

Technical Services Section  
Bureau of Water  
1000 SW Jackson St., Suite 420  
Topeka, KS 66612-1367



JUL 18 2014

Phone: 785-296-5513  
Fax: 785-296-0086  
edillingham@kdheks.gov  
www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

July 11, 2014

City Clerk  
Dept. of Public Works  
455 N. Main Street, Eighth Floor  
Wichita, KS 67202

RE: Kansas Water Pollution Control  
Permit No. M-AR94-SO01  
City of Wichita

Dear Permittee:

You have fulfilled all the filing requirements for a Kansas Water Pollution Control Permit and Authorization to Discharge under the National Pollutant Discharge Elimination System (NPDES). We are pleased to forward your new permit. While it is permissible to make as many copies as needed for monitoring and reporting purposes, you need to retain the original permit for your files.

We suggest you carefully read the terms and conditions of your permit and understand these terms and conditions are enforceable under both State and Federal law.

Please notice the reporting paragraph on page 2 of your permit, where all reports are due by the 28<sup>th</sup> day of the schedule noted. Please submit reports to the Kansas Department of Health and Environment, Bureau of Water-TSS, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367.

Also, please note that if the permit requires routine monitoring and reporting, the table under section A will contain a new term called "EDMR code". This term stands for Electronic Discharge Monitoring Report and is an addition to the permits to allow all permittees, in the future, to report the discharge monitoring report data electronically instead of on paper.

If you have any questions concerning this permit, contact Ed Dillingham at (785)296-5513.

Sincerely,

Michael B. Tate, P.E.  
Director, Bureau of Water

pc: SC - District  
RG- Permit File

KANSAS WATER POLLUTION CONTROL  
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT  
AND AUTHORIZATION TO DISCHARGE UNDER  
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to the provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, 33 U.S.C. 1251 et seq., the "Act",

Permittee: City of Wichita, Kansas

Permittee's Address: Department of Public Works  
Eighth Floor, City Hall  
455 North Main Street  
Wichita, KS 67202

Drainage Basin: Lower Arkansas River

is hereby authorized to discharge stormwater from the system as described herein in accordance with the limitations, conditions and requirements set forth in this permit.

This permit is effective August 1, 2014, supersedes the previously issued Kansas Stormwater Pollution Control permit M-AR94-SO01 and expires July 31, 2019.

**PERMIT AREA AND AUTHORIZED DISCHARGES**

This permit covers all areas within the permittee's jurisdiction (the Permit Area). The Permit Area may change based upon areas incorporated into or removed from the permittee's jurisdictional area during the term of this permit.

This permit authorizes all existing or new stormwater point source discharges which discharge to waters of the state from the Municipal Separate Storm Sewer System (MS4) located within the Permit Area. New stormwater discharges are those which are created during the term of this permit.

  
\_\_\_\_\_  
Secretary, Kansas Department of Health and Environment

July 11, 2014  
Date

**PART I. STORMWATER MANAGEMENT PROGRAM (SMP) DOCUMENT REQUIREMENTS**

- A. Current Stormwater Management Plan - The permittee shall continue to implement, and enforce the current Stormwater Management Program (SMP) until an updated SMP is implemented.
- B. Updated Stormwater Management Plan - By February 28, 2015, the current SMP document shall be updated to include the additional requirements in this permit. The updated SMP shall be designed to:
1. reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP),
  2. continue to implement the six minimum control measures,
  3. satisfy the requirements of this permit, the Clean Water Act and Kansas surface water quality statutes and regulations.
- Implementation of Best Management Practices (BMPs) consistent with the provisions of the SMP and this permit constitutes compliance with the standard of reducing pollutants to the Maximum Extent Practicable.
- C. Six Minimum Control Measures - The Permittee shall continue to review, update and implement BMPs with measureable goals for each of the six minimum control measures. The six minimum control measures are:
1. Public Education and Outreach
  2. Public Involvement and Participation
  3. Illicit Discharge Detection and Elimination
  4. Construction Site Stormwater Runoff Control
  5. Post-Construction Stormwater Management in New Development and Redevelopment Projects
  6. Pollution Prevention/Good Housekeeping for Municipal Operations

The detailed requirements for the Six Minimum Control measures are explained at the following url:

[http://www.kdheks.gov/muni/download/Fact\\_Sheet\\_six\\_min\\_controls.pdf](http://www.kdheks.gov/muni/download/Fact_Sheet_six_min_controls.pdf)

D. Monitoring Industrial and High Risk Run-off:

1. A program for monitoring industrial and high risk run-off to control pollutants from industrial facilities shall be developed and detailed within the SMP. This program for monitoring and controlling such run-off shall include the following:
  - a. Develop and maintain a list of industrial facilities that the permittee determines are contributing a substantial pollutant loading to the municipal storm sewer system. This list shall include municipal landfills; hazardous waste treatment, disposal, or recovery facilities; and facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).
  - b. Annually at least two facilities on the list shall be identified as high priority facilities and an inspection shall be conducted with sampling of stormwater run-off, for the following parameters:
    - 1) Oil and grease - mg/l
    - 2) Chemical oxygen demand - mg/l
    - 3) pH - Standard Units
    - 4) Biochemical oxygen demand (5 day) - mg/l
    - 5) Total suspended solids - mg/l
    - 6) Total phosphorus - mg/l
    - 7) Total Kjeldahl nitrogen (TKN) - mg/l reported as N

- 8) Nitrate plus nitrite (NO<sub>3</sub>NO<sub>2</sub>) - mg/l reported as N
- 9) Total Nitrogen - mg/l calculated as TKN + NO<sub>3</sub>NO<sub>2</sub>
- 10) Any other pollutant limited in effluent guidelines subcategories
- 11) Any other pollutant listed in an existing NPDES permit for the industrial facility.

A minimum of a single grab sample shall be obtained within the first 30 minutes of storm water run-off. The storm event should result in 0.5 inch or more rainfall.

E. Total Maximum Daily Load (TMDL) Regulated Pollutants - The Permittee shall continue to review, update, implement and develop, when necessary, structural and non-structural BMPs which will reduce to the Maximum Extent Practicable the discharge of the TMDL regulated pollutants from the MS4 as listed in PART II. The updated SMP shall provide:

1. Selection of Best Management Practices (BMPs)

The permittee shall provide an updated SMP document which discusses the structural and non-structural BMPs that have been or will be implemented to reduce the discharge of TMDL regulated pollutants from the MS4 significantly contributing to or causing an exceedence of the water quality standard. The SMP shall identify:

- a. which BMPs will be implemented, including non-structural and/or structural measures, as selected from EPA's Menu of BMPs located at (<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/>) or from a local or regionally appropriate storm drainage criteria manual such as the Kansas City APWA/MARC BMP Manual or such other BMPs as are appropriate.
- b. a description of non-structural practices being implemented, including the six minimum control measures and/or other source control measures,
- c. the location of the BMPs, if structural,
- d. the design factors associated with the BMPs, if structural,
- e. the reported effectiveness of the chosen BMPs based on regionally appropriate data or performance analyses in the International Stormwater BMP Database (<http://www.bmpdatabase.org>) or other appropriate sources,
- f. a schedule for constructing and/or implementing the BMPs,
- g. an inspection/maintenance plan and schedule for each BMP, as appropriate,
- h. a plan and schedule to monitor the effectiveness of the BMPs.

2. Establishing measurable goals to assess the effectiveness of the TMDL BMPs

- a. Overall TMDL measurable goals shall be based upon instream/inlake sampling of the main stream(s)/lake(s) existing in, or entering and leaving the Permit Area (or Permit Areas for co-operative stormwater control efforts as provided in paragraph 4 below) during or immediately following storm events.
- b. Individual or sub-basin BMP performance goals may include in-stream or BMP discharge sampling locations based upon individual BMPs, sub-basin BMPs or aggregate BMPs. Alternatively, the permittee may use modeling that has been properly calibrated to determine that BMP performance goals are being met.

- c. Measurable goals for reducing pollutants contributed by MS4s shall be expressed in quantifiable values to:
  - 1) reduce the concentration of pollutants,
  - 2) reduce the total mass of pollutants,
  - 3) a combination of the above methods and
  - 4) expressed as average and median values (percent reduction of inflow volume, reduction in pollutant concentration or mass loading) or for bacteria as a geometric mean.

3. Maps illustrating:

- a. the Permit Area, boundaries of the contributing drainage basins and primary sub-basins, within and outside the Permit Area,
  - b. the locations of the BMPs, if structural,
  - c. the stormwater BMP influent/effluent, lake and stream monitoring locations, as appropriate
  - d. storm sewer collection system which includes the outfalls within the Permit Area where the MS4 drains to TMDL listed impaired streams or lakes.
4. Alternative Stormwater Offsite Pollution Reduction Program - As appropriate, when waters of the state are affected by TMDL regulated pollutants from both the Permit Area and surrounding non-jurisdictional lands, the permittees may incorporate and implement plans through their SMP for an offsite pollution reduction program to install Best Management Practices (BMP) in alternative locations, including outside the Permit Area, within the watershed shared by urban entities or urban and non-urban entities. Any alternative stormwater offsite pollution reduction program should be developed with watershed interests, such as other communities, Watershed Restoration and Protection Strategy (WRAPS) groups and Conservation Districts lying outside the Permit Area for the joint purpose of reducing pollutant loads generated from urban and non-urban lands within the shared watershed. Candidate offsite locations and practices will be consistent with implementing existing watershed plans that identify specific urban and non-urban (such as agricultural) BMP types and locations to achieve TMDLs reductions. The Alternative Stormwater Offsite Pollution Reduction Program shall be subject to KDHE approval and approved by KDHE prior to incorporation into the permittee's SMP.

F. The parties responsible for compliance with the SMP document.

G. Monitoring Requirements - See Part III.

H. Reporting Requirements - See Part V.

I. Modifications to BMPs and the Stormwater Management Program document

For minor BMP modifications: Within 60 days of a determination by the permittee or by written notification from KDHE, the permittee shall modify the BMP if modifications are needed to achieve the goals of the program.

For major BMP modifications/replacement: Within 60 days of a determination by the permittee or by written notification from KDHE, the permittee shall provide a plan and schedule for the upgrade/replacement of the BMP. The plan and schedule are subject to KDHE approval.

The SMP shall be evaluated annually and modifications, if necessary, submitted with the annual report due to KDHE by February 28 of each year.

**PART II. TOTAL MAXIMUM DAILY LOAD (TMDL) BEST MANAGEMENT PRACTICES**

The permittee shall implement Best Management Practices (BMPs) to reduce to the Maximum Extent Practicable the discharge of the TMDL regulated pollutants from the MS4 to the impaired watershed stream and/or lake as listed below:

**T M D L T A B L E**

Total Maximum Daily Loads, TMDLs, are established for waters found on the CWA Section 303d list of impaired waters. The purpose of the TMDL is to define the necessary and allowable pollutant load that may enter those impaired waters so those waters attain a condition that fully supports all their designated uses. The TMDL then allocates portions of that allowable load among the likely point and non-point sources discharging the pollutant into the water or its watershed. Implementation of the TMDL by the NPDES and 319 programs brings about reductions in current loading from those sources through numeric goals or narrative actions to the allowable level allocated to each source.

<b>TMDL Regulated Pollutant</b>	<b>Specific Impaired Stream or Lake to Target</b>
Bacteria	Big Slough, Cowskin Creek, Chisholm Creek, Gypsum Creek, Little Arkansas River, Arkansas River
Nutrients	Big Slough, Cowskin Creek, Chisholm Creek, Gypsum Creek, Little Arkansas River, Arkansas River
Sediment	Big Slough, Cowskin Creek, Chisholm Creek, Gypsum Creek, Little Arkansas River, Arkansas River

**PART III. MONITORING REQUIREMENTS, FREQUENCY AND PARAMETERS**

**Monitoring Requirements**

- A. Storm Event Monitoring: The permittee shall implement a wet weather monitoring program designed to assess the improvements in the water body due to the BMP control measures implemented under the SMP. Sampling and analysis will include, at a minimum, instream monitoring of the main stream(s) entering and leaving the jurisdictional Permit Area for the pollutants identified by the governing TMDLs during or immediately after a specified storm event. For impaired lakes within the Permit Area, monitoring of conditions within those lakes will be conducted after rainfall has ceased and runoff into those lakes has curtailed. Additionally, monitoring of streams flowing within the Permit Area, discharges from MS4 outfalls, or discharges from areas with BMPs may be done at the permittee's discretion to assist in management and evaluation of the BMPs and the SMP.
- B. In addition to the storm event monitoring, the permittee may want to conduct dry weather monitoring, as appropriate, to determine the effectiveness or violations of the six minimum control measures or to confirm baseline water quality data.

**Monitoring Frequency and Periods**

- A. Four storm events per year per monitoring site (Storm event shall mean a 24-hr rain or snow melt event of greater than or equal to 0.50 inches.),
- B. At a minimum, monitoring shall be conducted in the spring (between March 1 and June 30) and summer (between July 1 and October 31) for the parameters as appropriate based upon the impairment.
- C. Additional monitoring may be conducted outside these timeframes if needed to meet the requirements of this permit.

**Parameters**

<u>TMDL Impairment</u>	<u>Parameter to be Monitored</u>	<u>MRL*</u>	<u>Sample Type</u>
Nutrients	Total Phosphorus as P (mg/l)	0.05	Grab or Composite
Nutrients	Orthophosphate as P (mg/l) **	0.05	Grab or Composite
Nutrients	Nitrate+Nitrite as N (mg/l)	0.10	Grab or Composite
Nutrients	Total Kjeldahl Nitrogen (mg/l)	0.10	Grab or Composite
Nutrients	Total Nitrogen (mg/l)		Calculate***
Sediment	Total Suspended Solids (mg/l)	10	Grab or Composite
Sediment	Turbidity (NTU)		Grab or Composite
Sediment (Lake)	Secchi Disk, (Ft)		Visual
Bacteria	E. coli (Col/100 ml or MPN)	10	Grab
Others	As provided by KDHE		As provided by KDHE

\* Minimum Reportable Limit

\*\* Optional - useful for measuring the impacts of lawn fertilizers and other sources of dissolved phase phosphorus.

\*\*\* Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate+Nitrite.

In addition, for streams at the time of sampling:

Rainfall, inches (last 24 hours)	Gauge Reading
Stream Flow, CFS and Stream Depth from a standard - Feet	Estimate/Reading
Stream Level (rising, falling, steady)	Describe
Stream Velocity (rapid, normal, still (backwater))	Describe

For storm events, grab samples for instream monitoring are to be obtained within 4 hours of rising stages on streams entering and leaving the Permit Area. Monitoring of a storm event for the purpose of complying with the stormwater monitoring and reporting requirements of this permit is not allowed if there is not at least 24 hours between this sampling storm event and the end of the previous rainfall event. If composite sampling is conducted, samples are to be collected over the course of the hydrograph and flow-weighted to provide a representative composite sample for the storm event. However, multiple composite or grab samples for an extended storm event may be taken to measure the variation of pollutant concentrations with time or stormwater flow.

**PART IV. PERMIT COMPLIANCE ACTIVITIES AND SCHEDULES**

- A. Year 2014: Complete inventory and maps of the outfalls, streams, and lakes in the targeted areas, select drainage basins and sub-basins as candidates for structural or non-structural BMPs, select and initiate, or continue existing effective plans for source control programs targeted to the TMDL pollutants. By July 1, 2014, implement new source control programs and the initial stormwater monitoring program.
- B. Year 2015: Continue the source control programs and monitoring of storm events at selected sites.

- C. Year 2016: Continue source control programs and monitoring of storm events at selected site. By July 1, 2016, select, design and initiate installation of appropriate structural BMPs.
- D. Year 2017: Continue BMP installation and/or source control programs and stream/lake/BMP outfall monitoring as appropriate. Complete BMP installations by the end of the year.
- E. Year 2018: Continue stream/lake/BMP monitoring and effective source control programs,
- F. By February 28, 2015, a copy of the initial updated/implemented SMP document developed pursuant to this permit's requirements shall be submitted to KDHE for review. Subsequent annual reports shall be submitted to KDHE by February 28 of each year for the preceding calendar year.
- G. By February 28, 2019, provide a final report on effectiveness of source controls and structural BMPs to achieve the measureable goals and summarize water quality data from selected monitoring sites.

**PART V. REPORTING**

The permittee shall submit a calendar year annual report to KDHE by February 28 of each year with the initial report under this permit due February 28, 2015 for calendar year 2014. The report shall cover the activities during the previous calendar year and must include:

- A. the status of compliance with permit conditions, an assessment of the appropriateness of the Best Management Practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals (with an indication of the progress toward meeting the goals) for each of the six minimum control measures and TMDLs as listed in the Stormwater Management Program document;
- B. results of information collected and analyzed, if any, during the annual reporting period, including monitoring data used to assess the success of the program at reducing the TMDL regulated pollutants;
- C. a summary of the stormwater activities that were scheduled to be undertaken during the previous calendar year and the status of these activities;
- D. a summary of the stormwater activities which are scheduled to be undertaken during the next reporting cycle (including an implementation schedule);
- E. a map showing changes in the permittee's jurisdictional Permit Area;
- F. description of significant changes in any of the BMPs including those in the SMP implementing the six minimum control measures;
- G. updated ordinances or resolutions associated with the SMP or the six minimum control measures shall be provided with the annual reports.
- H. a summary of the inspection results and information obtained under the Monitoring Industrial and High Risk Run-off section of this permit.
- I. a list of other parties, if any, which will be responsible for implementing any of the program areas of the Stormwater Management Program.

STANDARD CONDITIONS FOR  
KANSAS WATER POLLUTION CONTROL AND  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MS4 GENERAL PERMITS

1. Representative Sampling and Monitoring Report Submittals:
  - A. Samples and measurements taken as required herein shall be representative of the quality of the monitored water. Test results shall be recorded for the day the samples were taken. All samples shall normally be taken at the locations designated by the permittee in the Stormwater Management Plan according to the requirements of this permit. In the event samples must be obtained from a location different than that designated in the Stormwater Management Plan the annual report shall indicate the change of location and provide the justification therefore.
  - B. Monitoring results shall be recorded and reported on forms acceptable to the Division and provided in the annual report. Signed and certified copies of the annual report prepared in accordance with KAR 28-16-59, and all other reports required herein, shall be sent by U.S. mail to:

Kansas Department of Health & Environment  
Bureau of Water-Municipal Programs Section  
1000 SW Jackson Street, Suite 420  
Topeka, KS 66612-1367

2. Definitions:
  - A. A "grab sample" is an individual sample collected in less than 15 minutes. A "composite sample" is a combination of individual samples in which the volume of each individual sample is proportional to the flow, or the sample frequency is proportioned to the flow rate over the sample period, or the sample frequency is proportional to time.
  - B. The terms "Director", "Division", and "Department" refer to the Director, Division of Environment, Kansas Department of Health and Environment, respectively.
  - C. "Severe property damage" means substantial physical damage to property, damage to the treatment/control facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a diversion.
3. Duty to Mitigate: The permittee shall take all reasonable steps to minimize or prevent any damage to the environment or hazard to human health from any discharge in violation of this permit.
4. Test Procedures: All analyses required by this permit shall conform to the requirements of 40 CFR Part 136, unless otherwise specified, and shall be conducted in a laboratory accredited by the Department. For each measurement or sample, the permittee shall record the exact place, date, and time of measuring/sampling; the date and time of the analyses, the analytical techniques or methods used, minimum detection or reportable level, and the individual(s) who performed the measuring/sampling and analysis and, the results. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved procedures, the results shall be included in the Monitoring Report form required in 1.B. above. Such increased frequencies shall also be indicated.
5. Change in Discharge: All stormwater discharges shall be in compliance with the conditions of the permit. Modification or expansion of the storm sewer system is allowed. All new storm sewer segments and outfalls constructed after the effective date of the permit, which are located within the permit area, are authorized under the permit and must comply with the permit conditions.
6. Proper Operations and Maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the requirements of this permit and Kansas and Federal law.

7. **Incident Reporting:** The permittee shall report any unanticipated significant incidents which would be expected to result in non-compliance with the permit requirements within 24 hours from the time the permittee became aware of the incident. A written submission shall be provided within 5 days of the time the permittee became aware of the incident. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

For an anticipated incident or any planned changes or activities in the permitted control/treatment facility that may result in noncompliance with the permit requirements, the permittee shall submit written notice, if possible, at least ten days before the date of the event.

8. **Removed Substances:** Solids, sludges, debris, or other pollutants removed in the course of control/treatment of stormwater shall be utilized or disposed of in a manner acceptable to the Division.
9. **Right of Entry:** The permittee shall allow authorized representatives of the Division of Environment or the Environmental Protection Agency upon the presentation of credentials, to enter upon the permittee's premises where a stormwater discharge or source is located, or in which are located any records required by this permit, and at reasonable times, to have access to and copy any records required by this permit, to inspect any facilities, monitoring equipment or monitoring method required in this permit, and to sample any stormwater discharges from or influents into the stormwater control/treatment facilities.
10. **Transfer of Ownership:** The permittee shall notify the succeeding owner or controlling person of the existence of this permit by certified letter, a copy of which shall be forwarded to the Division. The succeeding owner shall secure a new permit. This permit is not transferable to any person except after notice and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.
11. **Records Retention:** Unless otherwise specified, all records and information resulting from the monitoring activities required by this permit, including all records of analyses and calibration and maintenance of instruments and recordings from continuous monitoring instruments, shall be retained for a minimum of 3 years, or longer if requested by the Division.
12. **Availability of Records:** Except for data determined to be confidential under 33 USC Section 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Treated and raw stormwater data shall not be considered confidential. Knowingly making any false statement on any such report or tampering with equipment to falsify data may result in the imposition of criminal penalties as provided for in 33 USC Section 1319 and KSA 65-170c.
13. **Permit Modifications and Terminations:** As provided by KAR 28-16-62, after notice and opportunity for a hearing, this permit may be modified, suspended or revoked or terminated in whole or in part during its term for cause as provided, but not limited to those set forth in KAR 28-16-62 and KAR 28-16-28b through g. The permittee shall furnish to the Director, within a reasonable amount of time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request, copies of all records required to be kept by this permit. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
14. **Administrative, Civil and Criminal Liability:** The permittee shall comply with all requirements of this permit. Nothing in this permit shall be construed to relieve the permittee from administrative, civil or criminal penalties for noncompliance as provided for in KSA 65-161 et seq., and 33 USC Section 1319.
15. **Oil and Hazardous Substance Liability:** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under 33 USC Section 1321 or KSA 65-164 et seq. A permittee shall promptly notify the Division by telephone upon discovering crude oil or any petroleum derivative in its storm sewer system or stormwater control/treatment facilities.

16. **Property Rights:** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringements of or violation of federal, state or local laws or regulations.
17. **Severability:** The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.
18. **Removal from Service:** The permittee shall inform the Division at least three months before any control/treatment unit, or any other part of the control/treatment facility permitted by this permit is to be removed from service and shall make arrangements acceptable to the Division to decommission the facility or part of the facility being removed from service such that the public health and waters of the state are protected.
19. **Duty to Reapply:** A permit holder wishing to continue any activity regulated by this permit after the expiration date, must apply for a new permit at least 180 days prior to expiration of the permit.



Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

August 19, 2014

Department of Public Works  
Mr. Scott Lindebak  
455 N. Main St., 8<sup>th</sup> Floor  
Wichita, KS 67202

RE: Kansas Water Pollution Control  
Permit No. M-AR94-SO01

Dear Permittee:

The Kansas Department of Health and Environment (KDHE) has modified MS4 permits as explained below. The modification went into effect on August 16, 2014. Please attach this letter to your NPDES permit as the permit modification.

**"KS-GP-14-001/002 PUBLIC NOTICE OF CHANGES TO COMBINED KANSAS WATER POLLUTION CONTROL GENERAL STORMWATER PERMITS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL STORMWATER PERMITS FOR SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

*After KDHE review and consideration of comments from certain MS4 permittees, the KDHE Secretary has determined that the following minor changes are made to all MS4 permits with effective dates including and after February 1, 2014. The list of permits affected is shown on KDHE's website: [http://www.kdheks.gov/muni/download/MS4 Permits Issued 2-1-2014.pdf](http://www.kdheks.gov/muni/download/MS4%20Permits%20Issued%202-1-2014.pdf)*

*The changes are:*

- 1) The MS4 permits with the federal prefix numbers KSR041 and KSR044 are changed to KSR41 and KSR44 respectively.*
- 2) On page 2 of the issued permits, the URL for the Six Minimum Control Measures is corrected to: [http://www.kdheks.gov/muni/download/Fact\\_Sheet\\_six\\_min\\_controls.pdf](http://www.kdheks.gov/muni/download/Fact_Sheet_six_min_controls.pdf)*
- 3) On page 5, Parameter to be Monitored Ortho-Phosphorus should have been listed as Ortho-Phosphate, and the requirement to monitor Dissolved Oxygen is being removed as a nutrient impairment parameter"*

If you have any questions concerning these changes, please contact me at 785.296.2856 or [sshoresm@kdheks.gov](mailto:sshoresm@kdheks.gov).

Sincerely,

A handwritten signature in cursive script that reads "Shelly Shores-Miller".

Shelly Shores-Miller  
Permits & Compliance

pc: SC - District  
RG- Permit File

**Hardesty, James**

---

**From:** Hardesty, James  
**Sent:** Thursday, January 14, 2016 2:47 PM  
**To:** Henning, Aaron; Nicholas, Terry  
**Subject:** RE: 2015 Annual Report NPDES Information Request- Maintenance Division

Aaron,

Below are excerpts of the report, with the requested information in red:

6B	City will continue the existing street sweeping program to reduce pollutant loadings to the storm sewer.	One round of residential street sweeping, four rounds of arterial street sweeping, and two rounds per week of downtown street sweeping will be completed annually by the City. This effort is currently underway, and will continue throughout the permit term.	In la re ro ar st Th to st
6C	Drainage control of Municipal snow piles.	In the event that large Municipal snow piles become necessary, the City will evaluate BMPs to control and mitigate effects of runoff pollution to the maximum extent practicable.	In ar Ty br fre

Let me know if there are questions,

Jim

**From:** Henning, Aaron  
**Sent:** Thursday, January 14, 2016 2:29 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>; Nicholas, Terry <TNicholas@wichita.gov>  
**Subject:** RE: 2015 Annual Report NPDES Information Request- Maintenance Division

Jim,

Can you please provide a list of the specific goals that were ultimately included in the updated permit? I know you were striving to revise many of them, but I don't know where the effort finally ended up.

Thanks!

Aaron

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:18 PM  
**To:** Henning, Aaron <[AHenning@wichita.gov](mailto:AHenning@wichita.gov)>; Nicholas, Terry <[TNicholas@wichita.gov](mailto:TNicholas@wichita.gov)>  
**Subject:** 2015 Annual Report NPDES Information Request- Maintenance Division

Aaron or Terry,

Please update this information to reflect activities in 2015.

Thanks you,

Jim

**From:** Henning, Aaron  
**Sent:** Tuesday, January 27, 2015 3:56 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>; Nicholas, Terry <[TNicholas@wichita.gov](mailto:TNicholas@wichita.gov)>  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Jim,

Please see the attached report and let us know if you have any questions/concerns.

Thank you,

Aaron

**From:** Hardesty, James  
**Sent:** Tuesday, January 27, 2015 12:15 PM  
**To:** Nicholas, Terry  
**Cc:** Henning, Aaron  
**Subject:** FW: 2014 Annual Report NPDES Information Request- Maintenance Division

Terry,

Can I get the information below in red updated to reflect activities in 2014?

Thanks,

Jim

6B	City will continue the existing street sweeping program to reduce pollutant loadings to the storm sewer.	Two rounds of residential street sweeping, eight rounds of arterial street sweeping, and two rounds per week of downtown street sweeping will be completed annually by the City. This effort is currently underway, and will continue throughout the permit term.	In la re ro ar sti Th to sti
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**From:** Emmons, Bill  
**Sent:** Wednesday, January 07, 2015 1:13 PM  
**To:** Hardesty, James  
**Cc:** Nicholas, Terry  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

That will have to come from Aaron and his staff. Terry Nicholas is the Street Services Supervisor.

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 7, 2015 11:32 AM  
**To:** Emmons, Bill; Henning, Aaron  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Thanks Bill,

Could I also get the # of rounds swept and lane miles?

Jim

---

**From:** Emmons, Bill  
**Sent:** Wednesday, January 07, 2015 11:06 AM  
**To:** Henning, Aaron  
**Cc:** Hardesty, James  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

Good morning sir,  
Here is the street sweeping number you requested. In 2014 we received 14,960.2 tons of street sweepings.

Make it a great day and stay warm.

Bill

---

**From:** Henning, Aaron  
**Sent:** Wednesday, December 31, 2014 8:42 AM  
**To:** Emmons, Bill  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Wonderful! Thanks for your help, Bill. Have a safe and happy New Year!

---

**From:** Emmons, Bill  
**Sent:** Wednesday, December 31, 2014 6:54 AM  
**To:** Henning, Aaron  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

Good morning sir,  
Hope all is well with you and yours. We should have the sweeping tons to you around 15 Jan.

Make it a great day.

Bill

---

**From:** Henning, Aaron

**Sent:** Tuesday, December 30, 2014 5:26 PM

**To:** Emmons, Bill; Borders, Monte

**Subject:** FW: 2014 Annual Report NPDES Information Request- Maintenance Division

Gentlemen,

Would you mind providing me with the "total tonnage removed" quantity for 2014 once you have it?

Many thanks!

Aaron

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:23 PM  
**To:** Knebel, Scott  
**Subject:** 2015 Annual Report NPDES Information Request- MAPD  
**Attachments:** 2013 City Limits.pdf

Scott,

Please update this information for activities in 2015.

Thanks,

Jim

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 2:05 PM  
**To:** Knebel, Scott <SKnebel@wichita.gov>  
**Subject:** 2014 Annual Report NPDES Information Request- MAPD

Scott,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Knebel, Scott  
**Sent:** Wednesday, January 22, 2014 1:23 PM  
**To:** Hardesty, James  
**Subject:** RE: 2013 NPDES Information Request- MAPD

Jim:

I've attached map of the current city limits in PDF format. In 2013, the City annexed 122.99 acres (0.192 square miles).

Scott

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:21 AM

**To:** Knebel, Scott  
**Subject:** 2013 NPDES Information Request- MAPD

Greetings Scott,

I am requesting the same information to reflect activities during calendar year 2013. Let me know if you have questions, and Thanks!

JH

---

**From:** Knebel, Scott  
**Sent:** Wednesday, January 09, 2013 4:16 PM  
**To:** Hardesty, James  
**Cc:** Schlegel, John; Lindebak, Scott  
**Subject:** RE: 2012 NPDES Information Request- MAPD

Jim:

The City of Wichita de-annexed the Furley property in 2012, so the land area within the city limits actually decreased in 2012 by 441.68 acres (0.69 square miles). I'm still waiting on County GIS to load the last annexation approved in 2012 before I can do a PDF map.

Scott

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:57 AM  
**To:** Knebel, Scott  
**Cc:** Schlegel, John; Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- MAPD

Greetings Scott,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**MAPD**

- A map, in PDF format, of the current city limits
- The total acreage and square miles annexed into the City in 2012.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty

Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:28 PM  
**To:** Schiffelbein, Tyler  
**Subject:** 2015 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, December 30, 2014 3:39 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Annual Report Information Request- City Managers Office

James,

We ran the EPA Stormwater PSA and a Serving You – River Trash Roundup. Both ran a several hundred times.

Thanks,

Tyler Schiffelbein  
City7 Producer



**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 1:58 PM  
**To:** Schiffelbein, Tyler  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** 2014 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor

Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Schiffelbein, Tyler  
**Sent:** Friday, February 07, 2014 3:39 PM  
**To:** Hardesty, James  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** RE: 2013 NPDES Information Request- City Managers Office

The only other things that I can think to add would be the "After the Storm" video that ran more than 50 times and the "Reduce Water Runoff" video that ran more than 50 times. As far as press releases go, you will need to ask Van or Lauragail.

---

**From:** Hardesty, James  
**Sent:** Thursday, February 06, 2014 12:20 PM  
**To:** Schiffelbein, Tyler  
**Subject:** FW: 2013 NPDES Information Request- City Managers Office

Tyler, below is a more specific information request for activities in 2013. The items in red are from the 2012 report, and I'm looking for an update for 2013. Feel free to include any additional type of stormwater pollution messages, e.g. videos, press releases, etc.

Let me know if you have questions,

Jim

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on 2012
MCM 1A	<b>Citizen Outreach/Educational Materials:</b> Video messages and graphics will be developed by the City for use on the City's Cable Channel 7 or other video outlets for community distribution. This activity will take the form of periodic repeating video presentations or graphics informing citizens of the importance of preventing stormwater pollution and individual actions citizens can take to reduce their impact on stormwater.	A new repeating video, obtained in January 2012, designed to inform the public on stormwater pollution prevention will be run at least twice per year on the City's Cable Channel 7, beginning in 2012. Presentations/messages and graphics will be documented along with the media used and its duration.	In 2012, the following were disseminated via (red) releases. <ul style="list-style-type: none"><li>• Press release educational program County</li><li>• Announcer Round Up.</li><li>• To date, 4778 Dumping-Drainage purchased, and Installation will</li><li>• The EPA video produced 'Do not' 100 times.</li></ul>

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:17 AM  
**To:** Schiffelbein, Tyler  
**Subject:** 2013 NPDES Information Request- City Managers Office

Hi Tyler,

I am requesting an update to reflect activity in calendar year 2013. Let me know if you have questions, and Thanks!

JH

---

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 2:24 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

Other projects included Dog Doogity and This is Our City, Help Keep it Pretty an anti-littering psa. These both run hundreds of times and maybe even thousands. I can't give an exact number because they are in our general rotation and play in a continuous loop. There were also some April Burn Ban News Conferences and PSAs that we ran. I'm not sure if that is what you are looking for.

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 1:59 PM  
**To:** Schiffelbein, Tyler  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I believe that EPA video is called "Reduce Runoff". Are there other environmental educational messages that were ran? Perhaps, pick up after your pets, or don't litter....those types of messages? If so, what were they, and how many times did they air?

---

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 1:53 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I know we ran a video about stormwater runoff that was given to us by the EPA. It probably ran about 50-70 times. That is the only thing that we ran.

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:56 AM  
**To:** Aviks, Debbie; Locke, Lauragail; Schiffelbein, Tyler  
**Cc:** Williams, Van; Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- City Managers Office

Greetings,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**City Manager's Office:**

- Any publications, news releases, or responses to the media concerning stormwater inspection, compliance, educational programs, proper use of pesticides and fertilizers, reporting of illicit discharges, and the improper disposal of hazardous materials.
- Any environmental education, stormwater in particular, that was disseminated via City 7.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:38 PM  
**To:** Dean, Alex  
**Cc:** LQuick  
**Subject:** 2015 NPDES Annual Report Information Request- Environmental Services Grease

Alex,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Dean, Alex  
**Sent:** Tuesday, January 13, 2015 12:19 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Cc:** Quick, Laura <LQuick@wichita.gov>  
**Subject:** 2014 NPDES Annual Report Information Request- Environmental Services

Jim,

Here is the information requested on grease inspections.

MCM 3F	<b>Restaurant Inspection for Proper Waste Grease Management</b>  Inspect restaurants to verify that grease is not being discharged to the municipal storm drains. These inspections are incorporated into the regular restaurant inspection system and are accomplished by City inspectors.	Inspections of restaurant grease handling are an existing program within the Public Works & Utilities Department. There will be a minimum of 160 inspections performed each year of the Permit and will be reported in our Annual Report. If changes are necessary with this program, KDHE will be informed.	In 2014, inspector issued 28 and docu rate.
-----------	---	--	---

Alex

**Alex Dean** Public Health Sanitarian

City of Wichita | Public Works & Utilities | Food Protection, Tobacco Control & Grease Program  
1900 E 9<sup>th</sup> St N • Wichita, KS 67214 | TEL 316.268.8362 • FAX 316.858.7787  
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## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:30 PM  
**To:** Perkins, Bill  
**Subject:** 2015 NPDES Annual Report Information Request- Sewer Maintenance Division  
**Attachments:** 2014Reports.pdf

Bill,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Perkins, Bill  
**Sent:** Tuesday, January 13, 2015 1:26 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Annual Report Information Request- Sewer Maintenance Division

2,798,335 lf of sanitary sewers cleaned  
91,310 lf of sanitary sewers rehabilitated or replaced  
120 line repairs completed, resulting in an equivalent of 26,400 lf of repaired sanitary sewers  
477,521 lf of sanitary sewers televised  
All 24 of the 2014 KDHE wastewater bypass and backup reports are attached

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 2:06 PM  
**To:** Perkins, Bill  
**Subject:** 2014 NPDES Annual Report Information Request- Sewer Maintenance Division

Bill,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Perkins, Bill  
**Sent:** Wednesday, January 22, 2014 12:44 PM

To: Hardesty, James

Subject: RE: 2013 NPDES Information Request- Sewer Maintenance Division

3,071,250 lf of sanitary sewers cleaned

60,176 lf of sanitary sewers rehabilitated or replaced

149 line repairs completed, resulting in an equivalent of 32,780 lf of repaired sanitary sewers

600,367 lf of sanitary sewers televised

All 21 of the 2013 KDHE wastewater bypass and backup reports are attached.

---

From: Hardesty, James

Sent: Wednesday, January 22, 2014 10:30 AM

To: Perkins, Bill

Subject: 2013 NPDES Information Request- Sewer Maintenance Division

Greetings Bill,

I am requesting the same information below to reflect activities during calendar year 2013. Let me know if you have questions, and Thanks!

JH

---

From: Perkins, Bill

Sent: Wednesday, January 16, 2013 11:39 AM

To: Hardesty, James

Cc: Lindebak, Scott

Subject: RE: 2012 NPDES Information Request- Sewer Maintenance Division

2,552,796 lf of sanitary sewers cleaned

45,202 lf of sanitary sewers rehabilitated or replaced

319 line repairs completed, resulting in an equivalent of 70,180 lf of repaired sanitary sewers

586,705 lf of sanitary sewers televised

All 25 of the 2012 KDHE wastewater bypass and backup reports are attached.

---

From: Hardesty, James

Sent: Tuesday, January 08, 2013 11:56 AM

To: Perkins, Bill

Cc: Lindebak, Scott

Subject: 2012 NPDES Information Request- Sewer Maintenance Division

Greetings Bill,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**Public Works & Utilities:**

**Sewer Maintenance Division:**

**Bill Perkins- Superintendant Sewer Maintenance**

- Total miles of sewer lines cleaned and linear feet of pipe repaired in 2012.
- Linear feet of sewer lines televised and corrective action taken as necessary.
- A summary of any illicit discharges detected and how they were resolved.
- Copies of all 2012 Wastewater Bypass Reports.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:46 PM  
**To:** Fleming, Kelly  
**Subject:** 2015 NPDES Annual Report Maps

Kelly,

Please update this information to reflect 2015.

Thanks,

Jim

**From:** Fleming, Kelly  
**Sent:** Wednesday, January 28, 2015 8:56 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** 2014 NPDES Annual Report Maps

Jim,

When you get a chance please review the pdfs so we know if we are good or need any changes. They are at <\\\\OZONE\\DeptOZ\\Public Works\\Storm Water Flood Control\\NPDES\\Annual Report\\2014\\2014 NPDES Annual Report Maps> . The pdfs are all current.

Thanks,

Kelly Fleming | City of Wichita | 316-268-4326 | [www.wichita.gov](http://www.wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 5:01 PM  
**To:** Fleming, Kelly  
**Subject:** 2015 NPDES Annual Report Information- GIS Update

Kelly,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Fleming, Kelly  
**Sent:** Tuesday, January 27, 2015 8:45 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: NPDES GIS Update

Jim,

By the end of 2015, 68,059 stormwater structures and 1,282 miles of conduit have been put on a GIS layer.

Thanks,

**Kelly Fleming** | **City of Wichita** | **316-268-4326** | [www.wichita.gov](http://www.wichita.gov)

**From:** Hardesty, James  
**Sent:** Monday, January 26, 2015 4:15 PM  
**To:** Fleming, Kelly  
**Subject:** NPDES GIS Update

Kelly, Please update the information in **red** to reflect totals at the end of 2014.

3B	Develop a stormwater system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a computer disk.	A complete GIS stormwater system map has been completed, and will be maintained, and updated throughout the year. A GIS map layer of the stormwater system will be made available for public use in 2015, and will be available on the City of Wichita website.	By the end of 2014, 67,394 stormwater structures and 1,214 miles of conduit have been put on a GIS layer.
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**Hardesty, James**

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**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:25 PM  
**To:** Hall, Mark  
**Subject:** 2015 NPDES Annual Report Information Request- Biannual Post Construction Inspection Reports

Mark,

Please update the information in red to reflect activities in 2015.

5 a b c d	<b>a:</b> Strategies which include a combination of structural and/or non-structural BMPs, <b>b:</b> Measures to ensure adequate long-term operation and maintenance of BMPs, <b>c:</b> Site owner or operator name and telephone responsible to ensure adequate long-term operation maintenance of BMP's, <b>d:</b> BMPs to prevent or minimize adverse water impacts.	The governing ordinance, Chapter 16.32 contains these requirements as reflected in the City of Wichita/Sedgwick County Stormwater Manual, which is available in hard copy and on the City website. Occasional revisions are made to the Manual, and the Manual is updated. Revisions and updates will be included in the Annual Report. The number of BMPs implemented in a reporting year, and the number of completed bi-annual BMP inspections will be reported in the Annual Report.	The Wichita/Sedgwick County Stormwater Manual is available in a digital format for free at: <a href="http://www.wichita.gov/Government/Departments/Stormwater">http://www.wichita.gov/Government/Departments/Stormwater</a> The Wichita/Sedgwick County Stormwater Manual is reviewed and updated via monthly meetings of the Stormwater Advisory Board. Updates are posted on the City website. The Stormwater Manual includes the following: <ul style="list-style-type: none"><li>• Inspection report every 2 years</li><li>• Inspection Certification submitted to City</li><li>• 19 Structural BMP's to select from</li><li>• 5 Non-Structural BMP's</li><li>• Requirements to permit Proprietary Systems</li></ul> <p>In 2014, City staff reviewed, and issued Stormwater Manual updates totaling 628 acres of Development or Redevelopment. The City received certified Bi-annual Inspector forward, this will be a point of enforcement emphasis.</p>
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Thanks,

Jim

**From:** Hall, Mark  
**Sent:** Tuesday, January 27, 2015 10:57 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 Bi-annual Inspection Reports

**From:** Hardesty, James  
**Sent:** Tuesday, January 27, 2015 10:15 AM

**To:** Hall, Mark

**Subject:** 2014 Bi-annual Inspection Reports

In 2014, The City received certified Bi-annual Inspection reports for 6 BMPs.

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:32 PM  
**To:** Degenhardt, Steve  
**Subject:** 2015 NPDES Annual Report Information Request- City Construction Site Inspections

Steve,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Degenhardt, Steve  
**Sent:** Thursday, January 08, 2015 7:06 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Annual Report Construction Site Inspections

In 2014, 25 City personnel oversaw BMP implementation on 115 publicly bid City projects budgeted at \$49.4 million.

The rest is still unchanged.

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 1:56 PM  
**To:** Degenhardt, Steve  
**Subject:** 2014 NPDES Annual Report Construction Site Inspections

Steve,

Please update this information with 2014 activities.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Degenhardt, Steve  
**Sent:** Tuesday, January 28, 2014 2:23 PM  
**To:** Hardesty, James  
**Subject:** RE: 2013 NPDES Construction Site Inpections

In 2013, 28 City personnel oversaw BMP implementation on 103 publicly bid City projects budgeted at \$41.5 million.

The rest is unchanged. I think Greg included our Materials Lab, Locators, Survey Crews on last year's personnel #. The number 28 represents our inspectors and Engineers.

**From:** Hardesty, James  
**Sent:** Monday, January 27, 2014 11:17 AM  
**To:** Degenhardt, Steve  
**Subject:** 2013 NPDES Construction Site Inspections

TMDL 1 F	<b>Construction Site Inspections</b>  The City will use the current program of construction site inspections to target construction activities within the four listed watersheds.	Total nitrogen, biochemical oxygen demand pollutants, suspended solids, and bacteria.	Beginning October 2008, the City will identify and target those construction or redevelopment projects having BMPs that are within close proximity to one of the four associated designated streams or rivers. The City will initially inspect within 30 days of the project start date. This effort will continue throughout the permit term.	In 2012, 47 City personnel oversaw BMP implementation on 93 publicly bid City construction projects budgeted at \$53 million. The engineers, who have received BMP training, have inspected the projects within 30 days of construction start date. Sites continue to be monitored daily throughout the duration of construction.
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## Hardesty, James

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**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:05 PM  
**To:** Hall, Mark  
**Subject:** 2015 NPDES Annual Report Information Request- Construction Site Inspections

Mark,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Hall, Mark  
**Sent:** Tuesday, January 06, 2015 4:02 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** Percent of construction inspections

Jim,

We had 1034 inspections that resulted in 523 NOV's being issued for 50.6% of inspections resulting in a notice.

Mark A. Hall, CISEC  
Compliance Officer  
Stormwater Management  
Stormwater Compliance  
455 N. Main 8th Floor  
Wichita Ks. 67202  
(316) 268-8337  
E-Mail [Mahall@Wichita.gov](mailto:Mahall@Wichita.gov)

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Visit our website:

<http://www.wichita.gov/Government/Departments/PWU/Pages/Stormwater.aspx>

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## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:02 PM  
**To:** 'Schant, Daniel'; Weber, Jim; Gunter, Charles A.  
**Cc:** 'jo.oliver@sedgwick.gov'  
**Subject:** 2015 NPDES Annual Report Information Request- HHW Collection

Daniel and Jo,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim Hardesty  
Interim Division Manager  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Schrant, Daniel [mailto:Daniel.Schant@sedgwick.gov]  
**Sent:** Thursday, January 29, 2015 2:42 PM  
**To:** Weber, Jim <Jim.Weber@sedgwick.gov>; Gunter, Charles A. <Charles.Gunter@sedgwick.gov>  
**Cc:** Hardesty, James <JHardesty@wichita.gov>; Erlenwein, Susan <susan.erlenwein@sedgwick.gov>  
**Subject:** RE: 2014 HHW Information

Per Jo Oliver, the HHW facility had 21,763 residential customers that brought in 1,165,815 pounds of hazardous waste.

Daniel Schrant, PE | Stormwater Engineer | Sedgwick County Public Works  
p: (316) 660-1778 | f: (316) 660-1875 | [daniel.schant@sedgwick.gov](mailto:daniel.schant@sedgwick.gov)  
1144 S. Seneca | Wichita, KS 67213-4443 | [www.sedgwickcounty.org](http://www.sedgwickcounty.org)



*Sedgwick County...*  
*working for you*

---

**From:** Weber, Jim  
**Sent:** Tuesday, January 27, 2015 9:38 AM  
**To:** Gunter, Charles A.  
**Cc:** James Hardesty; Schrant, Daniel; Erlenwein, Susan  
**Subject:** RE: 2014 HHW Information

Charles – can you provide the information that Jim Hardesty is requesting?

**Note:** Our email addresses have changed. Please update your address book.



*Sedgwick County...*  
*working for you*

**From:** Hardesty, James [<mailto:JHardesty@wichita.gov>]  
**Sent:** Monday, January 26, 2015 4:27 PM  
**To:** Schrant, Daniel; Weber, Jim  
**Subject:** 2014 HHW Information

Daniel, Jim,

Below is an excerpt from our 2014 NPDES Annual Report. Could I please get an update in the red area, to reflect activities in 2014?

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

3D	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	A free, regional Household Hazardous Waste disposal site will be maintained for all residents to use. The number of citizens and quantity of materials disposed of, will be included in the Annual Report. Additionally, an informational HHW video will be aired at least 6 times on the City's Cable Channel 7.	The City and County operate a free household hazardous waste disposal site. In 2014 the site had XX visitors, collected XX gallons.....?
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## Hardesty, James

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**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 4:05 PM  
**To:** Johnson, Alan W  
**Cc:** Deutscher, Darrin  
**Subject:** 2015 NPDES Annual Report Information Request- Meridian Outfall

Gents,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Johnson, Alan W  
**Sent:** Wednesday, February 04, 2015 6:50 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Cc:** Deutscher, Darrin <DDeutscher@wichita.gov>  
**Subject:** RE: Meridian Outfall

It has been in use since around May and was during construction as soon as the concrete set. We have only cleaned it once and that was in December and pulled out a little more than 122 ton of material but most of that was caused during construction so should not be that way again. Will see about that when they stat back up and do the system north on From Esthner to Walker on Meridian. Alan

**From:** Hardesty, James  
**Sent:** Tuesday, February 03, 2015 11:48 AM  
**To:** Deutscher, Darrin; Johnson, Alan W  
**Subject:** Meridian Outfall

When did the Meridian outfall officially become operational? How many times have we cleaned it, and how much did we remove each time?

Jim

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 9:07 AM  
**To:** Brown, Darren  
**Cc:** Maloney, Shawn; Dean, Alex  
**Subject:** 2015 NPDES Annual Report Information Request- Septic Systems

Darren,

Please update this information to reflect activity in 2015.

Thanks,

Jim

**From:** Brown, Darren  
**Sent:** Monday, January 05, 2015 1:07 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Cc:** Maloney, Shawn <SMaloney@wichita.gov>; Dean, Alex <ADEAN@wichita.gov>  
**Subject:** Sewer #s for KDHE

Jim,

I am the Program Manager to E.A.R. and also the supervisor for Water Quality. Alex forwarded me your email dated December 30<sup>th</sup> seeking information related to KDHE's NPDES Annual Report Information Request. Below are the 2014 numbers provided by my staff. Will this information be sufficient for your purposes?

- 72 Systems were evaluated at title transfer.
- 
- 44 Systems were inspected for new and replacement systems.
- 
- 51 On-site system permit applications were reviewed and approved.
- 
- 0 or 1 Properties were connected to sanitary sewer.

"The Permit applications reviewed and approved were taken from the invoice data base. I know of only one place that was supposed to connect to sanitary sewer but don't know if they have. I checked to see if they have connected and waiting for return call. So at the most there will be one."

**Darren L. Brown, P.G.**  
Program Manager  
Environmental Assessment & Remediation  
Public Works & Utilities  
City of Wichita  
Ph: 316-268-8355  
e-mail: [DLbrown@wichita.gov](mailto:DLbrown@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:45 PM  
**To:** Mitchell, Todd  
**Subject:** 2015 NPDES Annual Report Information Request- Stream Buffer Strips

Todd,

Please update this information to reflect the lineal feet of buffer strip for 2015.  
I don't need you to detail the locations again.

Thanks,

Jim

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 9:27 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Cowskin-E/S Maple to Kellogg-5476' east side  
Cowskin-W/S Maple to Kellogg-913' west side  
Cowskin-So. of Kellogg -247' both sides  
Cowskin-Harry to Pawnee Prairie-north side-1,365'  
Gyp Creek-Kinkaid to Woodlawn-E/S 3778.28', W/S 3778.28  
Gyp Creek-9<sup>th</sup>-13<sup>th</sup>-2774'-both sides  
Gyp Creek-Broadmoor to Rutland-2095'-both sides  
Cherry Creek-Pawnee to Cypress-2937.13'-both sides

**From:** Hardesty, James  
**Sent:** Friday, January 30, 2015 8:44 AM  
**To:** Mitchell, Todd  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Locations?

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 8:39 AM  
**To:** Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Jim,

Here's the buffer numbers: 21,516.93'. These are linear numbers, typically 3' in width.

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 4:32 PM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

Todd,

Can I get the buffer strip information below?

Thanks,

Jim

**From:** Deutscher, Darrin  
**Sent:** Monday, January 12, 2015 2:07 PM  
**To:** Johnson, Alan W; Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years) 1804
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0) 128,478.30
- Linear feet of storm conduit cleaned (745,208) 543,505.94
- Number of storm structures cleaned (100,689) 78,282
- Number of storm structures inspected (2270) 1350
- Linear feet of storm conduit installed (49) 245.20
- Linear feet of storm conduit repaired (518) 181.2
- Number of structures repaired (215) 309
- Number of structures installed (0) 19
- Number of structures replaced (265) 64
- Number of structures located (193) 23
- Stolen Lids 146

Here are all the Stormwater totals, will need to have Todd look into the 1<sup>st</sup> one.

*Darrin Deutscher*  
*General Supervisor II*  
*Stormwater Management*  
316-268-4037

**From:** Johnson, Alan W  
**Sent:** Monday, January 12, 2015 1:46 PM  
**To:** Deutscher, Darrin  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

**From:** Hardesty, James  
**Sent:** Friday, January 09, 2015 1:43 PM  
**To:** Vyff, Neil; Johnson, Alan W  
**Cc:** Harper, Rhonda K  
**Subject:** 2014 NPDES Report Information- Stormwater

Below is information for activities during 2014 that I need to report on our annual NPDES Report. It's the same information requested for 2013 activities, I just needed it updated with 2014 results. Neil/Alan please select the ones in your area. The number in parenthesis is the activity level reported in the previous Annual Report.

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years)
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0)
- Linear feet of storm conduit cleaned (745,208)
- Number of storm structures cleaned (100,689)
- Number of storm structures inspected (2270)
- Linear feet of storm conduit installed (49)
- Linear feet of storm conduit repaired (518)
- Number of structures repaired (215)
- Number of structures installed (0)
- Number of structures replaced (265)
- Number of structures located (193)

I know we are all busy, but if I could have these by Wednesday the 14<sup>th</sup>, I would very much appreciate it. Please let me know if there are questions, and Thanks for your efforts.

Jim

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 12:13 PM  
**To:** Drennen, Kay; Le, Cindy  
**Cc:** Maloney, Shawn; Brown, Darren  
**Subject:** 2015 NPDES Annual Report Information Request- WATER Center

Kay and Cindy,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Drennen, Kay  
**Sent:** Thursday, January 29, 2015 2:55 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Cc:** Brown, Darren <DLBrown@wichita.gov>; Maloney, Shawn <SMaloney@wichita.gov>  
**Subject:** RE: 2014 NPDES Report WATER Center

WATER Center staff gave 10 storm water related school activities to 312 students, 7 storm water related community presentations to 197 citizens, and 27 tours of the Gilbert-Mosley treatment plant that reached 152 youth and adults. WATER Center staff also gave out 2,129 pieces of water quality educational materials.

WATER Center staff continued to work with the Arkansas River Coalition, a citizen's group, that is dedicated to the protection and preservation of the Arkansas River. The ARC Board met 5 times in 2014, held one annual meeting, conducted two trash cleanups in their designated area along the Big Arkansas River between the red pedestrian bridge in Sim Park and the Seneca Street Bridge, and led 15 river floats.

The 2014 River Trash Round-up had 663 participants who collected 430 bags of trash that weighed in at 2.59 tons. The area in which the round-up took place was on both banks of the Big Arkansas River between the red pedestrian bridge at Sim Park (Meridian & Central street) and the John Mack Bridge (Broadway Street).

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 12:23 PM  
**To:** Drennen, Kay; Maloney, Shawn  
**Subject:** 2014 NPDES Report WATER Center

Kay and Shawn,

I need an update for activities undertaken during 2014 for the items in **red**.  
We were issued a new NPDES Permit in 2014, and in that new Permit, the reporting due date was shortened by a month.

Please let me know if you have questions,

Jim Hardesty  
City of Wichita

1D	Stormwater pollution prevention, water conservation and water quality education programs will continue to be developed and provided to schools and other interested organizations.	The City will continue contact with interested school officials and organization leaders. Programs and assistance will continue to be provided through ongoing programs at the W.A.T.E.R center and other locations, and will reach a minimum of 500 persons annually.	In 2012, City staff educated over 458 students at 19 presentations with stormwater activities and distributed educational materials for use in their classrooms. In 2012, WATER Center staff presented 10 talks and tours focusing on water quality issues that were attended by 328 adult citizens. Staff also gave out 1,052 pieces of water quality educational materials
2B	The City will conduct at least one volunteer cleanup day with citizen and group volunteers.	An Arkansas River (and/or tributaries) cleanup will be held at least once each year. Results will be documented in the Annual Report.	Co-hosted by City staff and community partners, the annual River Trash Roundup was held on April 21, 2013. 3.0 tons of trash was collected by 648 volunteers in the area by the Sims Park walking bridge and the Broadway 'John Mack' bridge in the Arkansas River.

**Hardesty, James**

---

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 11:50 AM  
**To:** Hickle, Joseph  
**Subject:** 2015 NPDES Annual Report Information Request- WINSLAMM

Joe,

Please provide the answer for the section in red.

Thanks,

Jim

7D	Measurable goals for reducing pollutants contributed by MS4s shall be expressed in quantifiable values to reduce the concentration of pollutants, reduce the total mass of pollutants, a combination of the above methods and expressed as average and median values (percent reduction of inflow volume, reduction in pollutant concentration or mass loading) or for bacteria as a geometric mean.	Nutrients, Sediment, Bacteria	WINSLAMM or other appropriate modeling software will be used to calculate the required values.
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## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 9:03 AM  
**To:** Batchman, Renee (RBatchman@wichita.gov)  
**Subject:** 2015 NPDES Report Information Request- SWAB  
**Attachments:** Agendas 2014.pdf; Attendance 2014.pdf

Renee,

Please update this information to reflect activity in 2015.

Thanks,

Jim

**From:** Batchman, Renee  
**Sent:** Tuesday, January 20, 2015 2:37 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: NPDES Report SWAB Information

Here are the agenda's and attendance for the 2014 calendar year.

Let me know if you need anything else!

Renee

**From:** Hardesty, James  
**Sent:** Monday, January 19, 2015 1:32 PM  
**To:** Batchman, Renee  
**Subject:** NPDES Report SWAB Information

Renee,

For the NPDES Annual Report, can you please send me (PDFs) of all of the SWAB attendance sheets and agendas.

Thanks.

4E	Procedure for receipt and consideration of information submitted by the public.	The City will sponsor monthly meetings of a Stormwater Management Advisory Board (SWAB). This advisory board will contain appointed representatives from the community, and is open to the public for comments as well. SWAB information, including agendas and attendance information will be posted to the City of Wichita website, and will be included in the Annual Report.	In 2014, SWAB met XX times. Attendance and agenda information is attached in Appendix ?.
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## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 11:53 AM  
**To:** Deutscher, Darrin; Johnson, Alan W  
**Subject:** 2015 NPDES Report Information- Stormwater

Darrin,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Deutscher, Darrin  
**Sent:** Monday, January 12, 2015 2:07 PM  
**To:** Johnson, Alan W <AWJohnson2@wichita.gov>; Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

- Number of storm inlet medallions installed (3253 is the total installed for all years) 1804
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0) 128,478.30
- Linear feet of storm conduit cleaned (745,208) 543,505.94
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- Linear feet of storm conduit installed (49) 245.20
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- Number of structures repaired (215) 309
- Number of structures installed (0) 19
- Number of structures replaced (265) 64
- Number of structures located (193) 23
- Stolen Lids 146

*Darrin Deutscher  
General Supervisor II  
Stormwater Management  
316-268-4037*

**From:** Johnson, Alan W  
**Sent:** Monday, January 12, 2015 1:46 PM  
**To:** Deutscher, Darrin  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

**From:** Hardesty, James  
**Sent:** Friday, January 09, 2015 1:43 PM

**To:** Vyff, Neil; Johnson, Alan W

**Cc:** Harper, Rhonda K

**Subject:** 2014 NPDES Report Information- Stormwater

Below is information for activities during 2014 that I need to report on our annual NPDES Report. It's the same information requested for 2013 activities, I just needed it updated with 2014 results. Neil/Alan please select the ones in your area. The number in parenthesis is the activity level reported in the previous Annual Report.

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years)
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0)
- Linear feet of storm conduit cleaned (745,208)
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- Linear feet of storm conduit installed (49)
- Linear feet of storm conduit repaired (518)
- Number of structures repaired (215)
- Number of structures installed (0)
- Number of structures replaced (265)
- Number of structures located (193)

I know we are all busy, but if I could have these by Wednesday the 14<sup>th</sup>, I would very much appreciate it. Please let me know if there are questions, and Thanks for your efforts.

Jim

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:52 PM  
**To:** Williams, Sonja  
**Cc:** McGuire, David  
**Subject:** 2015 NPDES Report Park & Rec Pest/Herb  
**Attachments:** 2014 NPDES Report.xlsx; NPDES Annual Report for 2014 Certification.docx

**Importance:** High

Sonja,

Please update this report to reflect activities in 2015.

Thanks,

Jim Hardesty  
Interim Division Manager  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Williams, Sonja  
**Sent:** Wednesday, December 31, 2014 8:50 AM  
**To:** Lewis, Rebecca  
**Cc:** McGuire, David  
**Subject:** 2014 NPDES Report  
**Importance:** High

Sonja Loggins-Williams  
City of Wichita Park and Recreation Department  
455 N Main, 11th Floor  
Wichita, Kansas 67202  
Office: 316-268-4152/ Fax; 316-219-6369  
[swilliams@wichita.gov](mailto:swilliams@wichita.gov)

## Hardesty, James

---

**From:** Schiffelbein, Tyler  
**Sent:** Monday, January 11, 2016 11:48 AM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- City Managers Office

James,

Here are the programs that we ran the last year. Not sure if all of them meet the requirements, but I thought I would add them. Let me know if you need anything else.

**FEMA Flood Map Meetings - around 80 plays**

**Serving You - How to See if Your Property is in a Floodplain - several hundred times**

**Local Loop FEMA Floodplain Maps - around 80 plays**

**2015 Arkansas River Trash Roundup PSA – several hundred times**

**Stormwater Response Update – around 40 times**

**Dog Doogity - several hundred times**

**Mayors Media Briefing 5/28/15 – 15 times** - *Mayor Jeff Longwell discusses the recent rainfall and how it has helped Wichita's water supply and how drainage improvements over the past few years has prevented flooding on the west side of town. He also talked about the City of Wichita Social Media Town Hall meetings to get the publics input on the upcoming budget.*

**Mayors Media Briefing 7/9/15 – 15 times** - *During Mayor Longwell's media briefing he discussed the City of Wichita's response to Monday night's flash flooding as well as an update on visitor passes for city hall. Council member Lavonta Williams also highlighted a new initiative to help felons get back into the work force with the Ban the Box program.*

**Mayors Media Briefing 8/27/15 – 15 times** - *Mayor Jeff Longwell and District V council member Bryan Frye detail the plans for a new wetland park in Northwest Wichita.*

Thanks,

Tyler Schiffelbein  
City7 Producer  
(316) 352 – 4881  
[wichita.gov](http://wichita.gov)  
[YouTube](#)



**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:28 PM  
**To:** Schiffelbein, Tyler <TSchiffelbein@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, December 30, 2014 3:39 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Annual Report Information Request- City Managers Office

James,

We ran the EPA Stormwater PSA and a Serving You – River Trash Roundup. Both ran a several hundred times.

Thanks,

Tyler Schiffelbein  
City7 Producer



**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 1:58 PM  
**To:** Schiffelbein, Tyler  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** 2014 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Schiffelbein, Tyler  
**Sent:** Friday, February 07, 2014 3:39 PM  
**To:** Hardesty, James  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** RE: 2013 NPDES Information Request- City Managers Office

The only other things that I can think to add would be the "After the Storm" video that ran more than 50 times and the "Reduce Water Runoff" video that ran more than 50 times. As far as press releases go, you will need to ask Van or Lauragail.

---

**From:** Hardesty, James  
**Sent:** Thursday, February 06, 2014 12:20 PM  
**To:** Schiffelbein, Tyler  
**Subject:** FW: 2013 NPDES Information Request- City Managers Office

Tyler, below is a more specific information request for activities in 2013. The items in red are from the 2012 report, and I'm looking for an update for 2013. Feel free to include any additional type of stormwater pollution messages, e.g. videos, press releases, etc.

Let me know if you have questions,

Jim

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on 2
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MCM 1A	<p><b>Citizen Outreach/Educational Materials:</b></p> <p>Video messages and graphics will be developed by the City for use on the City's Cable Channel 7 or other video outlets for community distribution. This activity will take the form of periodic repeating video presentations or graphics informing citizens of the importance of preventing stormwater pollution and individual actions citizens can take to reduce their impact on stormwater.</p>	<p>A new repeating video, obtained in January 2012, designed to inform the public on stormwater pollution prevention will be run at least twice per year on the City's Cable Channel 7, beginning in 2012. Presentations/messages and graphics will be documented along with the media used and its duration.</p>	<p>In 2012, the following were disseminated via ( ) releases.</p> <ul style="list-style-type: none"> <li>• Press release educational pr County.</li> <li>• Announcemer Round Up</li> <li>• To date, 4778 Dumping-Drai purchased, ar Installation wil</li> <li>• The EPA vide produced 'Dog 100 times.</li> </ul>
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**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:17 AM  
**To:** Schiffelbein, Tyler  
**Subject:** 2013 NPDES Information Request- City Managers Office

Hi Tyler,

I am requesting an update to reflect activity in calendar year 2013. Let me know if you have questions, and Thanks!

JH

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 2:24 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

Other projects included Dog Doogity and This is Our City, Help Keep it Pretty an anti-littering psa. These both run hundreds of times and maybe even thousands. I can't give an exact number because they are in our general rotation and play in a continuous loop. There were also some April Burn Ban News Conferences and PSAs that we ran. I'm not sure if that is what you are looking for.

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 1:59 PM  
**To:** Schiffelbein, Tyler  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I believe that EPA video is called "Reduce Runoff". Are there other environmental educational messages that were ran? Perhaps, pick up after your pets, or don't litter....those types of messages? If so, what were they, and how many times did they air?

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 1:53 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I know we ran a video about stormwater runoff that was given to us by the EPA. It probably ran about 50-70 times. That is the only thing that we ran.

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:56 AM  
**To:** Aviks, Debbie; Locke, Lauragail; Schiffelbein, Tyler  
**Cc:** Williams, Van; Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- City Managers Office

Greetings,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**City Manager's Office:**

- Any publications, news releases, or responses to the media concerning stormwater inspection, compliance, educational programs, proper use of pesticides and fertilizers, reporting of illicit discharges, and the improper disposal of hazardous materials.
- Any environmental education, stormwater in particular, that was disseminated via City 7.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 25, 2016 10:48 AM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** Reminder- 2015 NPDES Annual Report Information Request- Stream Buffer Strips  
  
**Importance:** High

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:45 PM  
**To:** Mitchell, Todd <TLMitchell@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- Stream Buffer Strips

Todd,

Please update this information to reflect the lineal feet of buffer strip for 2015.  
I don't need you to detail the locations again.

Thanks,

Jim

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 9:27 AM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Cowskin-E/S Maple to Kellogg-5476' east side  
Cowskin-W/S Maple to Kellogg-913' west side  
Cowskin-So. of Kellogg -247' both sides  
Cowskin-Harry to Pawnee Prairie-north side-1,365'  
Gyp Creek-Kinkaid to Woodlawn-E/S 3778.28', W/S 3778.28  
Gyp Creek-9<sup>th</sup>-13<sup>th</sup>-2774'-both sides  
Gyp Creek-Broadmoor to Rutland-2095'-both sides  
Cherry Creek-Pawnee to Cypress-2937.13'-both sides

**From:** Hardesty, James  
**Sent:** Friday, January 30, 2015 8:44 AM  
**To:** Mitchell, Todd  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Locations?

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 8:39 AM

**To:** Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Jim,  
Here's the buffer numbers: 21,516.93'. These are linear numbers, typically 3' in width.

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 4:32 PM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

Todd,

Can I get the buffer strip information below?

Thanks,

Jim

**From:** Deutscher, Darrin  
**Sent:** Monday, January 12, 2015 2:07 PM  
**To:** Johnson, Alan W; Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years) 1804
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0) 128,478.30
- Linear feet of storm conduit cleaned (745,208) 543,505.94
- Number of storm structures cleaned (100,689) 78,282
- Number of storm structures inspected (2270) 1350
- Linear feet of storm conduit installed (49) 245.20
- Linear feet of storm conduit repaired (518) 181.2
- Number of structures repaired (215) 309
- Number of structures installed (0) 19
- Number of structures replaced (265) 64
- Number of structures located (193) 23
- Stolen Lids 146

Here are all the Stormwater totals, will need to have Todd look into the 1<sup>st</sup> one.

*Darrin Deutscher*  
*General Supervisor II*  
*Stormwater Management*  
316-268-4037

**From:** Johnson, Alan W  
**Sent:** Monday, January 12, 2015 1:46 PM  
**To:** Deutscher, Darrin  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

---

**From:** Hardesty, James  
**Sent:** Friday, January 09, 2015 1:43 PM  
**To:** Vyff, Neil; Johnson, Alan W  
**Cc:** Harper, Rhonda K  
**Subject:** 2014 NPDES Report Information- Stormwater

Below is information for activities during 2014 that I need to report on our annual NPDES Report. It's the same information requested for 2013 activities, I just needed it updated with 2014 results. Neil/Alan please select the ones in your area. The number in parenthesis is the activity level reported in the previous Annual Report.

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years)
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0)
- Linear feet of storm conduit cleaned (745,208)
- Number of storm structures cleaned (100,689)
- Number of storm structures inspected (2270)
- Linear feet of storm conduit installed (49)
- Linear feet of storm conduit repaired (518)
- Number of structures repaired (215)
- Number of structures installed (0)
- Number of structures replaced (265)
- Number of structures located (193)

I know we are all busy, but if I could have these by Wednesday the 14<sup>th</sup>, I would very much appreciate it. Please let me know if there are questions, and Thanks for your efforts.

Jim

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 25, 2016 10:47 AM  
**To:** Drennen, Kay; Le, Cindy  
**Cc:** Maloney, Shawn; Brown, Darren  
**Subject:** Reminder- 2015 NPDES Annual Report Information Request- WATER Center

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 12:13 PM  
**To:** Drennen, Kay <KDrennen@wichita.gov>; Le, Cindy <CLe@wichita.gov>  
**Cc:** Maloney, Shawn <SMaloney@wichita.gov>; Brown, Darren <DLBrown@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- WATER Center

Kay and Cindy,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Drennen, Kay  
**Sent:** Thursday, January 29, 2015 2:55 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Cc:** Brown, Darren <[DLBrown@wichita.gov](mailto:DLBrown@wichita.gov)>; Maloney, Shawn <[SMaloney@wichita.gov](mailto:SMaloney@wichita.gov)>  
**Subject:** RE: 2014 NPDES Report WATER Center

WATER Center staff gave 10 storm water related school activities to 312 students, 7 storm water related community presentations to 197 citizens, and 27 tours of the Gilbert-Mosley treatment plant that reached 152 youth and adults. WATER Center staff also gave out 2,129 pieces of water quality educational materials.

WATER Center staff continued to work with the Arkansas River Coalition, a citizen's group, that is dedicated to the protection and preservation of the Arkansas River. The ARC Board met 5 times in 2014, held one annual meeting, conducted two trash cleanups in their designated area along the Big Arkansas River between the red pedestrian bridge in Sim Park and the Seneca Street Bridge, and led 15 river floats.

The 2014 River Trash Round-up had 663 participants who collected 430 bags of trash that weighed in at 2.59 tons. The area in which the round-up took place was on both banks of the Big Arkansas River between the red pedestrian bridge at Sim Park (Meridian & Central street) and the John Mack Bridge (Broadway Street).

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 12:23 PM  
**To:** Drennen, Kay; Maloney, Shawn  
**Subject:** 2014 NPDES Report WATER Center

Kay and Shawn,

I need an update for activities undertaken during 2014 for the items in red.

We were issued a new NPDES Permit in 2014, and in that new Permit, the reporting due date was shortened by a month.

Please let me know if you have questions,

Jim Hardesty  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

1D	Stormwater pollution prevention, water conservation and water quality education programs will continue to be developed and provided to schools and other interested organizations.	The City will continue contact with interested school officials and organization leaders. Programs and assistance will continue to be provided through ongoing programs at the W.A.T.E.R center and other locations, and will reach a minimum of 500 persons annually.	In 2012, City staff educated over 458 students at 19 presentations with stormwater activities and distributed educational materials for use in their classrooms. In 2012, WATER Center staff presented 10 talks and tours focusing on water quality issues that were attended by 328 adult citizens. Staff also gave out 1,052 pieces of water quality educational materials
2B	The City will conduct at least one volunteer cleanup day with citizen and group volunteers.	An Arkansas River (and/or tributaries) cleanup will be held at least once each year. Results will be documented in the Annual Report.	Co-hosted by City staff and community partners, the annual River Trash Roundup was held on April 21, 2013. 3.0 tons of trash was collected by 648 volunteers in the area by the Sims Park walking bridge and the Broadway 'John Mack' bridge in the Arkansas River.

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 25, 2016 10:45 AM  
**To:** Williams, Sonja  
**Cc:** McGuire, David  
**Subject:** Reminder- 2015 NPDES Report Park & Rec Pest/Herb  
**Attachments:** 2014 NPDES Report.xlsx; NPDES Annual Report for 2014 Certification.docx

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:52 PM  
**To:** Williams, Sonja <SWilliams@wichita.gov>  
**Cc:** McGuire, David <DMcGuire@wichita.gov>  
**Subject:** 2015 NPDES Report Park & Rec Pest/Herb  
**Importance:** High

Sonja,

Please update this report to reflect activities in 2015.

Thanks,

Jim Hardesty  
Interim Division Manager  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Williams, Sonja  
**Sent:** Wednesday, December 31, 2014 8:50 AM  
**To:** Lewis, Rebecca  
**Cc:** McGuire, David  
**Subject:** 2014 NPDES Report  
**Importance:** High

Sonja Loggins-Williams  
City of Wichita Park and Recreation Department  
455 N Main, 11th Floor  
Wichita, Kansas 67202  
Office: 316-268-4152/ Fax; 316-219-6369  
[swilliams@wichita.gov](mailto:swilliams@wichita.gov)

## Hardesty, James

---

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 2:27 PM  
**To:** 'stormwater@kdheks.gov'  
**Subject:** Updated Listing of Industrial and High Risk Run-off Facilities  
**Attachments:** Listing of Industrial and High Risk Run-Off Facilities.xlsx

Greetings,

I would like to obtain an updated version of the attached spreadsheet as it pertains to the city of Wichita. I received this listing from KDHE in September of 2014, and need it updated for inclusion in our 2015 MS4 NPDES Annual Report.

Please contact me with questions.

Thanks,

Jim Hardesty  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Hall, Mark  
**Sent:** Monday, February 08, 2016 2:19 PM  
**To:** Hardesty, James  
**Subject:** Annual report info

Jim, we sent out 42 Letters requesting bi-Annual inspection for last year, we then sent out 26 NOV's for those we had not received an inspection for. We received a total of 35 Inspection reports, 2 explanations that the BMP was maintained by others offsite 1 explanation that the site had not yet disturbed 1 acre and has not installed the interworking's of its Hydro guard unit. I'm still following up on 4 other locations for Inspection reports.

Mark A. Hall, CISEC  
Compliance Officer  
Stormwater Management  
Stormwater Compliance  
455 N. Main 8th Floor  
Wichita Ks. 67202  
(316) 268-8337  
E-Mail [Mahall@Wichita.gov](mailto:Mahall@Wichita.gov)

☑ Please consider the environment before printing this e-mail

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Visit our website:

<http://www.wichita.gov/Government/Departments/PWU/Pages/Stormwater.aspx>

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## Hardesty, James

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**From:** Johnson, Alan W  
**Sent:** Monday, January 11, 2016 7:26 AM  
**To:** Hardesty, James  
**Subject:** Emailing - wodetail.pdf  
**Attachments:** wodetail.pdf

*Jim, Here is the cost and amount of debris removed from McLean structure. Alan*

## Hardesty, James

---

**From:** Schrant, Daniel <Daniel.Schran@sedgwick.gov>  
**Sent:** Wednesday, January 13, 2016 9:57 AM  
**To:** Hardesty, James  
**Subject:** FW: 2015 NPDES Annual Report Information Request- HHW Collection  
**Attachments:** December 2015.xls

HHW information is attached.

Daniel Schrant, PE | Stormwater Engineer | Sedgwick County Public Works  
p: (316) 660-1778 | f: (316) 660-1875 | [daniel.schran@sedgwick.gov](mailto:daniel.schran@sedgwick.gov)  
1144 S. Seneca | Wichita, KS 67213-4443 | [www.sedgwickcounty.org](http://www.sedgwickcounty.org)



*Sedgwick County...  
working for you*

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**From:** Erlenwein, Susan  
**Sent:** Wednesday, January 13, 2016 9:16 AM  
**To:** Schrant, Daniel; Bowen, Scott R.  
**Subject:** RE: 2015 NPDES Annual Report Information Request- HHW Collection

Hi Daniel,

I have attached the HHW 2015 year-end summary. Please let me know if you have any questions.

Thanks,

Susan

Susan D. Erlenwein | Director | Sedgwick County Environmental Resources & HHW  
p: (316) 660-7205 | f: (316) 660-7246 [susan.erlenwein@sedgwick.gov](mailto:susan.erlenwein@sedgwick.gov)  
1144 S Seneca | Wichita, KS 67213 | [www.sedgwickcounty.org](http://www.sedgwickcounty.org)



*Sedgwick County...  
working for you*

---

**From:** Schrant, Daniel  
**Sent:** Thursday, January 07, 2016 4:07 PM  
**To:** Bowen, Scott R.; Erlenwein, Susan  
**Subject:** FW: 2015 NPDES Annual Report Information Request- HHW Collection

Scott / Susan:

The City of Wichita and myself need to include data in our Annual Reporting to KDHE for the HHW facility and its usage. Could you forward that information along? Thanks.

Daniel Schrant, PE | Stormwater Engineer | Sedgwick County Public Works  
p: (316) 660-1778 | f: (316) 660-1875 | [daniel.schran@sedgwick.gov](mailto:daniel.schran@sedgwick.gov)  
1144 S. Seneca | Wichita, KS 67213-4443 | [www.sedgwickcounty.org](http://www.sedgwickcounty.org)



*Sedgwick County...*  
*working for you*

---

**From:** James Hardesty  
**Sent:** Thursday, January 07, 2016 4:02 PM  
**To:** Schrant, Daniel; Weber, Jim; Gunter, Charles A.  
**Cc:** Oliver, Jo  
**Subject:** 2015 NPDES Annual Report Information Request- HHW Collection

Daniel and Jo,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim Hardesty  
Interim Division Manager  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

---

**From:** Schrant, Daniel [<mailto:Daniel.Schrant@sedgwick.gov>]  
**Sent:** Thursday, January 29, 2015 2:42 PM  
**To:** Weber, Jim <[Jim.Weber@sedgwick.gov](mailto:Jim.Weber@sedgwick.gov)>; Gunter, Charles A. <[Charles.Gunter@sedgwick.gov](mailto:Charles.Gunter@sedgwick.gov)>  
**Cc:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>; Erlenwein, Susan <[susan.erlenwein@sedgwick.gov](mailto:susan.erlenwein@sedgwick.gov)>  
**Subject:** RE: 2014 HHW Information

Per Jo Oliver, the HHW facility had 21,763 residential customers that brought in 1,165,815 pounds of hazardous waste.

Daniel Schrant, PE | Stormwater Engineer | Sedgwick County Public Works  
p: (316) 660-1778 | f: (316) 660-1875 | [daniel.schrant@sedgwick.gov](mailto:daniel.schrant@sedgwick.gov)  
1144 S. Seneca | Wichita, KS 67213-4443 | [www.sedgwickcounty.org](http://www.sedgwickcounty.org)



*Sedgwick County...*  
*working for you*

---

**From:** Weber, Jim  
**Sent:** Tuesday, January 27, 2015 9:38 AM  
**To:** Gunter, Charles A.  
**Cc:** James Hardesty; Schrant, Daniel; Erlenwein, Susan  
**Subject:** RE: 2014 HHW Information

Charles – can you provide the information that Jim Hardesty is requesting?

**Note:** Our email addresses have changed. Please update your address book.



*Sedgwick County...  
working for you*

**From:** Hardesty, James [<mailto:JHardesty@wichita.gov>]  
**Sent:** Monday, January 26, 2015 4:27 PM  
**To:** Schrant, Daniel; Weber, Jim  
**Subject:** 2014 HHW Information

Daniel, Jim,

Below is an excerpt from our 2014 NPDES Annual Report. Could I please get an update in the red area, to reflect activities in 2014?

Thanks,

Jim Hardesty  
 Water Quality Specialist  
 City of Wichita  
 455 N. Main 8<sup>th</sup> Floor  
 Wichita, KS. 67202  
 316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

3D	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	A free, regional Household Hazardous Waste disposal site will be maintained for all residents to use. The number of citizens and quantity of materials disposed of, will be included in the Annual Report. Additionally, an informational HHW video will be aired at least 6 times on the City's Cable Channel 7.	The City and County operate a free household hazardous waste disposal site. In 2014 the site had XX visitors, collected XX gallons.....?
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## Hardesty, James

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**From:** Brown, Darren  
**Sent:** Wednesday, January 13, 2016 3:51 PM  
**To:** Hardesty, James  
**Subject:** FW: 2015 NPDES Annual Report Information Request- Septic Systems

Jim,

2015 #'s as requested. From my staff Kathryn Jackson and Ashley Dunham. See below.

**Darren L. Brown, P.G.**  
Program Manager  
Environmental Assessment & Remediation

City of Wichita  
Public Works & Utilities  
Environmental Health Division  
1900 E. 9<sup>th</sup> Street  
Wichita, KS 67214  
Ph: 316-268-8355  
e-mail: [DLbrown@wichita.gov](mailto:DLbrown@wichita.gov)

- **80** Systems were evaluated at title transfer.
- **35** Systems were inspected for new and replacement systems.
- **37** On-site system permit applications were reviewed and approved.
- **1** Property was connected to sanitary sewer.

**Darren L. Brown, P.G.**  
Program Manager  
Environmental Assessment & Remediation

City of Wichita  
Public Works & Utilities  
Environmental Health Division  
1900 E. 9<sup>th</sup> Street  
Wichita, KS 67214  
Ph: 316-268-8355  
e-mail: [DLbrown@wichita.gov](mailto:DLbrown@wichita.gov)

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 9:08 AM  
**To:** Brown, Darren <[DLBrown@wichita.gov](mailto:DLBrown@wichita.gov)>  
**Cc:** Maloney, Shawn <[SMaloney@wichita.gov](mailto:SMaloney@wichita.gov)>; Dean, Alex <[ADEAN@wichita.gov](mailto:ADEAN@wichita.gov)>  
**Subject:** 2015 NPDES Annual Report Information Request- Septic Systems

Darren,

Please update this information to reflect activity in 2015.

Thanks,

Jim

**From:** Brown, Darren

**Sent:** Monday, January 05, 2015 1:07 PM

**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>

**Cc:** Maloney, Shawn <[SMaloney@wichita.gov](mailto:SMaloney@wichita.gov)>; Dean, Alex <[ADEAN@wichita.gov](mailto:ADEAN@wichita.gov)>

**Subject:** Sewer #s for KDHE

Jim,

I am the Program Manager to E.A.R. and also the supervisor for Water Quality. Alex forwarded me your email dated December 30<sup>th</sup> seeking information related to KDHE's NPDES Annual Report Information Request. Below are the 2014 numbers provided by my staff. Will this information be sufficient for your purposes?

- 72 Systems were evaluated at title transfer.
- 
- 44 Systems were inspected for new and replacement systems.
- 
- 51 On-site system permit applications were reviewed and approved.
- 
- 0 or 1 Properties were connected to sanitary sewer.

"The Permit applications reviewed and approved were taken from the invoice data base. I know of only one place that was supposed to connect to sanitary sewer but don't know if they have. I checked to see if they have connected and waiting for return call. So at the most there will be one."

**Darren L. Brown, P.G.**

Program Manager

Environmental Assessment & Remediation

Public Works & Utilities

City of Wichita

Ph: 316-268-8355

e-mail: [DLbrown@wichita.gov](mailto:DLbrown@wichita.gov)

## Hardesty, James

---

**From:** Chris A Seeds <CSeeds@kdheks.gov>  
**Sent:** Tuesday, February 09, 2016 11:06 AM  
**To:** Hardesty, James  
**Subject:** FW: NPDES Industrial Facilities  
**Attachments:** 2016-01-25 IND Stormwater Information.xlsx

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**From:** Don Carlson  
**Sent:** Monday, January 25, 2016 3:07 PM  
**To:** Chris A Seeds  
**Cc:** Dorothy Geisler  
**Subject:** RE: NPDES Industrial Facilities

Chris:

Attached is the industrial general permit stormwater permit information.

It appears there were an additional 3 tabs to the worksheet i.e., NPDES SWPPP, all NPDES Ind, and for some reason Ready Mix Parameters. I have addressed the Active Ind Stormwater GP and the No exposure in the attached worksheet. I provided only the columns that were in the previous spreadsheet.

Donald R. Carlson, PE  
Kansas Department of Health and Environment  
Bureau of Water - Industrial Programs Section  
1000 SW Jackson, Suite 420  
Topeka, Kansas 66612-1367  
(785) 296-5547  
(785) 296-0086 Fax

---

**From:** Chris A Seeds  
**Sent:** Tuesday, January 12, 2016 8:30 AM  
**To:** Don Carlson; Dorothy Geisler  
**Subject:** FW: NPDES Industrial Facilities

Can you please run an updated query for the Wichita Industrial Stormwater Facilities? Last years query is attached for reference.

Thanks  
Chris

---

**From:** Chris A Seeds  
**Sent:** Tuesday, September 16, 2014 12:09 PM  
**To:** 'JHardesty@wichita.gov'  
**Subject:** FW: NPDES Industrial Facilities

Mr. Hardesty,

As per our telephone conversation attached is an excel workbook containing lists of the Active Industrial Stormwater Permits, Facilities approved for No Exposure Certificates, Industrial NPDES facilities requiring a Stormwater Pollution Prevention Plan, All Industrial NPDES facilities, and a list of required test parameters for all Ready Mix facilities. I have also attached the current master permits for Industrial Stormwater and Concrete Ready Mix Facilities. Please let me know if any of these items will not open for you or if you have any questions.

Christine Seeds  
KDHE-Bureau of Water  
Technical Services  
785.296.5517  
[cseeds@kdheks.gov](mailto:cseeds@kdheks.gov)

---

**From:** Larry Hook  
**Sent:** Thursday, September 11, 2014 4:17 PM  
**To:** Chris A Seeds  
**Cc:** Joe Mester; Eric Staab  
**Subject:** FW: NPDES Industrial Facilities

---

**From:** Hardesty, James [<mailto:JHardesty@wichita.gov>]  
**Sent:** Thursday, September 11, 2014 3:49 PM  
**To:** Stormwater  
**Subject:** NPDES Industrial Facilities

On August 1, 2014, the City of Wichita was issued Kansas Permit # M-AR94-S001 MS4 NPDES Permit. Part I Section D of that Permit requires sampling of industrial and high risk run-off.

I would like to get a listing of industrial facilities in the City of Wichita that have obtained an NPDES Permit. Also, I need that information to contain any pollutants listed in that Permit (Part 1, Section D, b11).

Please let me know if you have questions, and thanks.

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Henning, Aaron  
**Sent:** Wednesday, February 03, 2016 3:01 PM  
**To:** Hardesty, James  
**Cc:** Nicholas, Terry  
**Subject:** RE: 2015 Annual Report NPDES Information Request- Maintenance Division  
**Attachments:** NPDES 2015 Year-End Report.doc

Jim,

Please see attached. If you need anything further, please let us know. Thank you.

Aaron

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:18 PM  
**To:** Henning, Aaron <AHenning@wichita.gov>; Nicholas, Terry <TNicholas@wichita.gov>  
**Subject:** 2015 Annual Report NPDES Information Request- Maintenance Division

Aaron or Terry,

Please update this information to reflect activities in 2015.

Thanks you,

Jim

**From:** Henning, Aaron  
**Sent:** Tuesday, January 27, 2015 3:56 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>; Nicholas, Terry <[TNicholas@wichita.gov](mailto:TNicholas@wichita.gov)>  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Jim,

Please see the attached report and let us know if you have any questions/concerns.

Thank you,

Aaron

**From:** Hardesty, James  
**Sent:** Tuesday, January 27, 2015 12:15 PM  
**To:** Nicholas, Terry  
**Cc:** Henning, Aaron  
**Subject:** FW: 2014 Annual Report NPDES Information Request- Maintenance Division

Terry,

Can I get the information below in red updated to reflect activities in 2014?

Thanks,

Jim

6B	City will continue the existing street sweeping program to reduce pollutant loadings to the storm sewer.	Two rounds of residential street sweeping, eight rounds of arterial street sweeping, and two rounds per week of downtown street sweeping will be completed annually by the City. This effort is currently underway, and will continue throughout the permit term.	In la re ro ar sti Th to sti
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**From:** Emmons, Bill  
**Sent:** Wednesday, January 07, 2015 1:13 PM  
**To:** Hardesty, James  
**Cc:** Nicholas, Terry  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

That will have to come from Aaron and his staff. Terry Nicholas is the Street Services Supervisor.

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 7, 2015 11:32 AM  
**To:** Emmons, Bill; Henning, Aaron  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Thanks Bill,

Could I also get the # of rounds swept and lane miles?

Jim

---

**From:** Emmons, Bill  
**Sent:** Wednesday, January 07, 2015 11:06 AM  
**To:** Henning, Aaron  
**Cc:** Hardesty, James  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

Good morning sir,  
Here is the street sweeping number you requested. In 2014 we received 14,960.2 tons of street sweepings.

Make it a great day and stay warm.

Bill

**From:** Henning, Aaron  
**Sent:** Wednesday, December 31, 2014 8:42 AM  
**To:** Emmons, Bill  
**Subject:** RE: 2014 Annual Report NPDES Information Request- Maintenance Division

Wonderful! Thanks for your help, Bill. Have a safe and happy New Year!

---

**From:** Emmons, Bill  
**Sent:** Wednesday, December 31, 2014 6:54 AM  
**To:** Henning, Aaron  
**Subject:** Re: 2014 Annual Report NPDES Information Request- Maintenance Division

Good morning sir,  
Hope all is well with you and yours. We should have the sweeping tons to you around 15 Jan.

Make it a great day.

Bill

---

**From:** Henning, Aaron  
**Sent:** Tuesday, December 30, 2014 5:26 PM  
**To:** Emmons, Bill; Borders, Monte  
**Subject:** FW: 2014 Annual Report NPDES Information Request- Maintenance Division

Gentlemen,

Would you mind providing me with the "total tonnage removed" quantity for 2014 once you have it?

Many thanks!

Aaron

## Hardesty, James

---

**From:** Knebel, Scott  
**Sent:** Thursday, January 07, 2016 4:37 PM  
**To:** Hardesty, James  
**Subject:** RE: 2015 Annual Report NPDES Information Request- MAPD  
**Attachments:** Wichita City Limits as of 12-31-15.pdf

Jim:

I've attached map of the city limits as of 12/31/15 in PDF format. In 2015, the City annexed 386.68 acres (0.604 square miles).

Scott

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:23 PM  
**To:** Knebel, Scott <[SKnebel@wichita.gov](mailto:SKnebel@wichita.gov)>  
**Subject:** 2015 Annual Report NPDES Information Request- MAPD

Scott,

Please update this information for activities in 2015.

Thanks,

Jim

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 2:05 PM  
**To:** Knebel, Scott <[SKnebel@wichita.gov](mailto:SKnebel@wichita.gov)>  
**Subject:** 2014 Annual Report NPDES Information Request- MAPD

Scott,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Knebel, Scott  
**Sent:** Wednesday, January 22, 2014 1:23 PM  
**To:** Hardesty, James  
**Subject:** RE: 2013 NPDES Information Request- MAPD

Jim:

I've attached map of the current city limits in PDF format. In 2013, the City annexed 122.99 acres (0.192 square miles).

Scott

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:21 AM  
**To:** Knebel, Scott  
**Subject:** 2013 NPDES Information Request- MAPD

Greetings Scott,

I am requesting the same information to reflect activities during calendar year 2013. Let me know if you have questions, and Thanks!

JH

---

**From:** Knebel, Scott  
**Sent:** Wednesday, January 09, 2013 4:16 PM  
**To:** Hardesty, James  
**Cc:** Schlegel, John; Lindebak, Scott  
**Subject:** RE: 2012 NPDES Information Request- MAPD

Jim:

The City of Wichita de-annexed the Furley property in 2012, so the land area within the city limits actually decreased in 2012 by 441.68 acres (0.69 square miles). I'm still waiting on County GIS to load the last annexation approved in 2012 before I can do a PDF map.

Scott

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:57 AM  
**To:** Knebel, Scott  
**Cc:** Schlegel, John; Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- MAPD

Greetings Scott,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**MAPD**

- A map, in PDF format, of the current city limits
- The total acreage and square miles annexed into the City in 2012.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Schiffelbein, Tyler  
**Sent:** Monday, January 11, 2016 11:48 AM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- City Managers Office

James,

Here are the programs that we ran the last year. Not sure if all of them meet the requirements, but I thought I would add them. Let me know if you need anything else.

**FEMA Flood Map Meetings - around 80 plays**

**Serving You - How to See if Your Property is in a Floodplain - several hundred times**

**Local Loop FEMA Floodplain Maps - around 80 plays**

**2015 Arkansas River Trash Roundup PSA – several hundred times**

**Stormwater Response Update – around 40 times**

**Dog Doogity - several hundred times**

**Mayors Media Briefing 5/28/15 – 15 times** - Mayor Jeff Longwell discusses the recent rainfall and how it has helped Wichita's water supply and how drainage improvements over the past few years has prevented flooding on the west side of town. He also talked about the City of Wichita Social Media Town Hall meetings to get the public's input on the upcoming budget.

**Mayors Media Briefing 7/9/15 – 15 times** - During Mayor Longwell's media briefing he discussed the City of Wichita's response to Monday night's flash flooding as well as an update on visitor passes for city hall. Council member Lavonta Williams also highlighted a new initiative to help felons get back into the work force with the Ban the Box program.

**Mayors Media Briefing 8/27/15 – 15 times** - Mayor Jeff Longwell and District V council member Bryan Frye detail the plans for a new wetland park in Northwest Wichita.

Thanks,

Tyler Schiffelbein  
City7 Producer  
(316) 352 – 4881  
[wichita.gov](http://wichita.gov)  
[YouTube](#)



**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:28 PM  
**To:** Schiffelbein, Tyler <TSchiffelbein@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, December 30, 2014 3:39 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Annual Report Information Request- City Managers Office

James,

We ran the EPA Stormwater PSA and a Serving You – River Trash Roundup. Both ran a several hundred times.

Thanks,

Tyler Schiffelbein  
City7 Producer



**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 1:58 PM  
**To:** Schiffelbein, Tyler  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** 2014 NPDES Annual Report Information Request- City Managers Office

Tyler,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Schiffelbein, Tyler  
**Sent:** Friday, February 07, 2014 3:39 PM  
**To:** Hardesty, James  
**Cc:** Locke, Lauragail; Williams, Van  
**Subject:** RE: 2013 NPDES Information Request- City Managers Office

The only other things that I can think to add would be the "After the Storm" video that ran more than 50 times and the "Reduce Water Runoff" video that ran more than 50 times. As far as press releases go, you will need to ask Van or Lauragail.

---

**From:** Hardesty, James  
**Sent:** Thursday, February 06, 2014 12:20 PM  
**To:** Schiffelbein, Tyler  
**Subject:** FW: 2013 NPDES Information Request- City Managers Office

Tyler, below is a more specific information request for activities in 2013. The items in red are from the 2012 report, and I'm looking for an update for 2013. Feel free to include any additional type of stormwater pollution messages, e.g. videos, press releases, etc.

Let me know if you have questions,

Jim

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on 2013
---------------	-----------------------	--------------------	------------------

MCM 1A	<p><b>Citizen Outreach/Educational Materials:</b></p> <p>Video messages and graphics will be developed by the City for use on the City's Cable Channel 7 or other video outlets for community distribution. This activity will take the form of periodic repeating video presentations or graphics informing citizens of the importance of preventing stormwater pollution and individual actions citizens can take to reduce their impact on stormwater.</p>	<p>A new repeating video, obtained in January 2012, designed to inform the public on stormwater pollution prevention will be run at least twice per year on the City's Cable Channel 7, beginning in 2012. Presentations/messages and graphics will be documented along with the media used and its duration.</p>	<p>In 2012, the following were disseminated via press releases.</p> <ul style="list-style-type: none"> <li>• Press release educational presentation County.</li> <li>• Announcemer Round Up.</li> <li>• To date, 4778 Dumping-Drainage purchased, and Installation will be completed.</li> <li>• The EPA video produced 'Dog Doogity' 100 times.</li> </ul>
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**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:17 AM  
**To:** Schiffelbein, Tyler  
**Subject:** 2013 NPDES Information Request- City Managers Office

Hi Tyler,

I am requesting an update to reflect activity in calendar year 2013. Let me know if you have questions, and Thanks!

JH

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 2:24 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

Other projects included Dog Doogity and This is Our City, Help Keep it Pretty an anti-littering psa. These both run hundreds of times and maybe even thousands. I can't give an exact number because they are in our general rotation and play in a continuous loop. There were also some April Burn Ban News Conferences and PSAs that we ran. I'm not sure if that is what you are looking for.

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 1:59 PM  
**To:** Schiffelbein, Tyler  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I believe that EPA video is called "Reduce Runoff". Are there other environmental educational messages that were ran? Perhaps, pick up after your pets, or don't litter....those types of messages? If so, what were they, and how many times did they air?

**From:** Schiffelbein, Tyler  
**Sent:** Tuesday, January 08, 2013 1:53 PM  
**To:** Hardesty, James  
**Subject:** RE: 2012 NPDES Information Request- City Managers Office

I know we ran a video about stormwater runoff that was given to us by the EPA. It probably ran about 50-70 times. That is the only thing that we ran.

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:56 AM  
**To:** Aviks, Debbie; Locke, Lauragail; Schiffelbein, Tyler  
**Cc:** Williams, Van; Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- City Managers Office

Greetings,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**City Manager's Office:**

- Any publications, news releases, or responses to the media concerning stormwater inspection, compliance, educational programs, proper use of pesticides and fertilizers, reporting of illicit discharges, and the improper disposal of hazardous materials.
- Any environmental education, stormwater in particular, that was disseminated via City 7.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**Hardesty, James**

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**From:** Soto, Correl  
**Sent:** Tuesday, January 12, 2016 4:48 PM  
**To:** Hardesty, James  
**Cc:** Quick, Laura; Schotsborg, Remilde; Dean, Alex  
**Subject:** RE: 2015 NPDES Annual Report Information Request- Environmental Services Grease

Jim,  
Please let me know if you have any questions.

MCM 3F	<b>Restaurant Inspection for Proper Waste Grease Management</b>  Inspect restaurants to verify that grease is not being discharged to the municipal storm drains. These inspections are incorporated into the regular restaurant inspection system and are accomplished by City inspectors.	Inspections of restaurant grease handling are an existing program within the Public Works & Utilities Department. There will be a minimum of 160 inspections performed each year of the Permit and will be reported in our Annual Report. If changes are necessary with this program, KDHE will be informed.	In 2015 insp issu and rate.
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**From:** Dean, Alex  
**Sent:** Friday, January 08, 2016 9:16 AM  
**To:** Soto, Correl <CSoto@wichita.gov>; Schotsborg, Remilde <RSchotsborg@wichita.gov>  
**Cc:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** FW: 2015 NPDES Annual Report Information Request- Environmental Services Grease

Correl or Remilde,

When you finish running the numbers for 2015, please provide the requested information to Jim. (You just need to update the information in red.)

Thanks,

Alex

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 3:38 PM  
**To:** Dean, Alex <ADEAN@wichita.gov>  
**Cc:** Quick, Laura <LQuick@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- Environmental Services Grease

Alex,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Dean, Alex  
**Sent:** Tuesday, January 13, 2015 12:19 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Cc:** Quick, Laura <[LQuick@wichita.gov](mailto:LQuick@wichita.gov)>  
**Subject:** 2014 NPDES Annual Report Information Request- Environmental Services

Jim,

Here is the information requested on grease inspections.

MCM 3F	<p><b>Restaurant Inspection for Proper Waste Grease Management</b></p> <p>Inspect restaurants to verify that grease is not being discharged to the municipal storm drains. These inspections are incorporated into the regular restaurant inspection system and are accomplished by City inspectors.</p>	<p>Inspections of restaurant grease handling are an existing program within the Public Works &amp; Utilities Department. There will be a minimum of 160 inspections performed each year of the Permit and will be reported in our Annual Report. If changes are necessary with this program, KDHE will be informed.</p>	In 2014 inspections issued and rate.
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Alex

**Alex Dean** Public Health Sanitarian

City of Wichita | Public Works & Utilities | Food Protection, Tobacco Control & Grease Program  
1900 E 9<sup>th</sup> St N • Wichita, KS 67214 | TEL 316.268.8362 • FAX 316.858.7787  
Connect with us: [wichita.gov](http://wichita.gov) | [Twitter](https://twitter.com/wichita) | [Facebook](https://www.facebook.com/wichita) | [YouTube](https://www.youtube.com/wichita)

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## Hardesty, James

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**From:** Perkins, Bill  
**Sent:** Tuesday, January 19, 2016 1:53 PM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- Sewer Maintenance Division  
**Attachments:** 2015 KDHE Reports.pdf

2,655,900 lf of sanitary sewers cleaned  
99,381 lf of sanitary sewers rehabilitated or replaced  
147 line repairs completed, resulting in an equivalent of 32,340 lf of repaired sanitary sewers  
514,952 lf of sanitary sewers televised  
All 25 of the 2015 KDHE wastewater bypass and backup reports are attached

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:30 PM  
**To:** Perkins, Bill <BPerkins@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- Sewer Maintenance Division

Bill,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Perkins, Bill  
**Sent:** Tuesday, January 13, 2015 1:26 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: 2014 NPDES Annual Report Information Request- Sewer Maintenance Division

2,798,335 lf of sanitary sewers cleaned  
91,310 lf of sanitary sewers rehabilitated or replaced  
120 line repairs completed, resulting in an equivalent of 26,400 lf of repaired sanitary sewers  
477,521 lf of sanitary sewers televised  
All 24 of the 2014 KDHE wastewater bypass and backup reports are attached

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 2:06 PM  
**To:** Perkins, Bill  
**Subject:** 2014 NPDES Annual Report Information Request- Sewer Maintenance Division

Bill,

Please update this information for activities in 2014.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

**From:** Perkins, Bill  
**Sent:** Wednesday, January 22, 2014 12:44 PM  
**To:** Hardesty, James  
**Subject:** RE: 2013 NPDES Information Request- Sewer Maintenance Division

3,071,250 lf of sanitary sewers cleaned  
60,176 lf of sanitary sewers rehabilitated or replaced  
149 line repairs completed, resulting in an equivalent of 32,780 lf of repaired sanitary sewers  
600,367 lf of sanitary sewers televised  
All 21 of the 2013 KDHE wastewater bypass and backup reports are attached.

---

**From:** Hardesty, James  
**Sent:** Wednesday, January 22, 2014 10:30 AM  
**To:** Perkins, Bill  
**Subject:** 2013 NPDES Information Request- Sewer Maintenance Division

Greetings Bill,

I am requesting the same information below to reflect activities during calendar year 2013. Let me know if you have questions, and Thanks!

JH

---

**From:** Perkins, Bill  
**Sent:** Wednesday, January 16, 2013 11:39 AM  
**To:** Hardesty, James  
**Cc:** Lindebak, Scott  
**Subject:** RE: 2012 NPDES Information Request- Sewer Maintenance Division

2,552,796 lf of sanitary sewers cleaned  
45,202 lf of sanitary sewers rehabilitated or replaced  
319 line repairs completed, resulting in an equivalent of 70,180 lf of repaired sanitary sewers  
586,705 lf of sanitary sewers televised  
All 25 of the 2012 KDHE wastewater bypass and backup reports are attached.

---

**From:** Hardesty, James  
**Sent:** Tuesday, January 08, 2013 11:56 AM  
**To:** Perkins, Bill  
**Cc:** Lindebak, Scott  
**Subject:** 2012 NPDES Information Request- Sewer Maintenance Division

Greetings Bill,

The time has come again to compile information for the City's Annual Stormwater National Pollutant Discharge Elimination System (NPDES) Report. The Stormwater Management Division is responsible for putting together the 2012 report. Therefore, please send all pertinent information regarding your 2012 activities to Jim Hardesty at [JHardesty@wichita.gov](mailto:JHardesty@wichita.gov).

In order to prepare and submit this report by the regulatory deadline, we will need your information on or before January 31, 2013.

In addition, I have listed below important information that will be needed from each department that has historically been involved with the Stormwater NPDES Annual Report and process. The information needed is as follows:

**Public Works & Utilities:**

**Sewer Maintenance Division:**

**Bill Perkins- Superintendent Sewer Maintenance**

- Total miles of sewer lines cleaned and linear feet of pipe repaired in 2012.
- Linear feet of sewer lines televised and corrective action taken as necessary.
- A summary of any illicit discharges detected and how they were resolved.
- Copies of all 2012 Wastewater Bypass Reports.

Please feel free to contact me with any questions, and thank you in advance for your effort,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8th Floor  
Wichita, Ks. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

## Hardesty, James

---

**From:** Fleming, Kelly  
**Sent:** Monday, January 11, 2016 9:08 AM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information- GIS Update

Jim,

By the end of 2015, 71,859 stormwater structures and 1,371 miles of conduit have been put on a GIS layer.

The email I sent you last January should have read 'By the end of 2014'.

Thanks,

**Kelly Fleming** | City of Wichita | 316-268-4326 | [www.wichita.gov](http://www.wichita.gov)

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 5:01 PM  
**To:** Fleming, Kelly <KFleming@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information- GIS Update

Kelly,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Fleming, Kelly  
**Sent:** Tuesday, January 27, 2015 8:45 AM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: NPDES GIS Update

Jim,

By the end of 2015, 68,059 stormwater structures and 1,282 miles of conduit have been put on a GIS layer.

Thanks,

**Kelly Fleming** | City of Wichita | 316-268-4326 | [www.wichita.gov](http://www.wichita.gov)

**From:** Hardesty, James  
**Sent:** Monday, January 26, 2015 4:15 PM  
**To:** Fleming, Kelly  
**Subject:** NPDES GIS Update

Kelly, Please update the information in red to reflect totals at the end of 2014.

3B	Develop a stormwater system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a computer disk.	A complete GIS stormwater system map has been completed, and will be maintained, and updated throughout the year. A GIS map layer of the stormwater system will be made available for public use in 2015, and will be available on the City of Wichita website.	By the end of 2014, 67,394 stormwater structures and 1,214 miles of conduit have been put on a GIS layer.
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## Hardesty, James

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**From:** Hall, Mark  
**Sent:** Wednesday, January 20, 2016 10:37 AM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- Biannual Post Construction Inspection Reports

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:25 PM  
**To:** Hall, Mark <MAHall@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- Biannual Post Construction Inspection Reports

Mark,

Please update the information in **red** to reflect activities in 2015.

5 a b c d	<b>a:</b> Strategies which include a combination of structural and/or non-structural BMPs, <b>b:</b> Measures to ensure adequate long-term operation and maintenance of BMPs, <b>c:</b> Site owner or operator name and telephone responsible to ensure adequate long-term operation maintenance of BMP's, <b>d:</b> BMPs to prevent or minimize adverse water impacts.	The governing ordinance, Chapter 16.32 contains these requirements as reflected in the City of Wichita/Sedgwick County Stormwater Manual, which is available in hard copy and on the City website. Occasional revisions are made to the Manual, and the Manual is updated. Revisions and updates will be included in the Annual Report. The number of BMPs implemented in a reporting year, and the number of completed bi-annual BMP inspections will be reported in the Annual Report.	The Wichita/Sedgwick County Stormwater Manual is available in a digital format for free at: <a href="http://www.wichita.gov/Government/Departments/Stormwater">http://www.wichita.gov/Government/Departments/Stormwater</a> The Wichita/Sedgwick County Stormwater Manual is reviewed and updated via monthly meetings of the Stormwater Advisory Board. Updates are posted on the City website. The Stormwater Manual includes the following: <ul style="list-style-type: none"><li>• Inspection report every 2 years</li><li>• Inspection Certification submitted to City</li><li>• 19 Structural BMP's to select from</li><li>• 5 Non-Structural BMP's</li><li>• Requirements to permit Proprietary Systems</li></ul> <b>In 2015, City staff reviewed, and issued Stormwater Manual updates totaling 637 acres of Development or Redevelopment. The City received certified Bi-annual Inspector annual inspection numbers will increase as more come online.</b>
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Mark,

Please update the information in red to reflect activities in 2015.

5 a b c d	<b>a:</b> Strategies which include a combination of structural and/or non-structural BMPs, <b>b:</b> Measures to ensure adequate long-term operation and maintenance of BMPs, <b>c:</b> Site owner or operator name and telephone responsible to ensure adequate long-term operation maintenance of BMP's, <b>d:</b> BMPs to prevent or minimize adverse water impacts.	The governing ordinance, Chapter 16.32 contains these requirements as reflected in the City of Wichita/Sedgwick County Stormwater Manual, which is available in hard copy and on the City website. Occasional revisions are made to the Manual, and the Manual is updated. Revisions and updates will be included in the Annual Report. The number of BMPs implemented in a reporting year, and the number of completed bi-annual BMP inspections will be reported in the Annual Report.	The Wichita/Sedgwick County Stormwater digital format for free at: <a href="http://www.wichita.gov/Government/Departments/Stormwater/">http://www.wichita.gov/Government/Departments/Stormwater/</a> The Wichita/Sedgwick County Stormwater Manual is reviewed and updated via monthly Advisory Board. Updates are posted on the City website. The Stormwater Manual includes the following: <ul style="list-style-type: none"><li>• Inspection report every 2 years</li><li>• Inspection Certification submitted</li><li>• 19 Structural BMP's to select from</li><li>• 5 Non-Structural BMP's</li><li>• Requirements to permit Proprietary Development</li></ul> In 2014, City staff reviewed, and issued 528 acres of Development or Redevelopment BMPs. The City received certified Bi-annual Inspection Reports for 6 BMPs, this will be a point of enforcement in 2015.
-----------------------	--	--	--

Thanks,

Jim

**From:** Hall, Mark

**Sent:** Tuesday, January 27, 2015 10:57 AM

**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>

**Subject:** RE: 2014 Bi-annual Inspection Reports

**From:** Hardesty, James

**Sent:** Tuesday, January 27, 2015 10:15 AM

**To:** Hall, Mark

**Subject:** 2014 Bi-annual Inspection Reports

In 2014, The City received certified Bi-annual Inspection reports for 6 BMPs.

## Hardesty, James

---

**From:** Degenhardt, Steve  
**Sent:** Tuesday, January 12, 2016 11:21 AM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- City Construction Site Inspections

In 2015, 23 City personnel oversaw BMP implementation on 165 publicly bid City projects budgeted at \$58.2 million.

The rest is unchanged.

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:32 PM  
**To:** Degenhardt, Steve <SDegenhardt@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- City Construction Site Inspections

Steve,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Degenhardt, Steve  
**Sent:** Thursday, January 08, 2015 7:06 AM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: 2014 NPDES Annual Report Construction Site Inspections

In 2014, 25 City personnel oversaw BMP implementation on 115 publicly bid City projects budgeted at \$49.4 million.

The rest is still unchanged.

**From:** Hardesty, James  
**Sent:** Tuesday, December 30, 2014 1:56 PM  
**To:** Degenhardt, Steve  
**Subject:** 2014 NPDES Annual Report Construction Site Inspections

Steve,

Please update this information with 2014 activities.

Thanks,

Jim Hardesty  
Water Quality Specialist  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317

**From:** Degenhardt, Steve  
**Sent:** Tuesday, January 28, 2014 2:23 PM  
**To:** Hardesty, James  
**Subject:** RE: 2013 NPDES Construction Site Inspections

In 2013, 28 City personnel oversaw BMP implementation on 103 publicly bid City projects budgeted at \$41.5 million.

The rest is unchanged. I think Greg included our Materials Lab, Locators, Survey Crews on last year's personnel #. The number 28 represents our inspectors and Engineers.

---

**From:** Hardesty, James  
**Sent:** Monday, January 27, 2014 11:17 AM  
**To:** Degenhardt, Steve  
**Subject:** 2013 NPDES Construction Site Inspections

TMDL 1 F	<b>Construction Site Inspections</b>  The City will use the current program of construction site inspections to target construction activities within the four listed watersheds.	Total nitrogen, biochemical oxygen demand pollutants, suspended solids, and bacteria.	Beginning October 2008, the City will identify and target those construction or redevelopment projects having BMPs that are within close proximity to one of the four associated designated streams or rivers. The City will initially inspect within 30 days of the project start date. This effort will continue throughout the permit term.	In 2012, 47 City personnel oversaw BMP implementation on 93 publicly bid City construction projects budgeted at \$53 million. The engineers, who have received BMP training, have inspected the projects within 30 days of construction start date. Sites continue to be monitored daily throughout the duration of construction.
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## Hardesty, James

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**From:** Hall, Mark  
**Sent:** Thursday, January 07, 2016 4:18 PM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- Construction Site Inspections

Jim,

We had 1009 inspections that resulted in 373 NOV's being issued for 37% of inspections resulting in a notice.

Thanks

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:05 PM  
**To:** Hall, Mark <MAHall@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- Construction Site Inspections

Mark,

Please update this information to reflect activities in 2015.

Thanks,

Jim

**From:** Hall, Mark  
**Sent:** Tuesday, January 06, 2015 4:02 PM  
**To:** Hardesty, James <JHardesty@wichita.gov>  
**Subject:** Percent of construction inspections

Jim,

We had 1034 inspections that resulted in 523 NOV's being issued for 50.6% of inspections resulting in a notice.

Mark A. Hall, CISEC  
Compliance Officer  
Stormwater Management  
Stormwater Compliance  
455 N. Main 8th Floor  
Wichita Ks. 67202  
(316) 268-8337  
E-Mail [Mahall@Wichita.gov](mailto:Mahall@Wichita.gov)

 Please consider the environment before printing this e-mail

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Visit our website:

<http://www.wichita.gov/Government/Departments/PWU/Pages/Stormwater.aspx>

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## Hardesty, James

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**From:** Le, Cindy  
**Sent:** Monday, January 11, 2016 10:41 AM  
**To:** Hardesty, James; Drennen, Kay  
**Cc:** Maloney, Shawn; Brown, Darren  
**Subject:** RE: 2015 NPDES Annual Report Information Request- WATER Center

Hi Jim,

The 2015 Arkansas River Trash Roundup had 855 participants and collected 1.8 tons of trash. The route of the Roundup is the same as the years before.

I'll let Kay fill in the rest. Please let me know if you need any other questions.

Cindy Le, MS  
Environmental Specialist  
Department of Public Works  
W.A.T.E.R. Center  
101 E. Pawnee St  
Wichita, KS 67211  
T: (316)350-3386

**“When the well's dry, we know the worth of water.”** – Benjamin Franklin

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 12:13 PM  
**To:** Drennen, Kay <KDrennen@wichita.gov>; Le, Cindy <CLe@wichita.gov>  
**Cc:** Maloney, Shawn <SMaloney@wichita.gov>; Brown, Darren <DLBrown@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- WATER Center

Kay and Cindy,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Drennen, Kay  
**Sent:** Thursday, January 29, 2015 2:55 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Cc:** Brown, Darren <[DLBrown@wichita.gov](mailto:DLBrown@wichita.gov)>; Maloney, Shawn <[SMaloney@wichita.gov](mailto:SMaloney@wichita.gov)>  
**Subject:** RE: 2014 NPDES Report WATER Center

WATER Center staff gave 10 storm water related school activities to 312 students, 7 storm water related community presentations to 197 citizens, and 27 tours of the Gilbert-Mosley treatment plant that reached 152 youth and adults. WATER Center staff also gave out 2,129 pieces of water quality educational materials.

WATER Center staff continued to work with the Arkansas River Coalition, a citizen’s group, that is dedicated to the protection and preservation of the Arkansas River. The ARC Board met 5 times in 2014, held one annual meeting, conducted two trash cleanups in their designated area along the Big Arkansas River between the red pedestrian bridge in Sim Park and the Seneca Street Bridge, and led 15 river floats.

The 2014 River Trash Round-up had 663 participants who collected 430 bags of trash that weighed in at 2.59 tons. The area in which the round-up took place was on both banks of the Big Arkansas River between the red pedestrian bridge at Sim Park (Meridian & Central street) and the John Mack Bridge (Broadway Street).

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 12:23 PM  
**To:** Drennen, Kay; Maloney, Shawn  
**Subject:** 2014 NPDES Report WATER Center

Kay and Shawn,

I need an update for activities undertaken during 2014 for the items in red.  
 We were issued a new NPDES Permit in 2014, and in that new Permit, the reporting due date was shortened by a month.

Please let me know if you have questions,

Jim Hardesty  
 City of Wichita  
 455 N. Main 8<sup>th</sup> Floor  
 Wichita, KS. 67202  
 316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

1D	Stormwater pollution prevention, water conservation and water quality education programs will continue to be developed and provided to schools and other interested organizations.	The City will continue contact with interested school officials and organization leaders. Programs and assistance will continue to be provided through ongoing programs at the W.A.T.E.R center and other locations, and will reach a minimum of 500 persons annually.	In 2012, City staff educated over 458 students at 19 presentations with stormwater activities and distributed educational materials for use in their classrooms. In 2012, WATER Center staff presented 10 talks and tours focusing on water quality issues that were attended by 328 adult citizens. Staff also gave out 1,052 pieces of water quality educational materials
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2B	The City will conduct at least one volunteer cleanup day with citizen and group volunteers.	An Arkansas River (and/or tributaries) cleanup will be held at least once each year. Results will be documented in the Annual Report.	Co-hosted by City staff and community partners, the annual River Trash Roundup was held on April 21, 2013. 3.0 tons of trash was collected by 648 volunteers in the area by the Sims Park walking bridge and the Broadway 'John Mack' bridge in the Arkansas River.
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## Hardesty, James

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**From:** Hickle, Joseph  
**Sent:** Monday, January 11, 2016 1:15 PM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Annual Report Information Request- WINSLAMM  
**Attachments:** Wichita Water Quality Modeling Analysis.pdf

Attached.

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 11:50 AM  
**To:** Hickle, Joseph <JHickle@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- WINSLAMM

Joe,

Please provide the answer for the section in red.

Thanks,

Jim

7D	Measurable goals for reducing pollutants contributed by MS4s shall be expressed in quantifiable values to reduce the concentration of pollutants, reduce the total mass of pollutants, a combination of the above methods and expressed as average and median values (percent reduction of inflow volume, reduction in pollutant concentration or mass loading) or for bacteria as a geometric mean.	Nutrients, Sediment, Bacteria	WINSLAMM or other appropriate modeling software will be used to calculate the required values.
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## Hardesty, James

---

**From:** Batchman, Renee  
**Sent:** Tuesday, January 12, 2016 3:53 PM  
**To:** Hardesty, James  
**Subject:** RE: 2015 NPDES Report Information Request- SWAB  
**Attachments:** SWAB Agenda 2015.pdf; SWAB Attendance 2015.pdf

Sorry about the delay in getting these to you.

RB

**From:** Hardesty, James  
**Sent:** Monday, January 11, 2016 9:03 AM  
**To:** Batchman, Renee <[RBatchman@wichita.gov](mailto:RBatchman@wichita.gov)>  
**Subject:** 2015 NPDES Report Information Request- SWAB

Renee,

Please update this information to reflect activity in 2015.

Thanks,

Jim

**From:** Batchman, Renee  
**Sent:** Tuesday, January 20, 2015 2:37 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: NPDES Report SWAB Information

Here are the agenda's and attendance for the 2014 calendar year.

Let me know if you need anything else!

Renee

**From:** Hardesty, James  
**Sent:** Monday, January 19, 2015 1:32 PM  
**To:** Batchman, Renee  
**Subject:** NPDES Report SWAB Information

Renee,

For the NPDES Annual Report, can you please send me (PDFs) of all of the SWAB attendance sheets and agendas.

Thanks.

4E	Procedure for receipt and consideration of information submitted by the public.	The City will sponsor monthly meetings of a Stormwater Management Advisory Board (SWAB). This advisory board will contain appointed representatives from the community, and is open to the public for comments as well. SWAB information, including agendas and attendance information will be posted to the City of Wichita website, and will be included in the Annual Report.	In 2014, SWAB met XX times. Attendance and agenda information is attached in Appendix ?
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## Hardesty, James

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**From:** Deutscher, Darrin  
**Sent:** Monday, January 11, 2016 11:30 AM  
**To:** Hardesty, James; Johnson, Alan W  
**Subject:** RE: 2015 NPDES Report Information- Stormwater

Here are the numbers for 2015

- Number of storm inlet medallions installed (3253 is the total installed for all years) 0
- Linear feet of storm conduit televised, and any illicit connections found 111,829.80 and 0 connections
- Linear feet of storm conduit cleaned 991,733.43
- Number of storm structures cleaned 98,547
- Number of storm structures inspected 1,037
- Linear feet of storm conduit installed 97.50
- Linear feet of storm conduit repaired 824.70
- Number of structures repaired 229
- Number of structures installed 0
- Number of structures replaced 64
- Number of structures located 30
- Stolen Lids 15

*Darrin Deutscher*  
*General Supervisor II*  
*Stormwater Management*  
316-268-4037

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 11:53 AM  
**To:** Deutscher, Darrin <DDeutscher@wichita.gov>; Johnson, Alan W <AWJohnson2@wichita.gov>  
**Subject:** 2015 NPDES Report Information- Stormwater

Darrin,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Deutscher, Darrin  
**Sent:** Monday, January 12, 2015 2:07 PM  
**To:** Johnson, Alan W <AWJohnson2@wichita.gov>; Hardesty, James <JHardesty@wichita.gov>  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

- Number of storm inlet medallions installed (3253 is the total installed for all years) 1804
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0) 128,478.30

- Linear feet of storm conduit cleaned (745,208) 543,505.94
- Number of storm structures cleaned (100,689) 78,282
- Number of storm structures inspected (2270) 1350
- Linear feet of storm conduit installed (49) 245.20
- Linear feet of storm conduit repaired (518) 181.2
- Number of structures repaired (215) 309
- Number of structures installed (0) 19
- Number of structures replaced (265) 64
- Number of structures located (193) 23
- Stolen Lids 146

*Darrin Deutscher*  
*General Supervisor II*  
*Stormwater Management*  
 316-268-4037

**From:** Johnson, Alan W  
**Sent:** Monday, January 12, 2015 1:46 PM  
**To:** Deutscher, Darrin  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

**From:** Hardesty, James  
**Sent:** Friday, January 09, 2015 1:43 PM  
**To:** Vyff, Neil; Johnson, Alan W  
**Cc:** Harper, Rhonda K  
**Subject:** 2014 NPDES Report Information- Stormwater

Below is information for activities during 2014 that I need to report on our annual NPDES Report. It's the same information requested for 2013 activities, I just needed it updated with 2014 results. Neil/Alan please select the ones in your area. The number in parenthesis is the activity level reported in the previous Annual Report.

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
- Number of storm inlet medallions installed (3253 is the total installed for all years)
- Linear feet of storm conduit televised, and any illicit connections found (53,364 and 0)
- Linear feet of storm conduit cleaned (745,208)
- Number of storm structures cleaned (100,689)
- Number of storm structures inspected (2270)
- Linear feet of storm conduit installed (49)
- Linear feet of storm conduit repaired (518)
- Number of structures repaired (215)
- Number of structures installed (0)
- Number of structures replaced (265)
- Number of structures located (193)

I know we are all busy, but if I could have these by Wednesday the 14<sup>th</sup>, I would very much appreciate it. Please let me know if there are questions, and Thanks for your efforts.

Jim

## Hardesty, James

---

**From:** Mitchell, Todd  
**Sent:** Monday, February 01, 2016 3:44 PM  
**To:** Hardesty, James  
**Cc:** Vyff, Neil  
**Subject:** RE: Reminder- 2015 NPDES Annual Report Information Request- Stream Buffer Strips

Here are the revised linear feet from buffers last year: 31416.82'

**From:** Hardesty, James  
**Sent:** Monday, February 01, 2016 7:58 AM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** RE: Reminder- 2015 NPDES Annual Report Information Request- Stream Buffer Strips  
**Importance:** High

"Here are the pertinent statistics" Todd, where are those stats? Did you mean to attach something?

**From:** Mitchell, Todd  
**Sent:** Sunday, January 31, 2016 5:39 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: Reminder- 2015 NPDES Annual Report Information Request- Stream Buffer Strips

Jim,

Here are the pertinent statistics you requested about the buffer zone debacle. I didn't mean for any delay, just humming the song "holding back the years". If you need further honing on the stats, but I'm sure you have what I have. The process has good and bad results but I feel the way to go is to cut everything if aesthetics rules.  
Todd

**From:** Hardesty, James  
**Sent:** Monday, January 25, 2016 10:48 AM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** Reminder- 2015 NPDES Annual Report Information Request- Stream Buffer Strips  
**Importance:** High

**From:** Hardesty, James  
**Sent:** Thursday, January 07, 2016 4:45 PM  
**To:** Mitchell, Todd <[TLMitchell@wichita.gov](mailto:TLMitchell@wichita.gov)>  
**Subject:** 2015 NPDES Annual Report Information Request- Stream Buffer Strips

Todd,

Please update this information to reflect the lineal feet of buffer strip for 2015.  
I don't need you to detail the locations again.

Thanks,

Jim

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 9:27 AM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Cowskin-E/S Maple to Kellogg-5476' east side  
Cowskin-W/S Maple to Kellogg-913' west side  
Cowskin-So. of Kellogg -247' both sides  
Cowskin-Harry to Pawnee Prairie-north side-1,365'  
Gyp Creek-Kinkaid to Woodlawn-E/S 3778.28', W/S 3778.28  
Gyp Creek-9<sup>th</sup>-13<sup>th</sup>-2774'-both sides  
Gyp Creek-Broadmoor to Rutland-2095'-both sides  
Cherry Creek-Pawnee to Cypress-2937.13'-both sides

**From:** Hardesty, James  
**Sent:** Friday, January 30, 2015 8:44 AM  
**To:** Mitchell, Todd  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Locations?

**From:** Mitchell, Todd  
**Sent:** Friday, January 30, 2015 8:39 AM  
**To:** Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

Jim,  
Here's the buffer numbers: 21,516.93'. These are linear numbers, typically 3' in width.

**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 4:32 PM  
**To:** Mitchell, Todd  
**Cc:** Vyff, Neil  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

Todd,

Can I get the buffer strip information below?

Thanks,

Jim

**From:** Deutscher, Darrin  
**Sent:** Monday, January 12, 2015 2:07 PM  
**To:** Johnson, Alan W; Hardesty, James  
**Subject:** RE: 2014 NPDES Report Information- Stormwater

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)

- Number of storm inlet medallions installed (3253 is the total installed for all years) 1804
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- Number of structures repaired (215) 309
- Number of structures installed (0) 19
- Number of structures replaced (265) 64
- Number of structures located (193) 23
- Stolen Lids 146

Here are all the Stormwater totals, will need to have Todd look into the 1<sup>st</sup> one.

*Darrin Deutscher*  
*General Supervisor II*  
*Stormwater Management*  
 316-268-4037

**From:** Johnson, Alan W  
**Sent:** Monday, January 12, 2015 1:46 PM  
**To:** Deutscher, Darrin  
**Subject:** FW: 2014 NPDES Report Information- Stormwater

**From:** Hardesty, James  
**Sent:** Friday, January 09, 2015 1:43 PM  
**To:** Vyff, Neil; Johnson, Alan W  
**Cc:** Harper, Rhonda K  
**Subject:** 2014 NPDES Report Information- Stormwater

Below is information for activities during 2014 that I need to report on our annual NPDES Report. It's the same information requested for 2013 activities, I just needed it updated with 2014 results. Neil/Alan please select the ones in your area. The number in parenthesis is the activity level reported in the previous Annual Report.

- Location, and linear feet of buffer strip (No Mow) zones in 2014 (not reported)
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- Number of structures located (193)

I know we are all busy, but if I could have these by Wednesday the 14<sup>th</sup>, I would very much appreciate it. Please let me know if there are questions, and Thanks for your efforts.

Jim

## **Hardesty, James**

---

**From:** Le, Cindy  
**Sent:** Wednesday, January 27, 2016 2:27 PM  
**To:** Hardesty, James; Drennen, Kay  
**Cc:** Maloney, Shawn; Brown, Darren  
**Subject:** RE: Reminder- 2015 NPDES Annual Report Information Request- WATER Center

Hi Jim!

Here are the updated information for 2015.

WATER Center staff gave 38 storm water related school activities on site to 606 students and 16 off-site programs to 478 students. We also gave WATER Center staff also gave out 728 pieces of water quality educational materials.

WATER Center staff continued to work with the Arkansas River Coalition, a citizen's group, that is dedicated to the protection and preservation of the Arkansas River. The ARC Board met 5 times in 2015, held one annual meeting, conducted two trash cleanups in their designated area along the Big Arkansas River between the red pedestrian bridge in Sim Park and the Seneca Street Bridge, and led 15 river floats.

The 2015 River Trash Round-up had 855 participants who collected 365 bags of trash that weighed in at 1.8 tons. The area in which the round-up took place was on both banks of the Big Arkansas River between the red pedestrian bridge at Sim Park (Meridian & Central street) and the John Mack Bridge (Broadway Street).

Cindy Le, MS  
Environmental Specialist  
Department of Public Works  
W.A.T.E.R. Center  
101 E. Pawnee St  
Wichita, KS 67211  
T: (316)350-3386

**“When the well's dry, we know the worth of water.”** – Benjamin Franklin

**From:** Hardesty, James  
**Sent:** Monday, January 25, 2016 10:47 AM  
**To:** Drennen, Kay <KDrennen@wichita.gov>; Le, Cindy <CLE@wichita.gov>  
**Cc:** Maloney, Shawn <SMaloney@wichita.gov>; Brown, Darren <DLBrown@wichita.gov>  
**Subject:** Reminder- 2015 NPDES Annual Report Information Request- WATER Center

**From:** Hardesty, James  
**Sent:** Friday, January 08, 2016 12:13 PM  
**To:** Drennen, Kay <KDrennen@wichita.gov>; Le, Cindy <CLE@wichita.gov>  
**Cc:** Maloney, Shawn <SMaloney@wichita.gov>; Brown, Darren <DLBrown@wichita.gov>  
**Subject:** 2015 NPDES Annual Report Information Request- WATER Center

Kay and Cindy,

Please update these numbers to reflect activity in 2015.

Thanks,

Jim

**From:** Drennen, Kay  
**Sent:** Thursday, January 29, 2015 2:55 PM  
**To:** Hardesty, James <[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)>  
**Cc:** Brown, Darren <[DLBrown@wichita.gov](mailto:DLBrown@wichita.gov)>; Maloney, Shawn <[SMaloney@wichita.gov](mailto:SMaloney@wichita.gov)>  
**Subject:** RE: 2014 NPDES Report WATER Center

WATER Center staff gave 10 storm water related school activities to 312 students, 7 storm water related community presentations to 197 citizens, and 27 tours of the Gilbert-Mosley treatment plant that reached 152 youth and adults. WATER Center staff also gave out 2,129 pieces of water quality educational materials.

WATER Center staff continued to work with the Arkansas River Coalition, a citizen's group, that is dedicated to the protection and preservation of the Arkansas River. The ARC Board met 5 times in 2014, held one annual meeting, conducted two trash cleanups in their designated area along the Big Arkansas River between the red pedestrian bridge in Sim Park and the Seneca Street Bridge, and led 15 river floats.

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**From:** Hardesty, James  
**Sent:** Wednesday, January 28, 2015 12:23 PM  
**To:** Drennen, Kay; Maloney, Shawn  
**Subject:** 2014 NPDES Report WATER Center

Kay and Shawn,

I need an update for activities undertaken during 2014 for the items in **red**.  
We were issued a new NPDES Permit in 2014, and in that new Permit, the reporting due date was shortened by a month.

Please let me know if you have questions,

Jim Hardesty  
City of Wichita  
455 N. Main 8<sup>th</sup> Floor  
Wichita, KS. 67202  
316-268-8317  
[JHardesty@wichita.gov](mailto:JHardesty@wichita.gov)

1D	Stormwater pollution prevention, water conservation and water quality education programs will continue to be developed and provided to schools and other interested organizations.	The City will continue contact with interested school officials and organization leaders. Programs and assistance will continue to be provided through ongoing programs at the W.A.T.E.R center and other locations, and will reach a minimum of 500 persons annually.	In 2012, City staff educated over 458 students at 19 presentations with stormwater activities and distributed educational materials for use in their classrooms. In 2012, WATER Center staff presented 10 talks and tours focusing on water quality issues that were attended by 328 adult citizens. Staff also gave out 1,052 pieces of water quality educational materials
2B	The City will conduct at least one volunteer cleanup day with citizen and group volunteers.	An Arkansas River (and/or tributaries) cleanup will be held at least once each year. Results will be documented in the Annual Report.	Co-hosted by City staff and community partners, the annual River Trash Roundup was held on April 21, 2013. 3.0 tons of trash was collected by 648 volunteers in the area by the Sims Park walking bridge and the Broadway 'John Mack' bridge in the Arkansas River.

## Hardesty, James

---

**From:** Batchman, Renee  
**Sent:** Thursday, February 11, 2016 12:20 PM  
**To:** Hardesty, James  
**Subject:** Info  
**Attachments:** 2015 SWAB Info.pdf

Here is your combined info!

Renee Batchman  
Administrative Aide II  
Public Works & Utilities  
Stormwater Management Division  
316-268-4498  
[rbatchman@wichita.gov](mailto:rbatchman@wichita.gov)



United Way of the Plains

## Hardesty, James

---

**From:** Fleming, Kelly  
**Sent:** Thursday, January 14, 2016 7:46 AM  
**To:** Hardesty, James  
**Subject:** 2015 NPDES System Maps

Jim,

The NPDES System maps are ready for your review at <S:\NPDES\Annual Report\2015 NPDES Report\Appendix C Supporting Documentation\System Maps> . The files that have '\_2015' were changed to show additional inventory collected in 2015. Please let me know if you have any questions.

Thank you,

Kelly Fleming | City of Wichita | 316-268-4326 | [www.wichita.gov](http://www.wichita.gov)

## Hardesty, James

---

**From:** Williams, Sonja  
**Sent:** Monday, January 25, 2016 10:52 AM  
**To:** Hardesty, James  
**Cc:** McGuire, David  
**Subject:** 2015 NPDES Report  
**Attachments:** 2015 NPDES Report.xlsx; NPDES Annual Report for 2015 Certification.docx

Sorry Mr. Hardesty wasn't meaning to exclude you however, I will add you to my distribution list. Thank you.

Sonja Loggins-Williams AAll  
City of Wichita Park and Recreation Department  
455 N Main, 11th Floor  
Wichita, Kansas 67202  
Office: 316-268-4152/ Fax: 316-219-6369  
[swilliams@wichita.gov](mailto:swilliams@wichita.gov)

## Hardesty, James

---

**From:** Hall, Mark  
**Sent:** Monday, January 25, 2016 12:49 PM  
**To:** Hardesty, James  
**Subject:** Training report  
**Attachments:** Karl's Tire A Auto 12\_29\_15.pdf; SOS Metals Midwest (SWP3 Training-6.4.15).pdf; Envirotech 03\_06\_15.pdf

Jim,

This year stormwater staff, in an effort to promote education and training throughout the community, has implemented an innovative approach with a select group of enforcement efforts. When a violations has taken place on commercial and industrial properties, and there is a feeling of an inadequate response or a lack of understanding from the Owners/Managers/employees or what appears to be a lack of training. When to offending parties have completed the cleanup phase, In lieu of other sanctions, stormwater enforcement staff are requiring the offending party/parties to conduct training for their employees with an emphasis on stormwater. This training is required to take place on a quarterly basis for two calendar years. The offending party is required to supply our office with a sign in sheet showing date, time of training, as well as the topic of training. Even if the employees of these firms move on to other employers they will take this training and knowledge with them. Please find attached some representative copies of sign in sheets, from some of the participants in this new innovative program.

Thanks

Mark A. Hall, CISEC  
Compliance Officer  
Stormwater Management  
Stormwater Compliance  
455 N. Main 8th Floor  
Wichita Ks. 67202  
(316) 268-8337  
E-Mail [Mahall@Wichita.gov](mailto:Mahall@Wichita.gov)

Please consider the environment before printing this e-mail

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Visit our website:

<http://www.wichita.gov/Government/Departments/PWU/Pages/Stormwater.aspx>

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# APPENDIX B

# WATER MONITORING RESULTS

## PHASE I OPERATOR (Industrial & high risk run-off control pollutants within the MS4)

Site Name: Northeast Substation

Site Number: 5561-203b

Event Rainfall Total: 0.08 Inches

Lake:

Stream:

Estimated Stream Flow: 1<sup>st</sup> Flush Samples CFS

Stream Level Conditions: 1<sup>st</sup> Flush (Rising, Falling, Steady)

Stream Velocity Conditions: 1<sup>st</sup> Flush (Rapid/Normal, Still (backwater))

Sample Date: Sept 23, 2015

Parameters & Units Required	Results*	Sample Type	
		Grab	Composite
Oil & Grease (mg/l)	6.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chemical Oxygen Demand (mg/l)	115	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH (S.U.)	8.13	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Biochemical Oxygen Demand (5-day)	27	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Suspended Solids (mg/l)	112	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Phosphorus (mg/l)	0.14	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Kjeldahl Nitrogen (mg/l)	2.37	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nitrate + Nitrite (mg/l)	1.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Pollutant in Guidelines		<input type="checkbox"/>	<input type="checkbox"/>
Other Pollutant In permit		<input type="checkbox"/>	<input type="checkbox"/>
Other: Nitrogen as N	4.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>

Comments: \_\_\_\_\_

### Footnotes and comments

\* Any result shown in analytical report to be ND (non-detect) must be shown as < with the reporting/detection limit by the certified laboratory.

This form, Water Monitoring Results for Phase I Operator, is intended for use by Phase I MS4s.

NPDES permitted Phase I MS4s included Topeka: Unified Government of Wyandotte County and Kansas City, Kansas; and Wichita. All other NPDES permitted MS4s in Kansas are Phase II MS4s

# APPENDIX B

# WATER MONITORING RESULTS

## PHASE I OPERATOR (Industrial & high risk run-off control pollutants within the MS4)

Site Name: Bus Transit Facility

Site Number: 5547-1562

Event Rainfall Total: 0.08 Inches

Lake:

Stream:

Estimated Stream Flow: 1<sup>st</sup> Flush Samples CFS

Stream Level Conditions: 1<sup>st</sup> Flush Samples (Rising, Falling, Steady)

Stream Velocity Conditions: 1<sup>st</sup> Flush Samples (Rapid/Normal, Still (backwater))

Sample Date: Sept 23, 2015

Parameters & Units Required	Results*	Sample Type	
		Grab	Composite
Oil & Grease (mg/l)	ND(5.8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chemical Oxygen Demand (mg/l)	172	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH (S.U.)	8.64	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Biochemical Oxygen Demand (5-day)	41	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Suspended Solids (mg/l)	133	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Phosphorus (mg/l)	0.55	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Kjeldahl Nitrogen (mg/l)	2.36	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nitrate + Nitrite (mg/l)	1.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Pollutant in Guidelines		<input type="checkbox"/>	<input type="checkbox"/>
Other Pollutant In permit		<input type="checkbox"/>	<input type="checkbox"/>
Other: Nitrogen as N	3.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>

Comments: \_\_\_\_\_

### Footnotes and comments

\* Any result shown in analytical report to be ND (non-detect) must be shown as < with the reporting/detection limit by the certified laboratory.

This form, Water Monitoring Results for Phase I Operator, is intended for use by Phase I MS4s.

NPDES permitted Phase I MS4s included Topeka: Unified Government of Wyandotte County and Kansas City, Kansas; and Wichita. All other NPDES permitted MS4s in Kansas are Phase II MS4s

Worksheet #10

Facility: BROOKS LAFFELL

Completed By:

Title:

Date:

Employee Training Record

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Spill Prevention & Response GOOD HOUSEKEEPING MATERIAL MANAGEMENT	OVERVIEW OF SWPZ PLANS REQUIREMENTS AND BEST PRACTICES	01/22/2010	Aaron Henning, Tony DeGiacco, FRANKLIN
Spill Prevention & Response GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM + DISCUSSIONS	10/18/2010	Aaron Henning, Tony DeGiacco, Bill Emmons, Monte Borealis
SWPZ - SWP3/SPEC PLANS & BEST PRACTICES	COPYRIGHT FROM NET - Spill PREVENTION (FOUNDS ACCIDENTAL BY PRODUCTS)	17 Jul 11	Bill Emmons, Monte Borealis
SWPZ - SWP3/SPEC PLANS & BEST PRACTICES	REVIEWED - POST IN THIS FOLDER (AT END OF THIS SECTION)	27 Jul 12	Bill Emmons, Monte Borealis
SWPZ - SWP3/SPEC PLANS & BEST PRACTICES - EXCEPTS FOR ENV. COMPLIANCE PROGRAM	REVIEWED	9 Jul 13	Bill Emmons, Monte Borealis
SWPZ - SWP3/SPEC PLANS & BEST PRACTICES	REVIEWED	16 Jul 14	Bill Emmons, Monte Borealis

Worksheet #13

Brooks C & S Landfill

Facility:

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
29 APR 15	William [Signature]	No presence of SW pollutants observed
28 May 15	William [Signature]	No presence of Non-SW pollutants observed
29 Jun 15	William [Signature]	No presence of SW pollutants observed
July 28, 2015	Mark [Signature]	No presence of any SW pollutants observed

Worksheet #13

Brooks C/D LaFric

Facility:

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
28 Oct 14	William Johnson	No Presence of SW Pollutants observed
28 Nov 14	William Johnson	No Presence of Non-SW Pollutants observed
30 Dec 14	William Johnson	No Presence of SW Pollutants observed
9 JAN 15	William Johnson	No Presence of Non-SW Pollutants observed
24 Feb 15	William Johnson	No Presence of SW Pollutants observed
20 MAR 15	William Johnson	No Presence of Non-SW Pollutants observed

# Worksheet #13

Facility: *Deans Child Center*

Completed By:

Title:

Date:

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
23 APR 14	<i>William C. Williams</i>	No presence of SW Pollutants observed
28 MAY 14	<i>William C. Williams</i>	No presence of Non-SW Pollutants observed No presence of SW Pollutants observed
26 Jun 14	<i>William C. Williams</i>	No presence of Non-SW Pollutants observed No presence of SW Pollutants observed
28 Jul 14	<i>William C. Williams</i>	No presence of Non-SW Pollutants observed No presence of SW Pollutants observed
28 Aug 14	<i>William C. Williams</i>	No presence of Non-SW Pollutants observed No presence of SW Pollutants observed
29 Sep 14	<i>William C. Williams</i>	No presence of Non-SW Pollutants observed No presence of SW Pollutants observed

<b>Worksheet #11</b>		Facility: <u>BROOKS</u>
<b>Site Compliance Inspection Report</b>		Completed By: <u>JA</u>
		Title: _____
		Date: <u>7/28/15</u>
<p><b>Instructions:</b> Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.</p>		
<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1		<u>Yes</u>
2		
3		
4		
<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1		
<u>None</u>		
2		
3		
4		
<b>Certification</b>		
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>		
A. Name & Official Title (Type or Print)		B. Area Code and Telephone No.
<u>Jim Hardesty Int. Dev. Mgr.</u>		<u>316-268-8317</u>
C. Signature		D. Date Signed
<u>Jim Hardesty</u>		<u>7/28/15</u>

Worksheet #10

Employee Training Record

Facility:  
Completed By:  
Title:  
Date:

Brooks Laddell

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g. film, newsletter course)	Schedule of Training (list dates)	Attendees
Spill Prevention & Response Good Housekeeping Material Management	Overview of SUD2 Plans Requirements and Best Practices	01/22/2010	Aaron Hawkins, Tony DeCoco, Francklin
Spill Prevention & Response Good Housekeeping Material Management	Form & Discussions CORALS FROM NET - Spill Prevention (rounds available in hallway)	10/18/2010	Aaron Hawkins, Tony DeCoco, Francklin
Spill Prevention & Response Good Housekeeping Material Management	CORALS FROM NET - Spill Prevention (rounds available in hallway)	12 Jul 11	Brie Emmons
Spill Prevention & Response Good Housekeeping Material Management	Reviewed - Best in This Folder (AT and of this section)	27 Jul 12	Brie Emmons
Spill Prevention & Response Good Housekeeping Material Management	Reviews	9 Jul 13	Brie Emmons
Spill Prevention & Response Good Housekeeping Material Management	Reviews	16 Jul 14	Brie Emmons

# Worksheet #13

## Monthly Site Inspections

Brooks C. S. & W. D. Inc.

Facility: \_\_\_\_\_  
 Completed By: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
29 APR 15	William Williams	No presence of SW Pollutants observed
28 MAR 15	William Williams	No presence of Non-SW Pollutants observed
29 Jun 15	William Williams	No presence of SW Pollutants observed
July 28, 2015	Mark Bruders	No presence of any SW pollutants observed

# Worksheet #13

## Monthly Site Inspections

Facility: Brooks G.D. Landfill

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
28 Oct 14	William D. Williams	No Presence of Soil Pollutants observed
28 Nov 14	William D. Williams	No Presence of Non-Soil Pollutants observed.
30 Dec 14	William D. Williams	No Presence of Non-Soil Pollutants observed.
29 Jan 15	William D. Williams	No Presence of Non-Soil Pollutants observed.
24 Feb 15	William D. Williams	No Presence of Non-Soil Pollutants observed.
20 Mar 15	William D. Williams	No Presence of Non-Soil Pollutants observed.

## Worksheet #13

### Monthly Site Inspections

Facility:

*Proas Civil Services*

Completed By:

Title:

Date:

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
23 Apr 14	<i>William D. Williams</i>	No presence of SW pollutants observed
28 May 14	<i>William D. Williams</i>	No presence of SW pollutants observed
26 Jun 14	<i>William D. Williams</i>	No presence of SW pollutants observed
28 Jul 14	<i>William D. Williams</i>	No presence of SW pollutants observed
28 Aug 14	<i>William D. Williams</i>	No presence of SW pollutants observed
29 Sep 14	<i>William D. Williams</i>	No presence of SW pollutants observed

# Worksheet #13

Facility: CMF

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
04/20/15	Aaron Henning	Presence of SW Pollutants NOT OBSERVED
05/27/15	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED Presence of SW Pollutants NOT OBSERVED
06/19/15	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED Presence of SW Pollutants NOT OBSERVED
07/22/15	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED Presence of SW Pollutants NOT OBSERVED
		Presence of Non-SW Discharge NOT OBSERVED

# Worksheet #13

Facility: CMF

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
10/22/14	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
11/20/14	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED.
12/22/14	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
01/28/15	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED.
02/25/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
03/25/15	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED.

\* SCHEDULE INSPECTIONS UPON COMPLETION OF DESIGNATED SHOW ROUTES.

Worksheet #10

Facility: CMF

Completed By:

Title:

Date:

Employee Training Record

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	OVERVIEW OF SWP2 PLAN REQUIREMENTS AND COMPLIANT PRACTICES	04/13/2010	Aaron Henning, CMF DON CRODDICK, CMF FRONTLINE'S
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM AND DISCUSSION	10/18/2010	CMF Management BOBBI F. INSPECTOR
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM AND DISCUSSION	10/19/2010	CMF FRONTLINE STAFF
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM AND DISCUSSION	12/19/11, 14/28/11, 01/19/12, 02/04/12, 02/04/12	CMF MANAGEMENT AND FRONTLINE STAFF
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM AND DISCUSSION	04/18/2013	CMF MANAGEMENT AND FRONTLINE STAFF
SPILL PREVENTION + RESPONSE GOOD HOUSEKEEPING MATERIAL MANAGEMENT	FILM AND DISCUSSION	10/29/2014	CMF MANAGEMENT AND FRONTLINE STAFF

<b>Worksheet #11</b>	Facility: <u>CMP</u> Completed By: <u>JMA</u> Title: _____ Date: <u>7/28/15</u>
<b>Site Compliance Inspection Report</b>	

**Instructions:** Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.

<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1	<i>Compliant</i>	<i>Yes</i>
2		
3		
4		

<b>Response Actions</b>			
	Actions Needed	Proposed Completion Date	Actual Completion Date
1	<i>none</i>		
2			
3			
4			

**Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

A. Name & Official Title (Type or Print)	B. Area Code and Telephone No.
<i>Jim Halpern, Interim Division Manager</i>	<i>316-268-8317</i>
C. Signature	D. Date Signed
<i>Jim Halpern</i>	<u>7/28/15</u>

# Worksheet #13

Facility: WEST SUBSTATION

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
10/22/14	Aaron Henning	PRESENCE OF SW POLLUTANTS NOT OBSERVED.
11/26/14	Aaron Henning	PRESENCE OF NON-SW DISCHARGE NOT OBSERVED.
12/22/14	Aaron Henning	PRESENCE OF SW POLLUTANTS NOT OBSERVED.
01/28/15	Aaron Henning	PRESENCE OF NON-SW DISCHARGE NOT OBSERVED.
02/25/15	Aaron Henning	PRESENCE OF SW POLLUTANTS NOT OBSERVED.
03/05/15	Aaron Henning	PRESENCE OF NON-SW DISCHARGE NOT OBSERVED.

<b>Worksheet #11</b>	Facility: <u>West Side</u> Completed By: <u>JMA</u> Title: _____ Date: <u>7/28/15</u>
<b>Site Compliance Inspection Report</b>	

**Instructions:** Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.

<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1		YES
2		
3		
4		

<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1 <i>None</i>		
2		
3		
4		

<b>Certification</b>	
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>	
A. Name & Official Title (Type or Print)	B. Area Code and Telephone No.
<i>Jim Hardesty</i> Interim Div. Manager	316-268-8317
C. Signature	D. Date Signed
<i>Jim Hardesty</i>	7/28/15

# Worksheet #13

Facility: Northside Substation

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
03/25/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of non-SW discharge NOT OBSERVED. *Sediment samples upon completion of designated sites.
04/20/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of non-SW discharge NOT OBSERVED.
05/07/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of non-SW discharge NOT OBSERVED.
06/19/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of non-SW discharge NOT OBSERVED.
07/02/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of non-SW discharge NOT OBSERVED.

# Worksheet #13

Facility: Northeast Substation

Completed By:

Title:

Date:

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
09/29/14	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
10/22/14	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
11/24/14	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
12/22/14	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
01/28/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
02/25/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.

Worksheet #11		Facility: <u>NE Sub</u>
Site Compliance Inspection Report		Completed By: <u>JMA</u>
		Title: _____
		Date: <u>7/28/15</u>
<p><b>Instructions:</b> Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.</p>		
<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1	<u>Fully Compliant</u>	
2		
3		
4		
<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1		
<u>None</u>		
2		
3		
4		
<b>Certification</b>		
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>		
A. Name & Official Title (Type or Print)		B. Area Code and Telephone No.
<u>Jim Hardesty, Interim City Manager</u>		<u>316-268-8317</u>
C. Signature		D. Date Signed
<u>Jim Hardesty</u>		<u>7/28/15</u>

# Worksheet #13

## Monthly Site Inspections

Facility:

Water Substation

Completed By:

Title:

Date:

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
04/30/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
05/27/15	Aaron Henning	Presence of NON-SW Discharges NOT OBSERVED.
06/19/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
07/22/15	Aaron Henning	Presence of NON-SW Discharges NOT OBSERVED.
		Presence of SW pollutants NOT OBSERVED.
		Presence of NON-SW Discharges NOT OBSERVED.
		Presence of NON-SW Discharges NOT OBSERVED.



**City of Wichita**  
**K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.

Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
Asp. millings	7-30-19	400	10,500				X
CRUSHED CONC.	"	400	17,400				X
Ruble - conc.	"		24,500				X
Asp. Ruble	"		23,500				X
ROAD GRAVEL	"	200	1100				X
<del>Asp</del> Diesel	"		50 gal	NONE	NO		X
Asp. milling	8-29-14	300	10,000				
CRUSHED CONC.		400	17,000				
CONCRETE Ruble			24,200				
Asp. Ruble			23,700				
Diesel			50 gal.	NONE			X
ROAD GRAVEL		100	1000				
asp. milling	9-26-14	300	10,000				
CRUSHED CONC.		400	17,000				
CONC. Ruble			24,700				
Asp. Ruble			23,700				

**City of Wichita**  
**K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.							
Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
ROAD GRAVEL	9-26-14	100	900				
Diesel	11		50gal		NONE		X
CRUSHED CONC.	10-31-14	200	16800				
ASPH. milling		200	9800				
CONC. Ruble			24900				
ASP Ruble			23900				
Diesel			50gal		NONE		X
ROAD GRAVEL			800				
ASPH. milling	11-21-14	400	9400				
CRUSHED CONC		200	16600				
CONC. Ruble			25200				
ASP Ruble			24100				
Diesel			50gal		NONE		X
ROAD gravel			<del>50gal</del> 800		<del>NONE</del>		X
ASPH milling	12-23-14	400	9000				
CRUSHED CONC.		400	16200				

**City of Wichita  
K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.							
Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
CONC. Rubble	12-23-14		25400				
ASPH Rubble	12-23-14		24300				
Diesel			50gal		NONE		X
ROAD GRAVEL		100	700				
ASPH. milling		500	8500				
CRUSHED CONC.		400	15800				
CONC. Rubble			25600				
ASPH. Rubble			24500				
Diesel			50gal		NONE		X
ASPH milling	1-28-15	500	8000				
CRUSHED CONC.		400	15400				
CONC. Rubble			25600				
ASPH Rubble			24500				
Diesel			50gal		NONE		X
ROAD GRAVEL		100	600				
ASPH milling	2-25-15	500	7500				









WICHITA

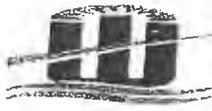
Department of Public Works & Utilities  
Maintenance Division

# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
Don Craddock	Don Craddock
MICHAEL FRATZER	Michael Fratzer
Lee Brown	Lee Brown
Terry Winter	Terry Winter
JAMES BLACK	James Black
Aniceto Velazquez	Aniceto Velazquez
Doug Jones	Doug Jones
KEVIN COPE	Kevin Cope
Richard Many	Richard Many
DANNY R. SCHAUF	Danny R. Schauf
BILLY R. HUBBARD	Billy R. Hubbard
Michelle Wright	Michelle Wright
Andy Busarda	Andy Busarda
William Wood	William Wood
Robert A. Craddock	Robert A. Craddock
CURTIS FISHER	Curtis Fisher
Roberto Carrillo	Roberto Carrillo
Mareic Johnson	Mareic Johnson
Eugene Bryant	Eugene Bryant
Heath Evans	Heath Evans
Roger Whiteley	Roger Whiteley
Steve Dillon	Steve Dillon
Oscar Walker	Oscar Walker
David Craddock	David Craddock



WICHITA

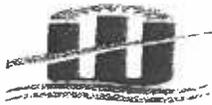
Department of Public Works & Utilities  
Maintenance Division

# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
LYNN AVANTS	<i>[Signature]</i>
TODD A. NAVE	<i>[Signature]</i>
JASON WOLGBOMUTH	<i>[Signature]</i>
JOEY A. "BO" WILLIAMS	<i>[Signature]</i>
DAVID P. PAMETTER	<i>[Signature]</i>
Bohumil Votava	<i>[Signature]</i>
Andre Wilson	<i>[Signature]</i>
Tony Tatum	<i>[Signature]</i>
Mike Gabbert	<i>[Signature]</i>
Jimmy King	<i>[Signature]</i>
Steve Grimes	<i>[Signature]</i>
LEVI HARMON	<i>[Signature]</i>
Pedro Hernandez	<i>[Signature]</i>
Jerry Newton I	<i>[Signature]</i>
BARB ZEMMEL	<i>[Signature]</i>
Keith Kruse	<i>[Signature]</i>
Edwina Johnson	<i>[Signature]</i>
Jessie Ross	<i>[Signature]</i>
Roger Y. Brown	<i>[Signature]</i>
Ché Graham EOH	<i>[Signature]</i>
Daniel Sim	<i>[Signature]</i>
Harvey Gores	<i>[Signature]</i>
Kevin Shaw	<i>[Signature]</i>



# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
Eric Smith	
Bobby Bell	
Jordan Lewis	
Bruant MOOSE	
Devintez Howard	
Alex Daniels	
Shawn Stupka	
TROY STEWART	
Karlin White	
NICK PERKINS	
Lonnie Erwin	
Daniel Foster	
Brian Pennard	
Lamont Brown	
Reginald Perez	
David Rose	
Tyrone Kiley	
Roger Skilling	
Steve Bunnell	
SCOTT PERKINS	
Goodenough	
Tim Heath	
Austin C. Shumate (TT)	
MATT SCHULTZ	





WICHITA

Department of Public Works & Utilities  
Maintenance Division

# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	2:00 pm	Signature
JASON WATERS		
Clyde Napier		
ERLIE STANG		
Nicholas Peoples		
Tim Stewart		
Michelle Wright		
Phillip Sells		
Billy R Hubbard		
DANNY R Schauf		
Nathan Eastman		
~~~~~		
	11:00 pm	
→ Marques Hagans		
LARRY MARZETT		
AMIE JASO		
Garek Spurge		
William BUSH		
Charlotte Dowell		
Daniel Ashcraft		
Fred mason		
TERRY NICHOLAS		

<b>Worksheet #11</b>		Facility: <u>K-96 + Hillside</u>
<b>Site Compliance Inspection Report</b>		Completed By: <u>JMA</u>
		Title: _____
		Date: <u>7/28/15</u>
<p><b>Instructions:</b> Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.</p>		
<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1	<u>Compliant</u>	<u>Yes</u>
2		
3		
4		
<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1		
<u>None</u>		
2		
3		
4		
<b>Certification</b>		
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>		
A. Name & Official Title (Type or Print)		B. Area Code and Telephone No.
<u>Jim Hardisty Interim Site Mgr</u>		<u>316-268-8317</u>
C. Signature		D. Date Signed
<u>Jim Hardisty</u>		<u>7/28/15</u>



NOTICE OF TERMINATION FORM (NOT)

To Relinquish the Authorization to Discharge Stormwater Runoff from Industrial Activity from the Industrial Facility Described Herein. Kansas Water Pollution Control General Permit No. S-ISWA-1111-1

Submission of this Notice of Termination (NOT) constitutes notice that the party identified in Section I of this form relinquishes authorization for coverage under the Kansas Water Pollution Control general permit, or KDHE authorized successors issued for Stormwater Runoff from Industrial Activity in the State of Kansas. Submission of this Notice of Termination to KDHE relinquishes the permittee's authorization to discharge stormwater associated with industrial activity at the industrial facility described herein. Completion of this NOT does not automatically relieve the former permittee of any civil, criminal and/or administrative penalties.

Coverage is terminated when the Kansas Department of Health and Environment (KDHE) receives and accepts a complete NOT. KDHE will notify any permittee whose NOT is incomplete, deficient or denied.

Certification

I certify under penalty of law that all authorized discharges of stormwater associated with industrial activity at the industrial facility described herein have been eliminated. I understand that by submitting this Notice of Termination, I am no longer authorized under the general NPDES permit S-ISWA-1111-1 to discharge stormwater associated with industrial activity at this industrial facility. I understand that discharging pollutants in stormwater associated with industrial activity to waters of the State is unlawful under K.S.A. 65-164 and 65-165 and the Clean Water Act without authorization by a valid Kansas Water Pollution Control Permit. I understand that by submitting this Notice of Termination, I am not released from liability for any violations of the general NPDES permit S-ISWA-1111-1, K.S.A. 65-164 and 65-165, the Kansas Surface Water Quality Standards (K.A.R. 28-16-28 et seq.), or the Clean Water Act. I also hereby certify that I am authorized to sign this Notice of Termination as a representative of the permittee named herein.

Please Print or Type.

Name of Industrial Facility: HELIPORT
Address: 1601 S. McLean City: Wichita County: 56 State: KS Zip Code: 66213
Kansas Permit No. G-AR94-0044 Federal Permit No.
Print Name: JIM HARDESTY Date: 6/24/15
Signature: Jim Hardesty E-mail address: JHARDESTY@Wichita.gov

Submit the NOT with original signature to: Kansas Department of Health and Environment Bureau of Water, Industrial Programs Section 1000 SW Jackson, Suite 420 Topeka, KS 66612 - 1367

KDHE Contact Information Phone: (785) 296-5545 e-mail: stormwater@kdheks.gov

Division of Environment  
Curtis State Office Building  
1000 SW Jackson St., Suite 400  
Topeka, KS 66612-1367



Phone: 785-296-1535  
Fax: 785-296-8464  
www.kdhcks.gov

Susan Mosier, MD, Acting Secretary

Department of Health & Environment

Sam Brownback, Governor

June 17, 2015

Becky Gagnon-Lewis  
City of Wichita  
1900 E. 9th St.  
Wichita, KS 67214

**Industrial Stormwater Permit Holders Invoice for Annual Permit Fee  
July 2015 through July 2016**

Dear Permittee: An Industrial Stormwater Permit was issued to the addressed industrial facility. K.A.R. 28-16-56d requires permit fees to be paid annually. Payment is due **July 28, 2015**.

Facility Name: Heliport  
Permit No. G-AR94-0044  
Facility Location: Wichita  
Please make check payable to: **KDHE**  
Permit Fee: \$480

**NOTE: Your permit fees are not up to date. If payment is not received by May 28, 2015, your permit will be placed on inactive status without further notification. Your current authorization will no longer be valid this facility.**

**TO BE COMPLETED BY PERMITTEE:**

1. Has the annual comprehensive site evaluation (Permit Section 2.4.4) been completed? (Y/N) \_\_\_\_\_
2. Has the SWP2 Plan been updated and certified (Permit Section 2.4.6)? (Y/N) \_\_\_\_\_
3. Has a site drainage map been included per enclosed notification/information sheet? (Y/N) \_\_\_\_\_

If you answered no to either of the above questions you are required to complete the annual evaluation and/or update/modify the SWP2 Plan within 90 days of this certification date.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**TO ENSURE PERMIT COMPLIANCE, ALL QUESTIONS MUST BE ANSWERED AND FORM SIGNED AND SUBMITTED WITH PAYMENT.**

For official use only.	Check No.	Date Received:

Department: PUBLIC WORKS & UTILITIES

Instructor: BECKY LEWIS / JAMIE BELDE

Division: Sewage Treatment

Safety Meeting Topic: SPCC

Date: 7-23-14

Length of Meeting: 45 min.

Printed Name	Signature	Title
Terry W. Tilston	<i>Terry W. Tilston</i>	Operator
NMA NGA	<i>NMA NGA</i>	Lab Tech
Leopoldo R. Garcia	<i>Leopoldo R. Garcia</i>	Operator
Troy L. Damm	<i>Troy L. Damm</i>	Operator
Carlos Botello	<i>Carlos Botello</i>	Operator
Jesse Nichols	<i>Jesse Nichols</i>	Lab Tech
Vicente Hernandez	<i>Vicente Hernandez</i>	Measurer
McCory Miller	<i>McCory Miller</i>	laborer
Tyler Lerner	<i>Tyler Lerner</i>	laborer
Barry Latham	<i>Barry Latham</i>	1st mechanic
Lee Hansen	<i>Lee Hansen</i>	1st mechanic
Greg Drummond	<i>Greg Drummond</i>	mechanic
OBEL HARRIS	<i>Obel Harris</i>	M. worker
John Murphy	<i>John Murphy</i>	Operator
Robert Clayburn	<i>Robert Clayburn</i>	Operator
Christin L. Williams	<i>Christin L. Williams</i>	EO II
SEAN FRANCISCO	<i>Sean Francisco</i>	Operations
William Brooks	<i>William Brooks</i>	Operations EO II
Mark Hearing	<i>Mark Hearing</i>	ops
FRANK OSBORN	<i>Frank Osborn</i>	EOI
Troy Rodriguez	<i>Troy Rodriguez</i>	EOI
DEREK WISLER	<i>Derek Wisler</i>	EOI
Seth Holmes	<i>Seth Holmes</i>	EOI
Amber McKuey	<i>Amber McKuey</i>	EOI
Jeffrey Williams	<i>Jeffrey Williams</i>	Operator
James E. Weber	<i>James E. Weber</i>	Elect.
Fresley Thomas	<i>Fresley Thomas</i>	Elect.
Dan Jones	<i>Dan Jones</i>	mech.
Warren Herrington	<i>Warren Herrington</i>	EOI
Ruler-Ying Trefz	<i>Ruler-Ying Trefz</i>	Chemist
JABATHA KLING	<i>Jabatha Kling</i>	Pretreatment specialist
Reginald Thompson	<i>Reginald Thompson</i>	Maintenance Worker
Raul Edwards	<i>Raul Edwards</i>	Service Tech
DAVE MARTIN	<i>Dave Martin</i>	Operator

Lilian Le  
 Mike Carroll  
 Larry Koontz  
 Jamie Belden

*Hill*  
*Oil Cull*  
*Lilly*  
*Sein*

lab tech.  
 General Supervisor II  
 Electrical/Maint Supv.  
 OPERATIONS SUP.

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Extinguisher Available/Serviceable	YES	
First Aid Kit Available	YES	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	YES	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	IN O/M TRUCK B24
First Aid Kit Available	YES	IN O/M
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	
First Aid Kit Available	YES	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	YES	
Evidence of Spill(s)	NO	
Spill Kit Available	YES	IN ICC
Fire Ext.—Available/Serviceable	YES	IN ICC
First Aid Kit Available	YES	IN ICC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	
First Aid Kit Available	YES	

Inspector's Name Vicente Hernandez  
 Inspector's Signature Vicente Hernandez

Date: 06/12/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 06-12-2015 Time: 10:06 AM Inspector: Vicente Hernandez Jr

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?		X	
Are drums in good condition (no rusting, corrosion, etc.)	X		
Are drums closed?	X		
Are the containment basins in good condition (no leaks, cracks, etc.)?	X		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	X		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	X		
Is the tank foundation in good condition?	X		
Are the levels and alarms working properly?	X		
Are the vents obstructed?		X	
Is there any problem with the valves?		X	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	X		
Are the pipes in good condition (no rusting)?	X		
Are the concrete containment walls intact?	X		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			N/A

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 06-12-2015 and (will / will not) amend the plan as a result.

Vicente Hernandez Jr

Signature

Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK Farm, WASTE OIL

Date: 06/12/2015 Type of Precipitation: N/A

Inspection Time: 10:16 AM hrs

Oil/Fuel Sheen Observed\*: Yes No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No

If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:  
Clear?  Yes No

If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No  
If yes, describe:  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: \_\_\_\_\_ minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Vicente Hernandez  
Inspector's Name (Print)

Vicente Hernandez  
Inspector's Signature

06/12/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available		
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	gone rust	
Condition of Diesel AGT and Pump	Some rust	
Concrete Secondary Containment	Good	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available		
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name Mike Carroll  
 Inspector's Signature Mike Carroll

Date: 5/13/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 5/13/15 Time: 9:51 A Inspector: Mike Carroll

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?	/		
Are drums in good condition (no rusting, corrosion, etc.)	/		
Are drums closed?	-		
Are the containment basins in good condition (no leaks, cracks, etc.)?	/		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	-		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	-		
Is the tank foundation in good condition?	/		
Are the levels and alarms working properly?	-		
Are the vents obstructed?		/	
Is there any problem with the valves?	-		
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	/		
Are the pipes in good condition (no rusting)?	/		
Are the concrete containment walls intact?	-		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2

on Date: 5/13/15 and (will / will not) amend the plan as a result.

Mike Carroll  
Signature

General Supervisor  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM WASK 0:1

Date: 5 13 15 Type of Precipitation: none

Inspection Time: 9:51 hrs

Oil/Fuel Sheen Observed\*: Yes  No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No  
If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:

Clear  Yes No

If No, Degree of Turbidity?

Low

(easily seen through)

Medium

(somewhat opaque)

High

(dark—can't be described as low or medium)

Trash or Debris present?\*:  Yes No

If yes, describe:

See Note grass clippings

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Mike Carroll  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

5 13 15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	Yes	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Good	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name  
 Inspector's Signature

*Mike Carroll*

Date: 4/8/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 4-9-15 Time: 8:35 A Inspector: Mike Carroll

<b>Drum Storage</b>			
	Yes	No	Comments
Checked all container surfaces for signs of leakage?	✓		
Are drums in good condition (no rusting, corrosion, etc.)	✓		
Are drums closed?	✓		
Are the containment basins in good condition (no leaks, cracks, etc.)?	✓		
<b>Above Ground Tanks</b>			
	Yes	No	Comments
Checked tank surfaces for signs of leakage?	✓		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	✓		
Is the tank foundation in good condition?	✓		
Are the levels and alarms working properly?	✓		
Are the vents obstructed?		✓	
Is there any problem with the valves?		✓	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	✓		
Are the pipes in good condition (no rusting)?	✓		
Are the concrete containment walls intact?	✓		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 4-9-15 and (will / will not) amend the plan as a result.

Mike Carroll  
Signature

General Supervisor  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment Tank Farm Waste Oil

Date: 4/8/15 Type of Precipitation: none

Inspection Time: 8:35 a hrs

Oil/Fuel Sheen Observed\*: Yes  No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No  
If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:  
Clear?  Yes No

If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No  
If yes, describe:  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Mike Carroll  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

4/8/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes \_\_\_ No X
  
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes \_\_\_ No X
  
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes \_\_\_ No X
  
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes \_\_\_ No X
  
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	No	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Surface Rust	
Condition of Diesel AGT and Pump	Surface Rust	
Concrete Secondary Containment	Good	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	Small	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	IN O/M
First Aid Kit Available	Yes	IN O/M
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	Yes	Small will clean up
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	In ICC
First Aid Kit Available	Yes	IN ICC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	Yes	Cleaned up
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name Leif H. H. H. H.  
 Inspector's Signature [Signature]

Date: 3/31/15

**Annual Facility Inspection Checklist -- Sewage Treatment Plant No. 2**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Inspector: \_\_\_\_\_

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?			
Are drums in good condition (no rusting, corrosion, etc.)			
Are drums closed?			
Are the containment basins in good condition (no leaks, cracks, etc.)?			
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?			
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?			
Is the tank foundation in good condition?			
Are the levels and alarms working properly?			
Are the vents obstructed?			
Is there any problem with the valves?			
Are the transfer hoses in good condition (no cracking, creasing, etc.)?			
Are the pipes in good condition (no rusting)?			
Are the concrete containment walls intact?			
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: \_\_\_\_\_ and (will / will not) amend the plan as a result.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM, WASTE OIL

Date: 3/31/15 Type of Precipitation: None

Inspection Time: 1507 hrs

Oil/Fuel Sheen Observed\*: Yes  No   
If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No   
If yes, describe: Diesel Gasoline Other (Describe):

Appearance\*:  
 Clear? Yes No If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*:  Yes No  
If yes, describe: TRGS  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Lee Ph. Brick  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

3/31/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes \_\_\_ No X
  
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes \_\_\_ No X
  
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes \_\_\_ No X
  
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes \_\_\_ No X
  
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

	ITEM CHECKED	NOTES
<b>Biosolids Maintenance Shop</b>		
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>	ITEM CHECKED	NOTES
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	Yes	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	IN O&M truck bay
First Aid Kit Available	Yes	
<b>Sludge Dewatering Facility</b>	ITEM CHECKED	NOTES
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	ITEM CHECKED	NOTES
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	IN ICC
Fire Ext.—Available/Serviceable	Yes	in ICC
First Aid Kit Available	Yes	in ICC
<b>Bulk Oil Storage</b>	ITEM CHECKED	NOTES
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name Lucius Howard  
 Inspector's Signature Lucius Howard

Date: 2 / 11 / 15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 2/11/15 Time: 9 AM Inspector: Lucia Howland

	Yes	No	Comments
<b>Drum Storage</b>			
Checked all container surfaces for signs of leakage?	<input checked="" type="checkbox"/>		
Are drums in good condition (no rusting, corrosion, etc.)	<input checked="" type="checkbox"/>		
Are drums closed?	<input checked="" type="checkbox"/>		
Are the containment basins in good condition (no leaks, cracks, etc.)?	<input checked="" type="checkbox"/>		
<b>Above Ground Tanks</b>	Yes	No	Comments
Checked tank surfaces for signs of leakage?	<input checked="" type="checkbox"/>		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	<input checked="" type="checkbox"/>		
Is the tank foundation in good condition?	<input checked="" type="checkbox"/>		
Are the levels and alarms working properly?	<input checked="" type="checkbox"/>		
Are the vents obstructed?		<input checked="" type="checkbox"/>	
Is there any problem with the valves?		<input checked="" type="checkbox"/>	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	<input checked="" type="checkbox"/>		
Are the pipes in good condition (no rusting)?	<input checked="" type="checkbox"/>		
Are the concrete containment walls intact?	<input checked="" type="checkbox"/>		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)		<input checked="" type="checkbox"/>	<u>N/A</u>

Remarks/Recommendations:

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 2/11/15 and (will / will not) amend the plan as a result.

Lucia Howland  
Signature

\_\_\_\_\_  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK Farm / Waste oil

Date: 2 / 11 / 15 Type of Precipitation: N/A

Inspection Time: 9:30 hrs

Oil/Fuel Sheen Observed\*: Yes No  
If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes No  
If yes, describe: Diesel Gasoline Other (Describe):

Appearance\*:  
Clear? Yes No If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes No  
If yes, describe:  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: \_\_\_\_\_ minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Lucius Howland  
Inspector's Name (Print)

Lucius Howland  
Inspector's Signature

2 / 11 / 15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Extinguisher Available/Serviceable	yes	
First Aid Kit Available		
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	good	
Condition of Diesel AGT and Pump	good	
Concrete Secondary Containment	yes	
Piping to/from AGTs and Pumps	good	
Evidence of Spill(s)	NO	
Spill Kit Available	yes	<del>IN ICC</del>
Fire Ext.—Available/Serviceable	yes	<del>IN ICC</del> IN O&M Shop
First Aid Kit Available	yes	<del>IN ICC</del> IN O&M Shop
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	
First Aid Kit Available	yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	good	
Concrete Secondary Containment	yes	
Evidence of Spill(s)	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	IN ICC
First Aid Kit Available	yes	IN ICC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	
First Aid Kit Available	yes	

Inspector's Name \_\_\_\_\_  
 Inspector's Signature Mike Carroll

Date: 11/20/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 1-20-15 Time: 1:15p Inspector: Jim Cull

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?	X		
Are drums in good condition (no rusting, corrosion, etc.)	X		
Are drums closed?	X		
Are the containment basins in good condition (no leaks, cracks, etc.)?	X		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	X		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	X		
Is the tank foundation in good condition?	X		
Are the levels and alarms working properly?	X		
Are the vents obstructed?		X	
Is there any problem with the valves?		X	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	X		
Are the pipes in good condition (no rusting)?	X		
Are the concrete containment walls intact?	X		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)		X	N/A

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: \_\_\_\_\_ and (will / will not) amend the plan as a result.

Jim Cull  
Signature

General Supervisor  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM / waste oil

Date: 1/20/15 Type of Precipitation: None

Inspection Time: 1:15p hrs

Oil/Fuel Sheen Observed\*: Yes  No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No

If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:

Clear?  Yes  No

If No, Degree of Turbidity?

Low

(easily seen through)

Medium

(somewhat opaque)

High

(dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No

If yes, describe:

See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Mike Carroll

Inspector's Name (Print)

[Signature]

Inspector's Signature

1/20/15

Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes\_\_\_ No\_\_X
  
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes\_\_\_ No\_\_X
  
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes\_\_\_ No\_\_X
  
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes\_\_\_ No\_\_X
  
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes\_\_\_ No\_\_X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

Worksheet #13

Monthly Site Inspections

Facility: Plant 2  
 Completed By: Mike Carroll  
 Title: General Supervisor II  
 Date: \_\_\_\_\_

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
1-20-15	Mike Carroll	Completed
2/11/15	James Howland	inspected / completed
3-3-15	Lee Philbrick	Completed
4-8-15	Mike Carroll	Completed
5/13/15	Mike Carroll	Completed
6-12-15	Vicente Hernandez	Completed

<b>Worksheet #11</b>	Facility: <u>Plant I</u> Completed By: <u>JH</u> Title: _____ Date: <u>7/28/15</u>
<i>Site Compliance Inspection Report</i>	

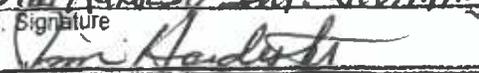
**Instructions:** Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.

<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1		<u>Yes</u>
2		
3		
4		

<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1 <u>None</u>		
2		
3		
4		

**Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

A. Name & Official Title (Type or Print) <u>Jim Hernandez, Int. Adv. Mgr</u>	B. Area Code and Telephone No. <u>316-268-8317</u>
C. Signature 	D. Date Signed <u>7/28/15</u>

<b>Worksheet #11</b>		Facility: <u>Plant J</u>
<b>Site Compliance Inspection Report</b>		Completed By: <u>JH</u>
		Title: _____
		Date: <u>7/28/15</u>
<p><b>Instructions:</b> Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.</p>		
<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1	<u>Full Compliance</u>	<u>Yes</u>
2		
3		
4		
<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1		
2		
3		
4		
<b>Certification</b>		
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>		
A. Name & Official Title (Type or Print)		B. Area Code and Telephone No.
<u>Jim Handley Interim Division Manager</u>		<u>316-268-8317</u>
C. Signature		D. Date Signed
<u>Jim Handley</u>		<u>7/28/15</u>

Department: PUBLIC WORKS & UTILITIES

Instructor: BECKY LEWIS / JAMIE BELDE

Division: Sewage Treatment

Safety Meeting Topic: SPCC

Date: 7-23-14

Length of Meeting: 45 min.

Printed Name	Signature	Title
Terry W. Tilborn	<i>Terry W. Tilborn</i>	Operator
Nina NAA	<i>Nina</i>	Lab Tech
Leopoldo R. Garcia	<i>Leopoldo R. Garcia</i>	Operator
Troy L. Dan	<i>Troy L. Dan</i>	Operator
Carlos Botello	<i>Carlos Botello</i>	Operator
Jesse Nichols	<i>Jesse Nichols</i>	Lab tech
Vicente Hernandez	<i>Vicente Hernandez</i>	Mediator
McCory Miller	<i>McCory Miller</i>	laborer
Tyler Turner	<i>Tyler Turner</i>	laborer
Barry Latham	<i>Barry Latham</i>	1st Mechanic
Lee Hassan	<i>Lee Hassan</i>	1st Mechanic
Greg Drummond	<i>Greg Drummond</i>	M. worker
O'Neil HARRIS	<i>O'Neil Harris</i>	M. worker
John Murphy	<i>John Murphy</i>	Operator
Robert Claybourn	<i>Robert Claybourn</i>	Operator
Christin L. Williams	<i>Christin L. Williams</i>	EO III
SEAN FRANCISCO	<i>Sean Francisco</i>	Operations
William Brooks	<i>William Brooks</i>	operations EO II
Mark Haggard	<i>Mark Haggard</i>	ops
Frank O'STOURN	<i>Frank O'STOURN</i>	EOI
Troy Rodriguez	<i>Troy Rodriguez</i>	EOI
Derek Wisler	<i>Derek Wisler</i>	EOI
Seth Holmes	<i>Seth Holmes</i>	EOI
Amber McKelvey	<i>Amber McKelvey</i>	EOI
Jeffrey Williams	<i>Jeffrey Williams</i>	Operator
James E. Weber	<i>James E. Weber</i>	Elect.
Fresley Thomas	<i>Fresley Thomas</i>	Elect.
Dan Jones	<i>Dan Jones</i>	mech.
Warren Herrington	<i>Warren Herrington</i>	EOI
Ruler-Ying Trefz	<i>Ruler-Ying Trefz</i>	Chemist
JABATHA KLING	<i>Jabatha Kling</i>	Pretreatment Specialist
Reginald Thompson	<i>Reginald Thompson</i>	Maintenance Worker
David Martin	<i>David Martin</i>	Service Tech

Lilian Le *Lilian Le* Lab tech.

Mike Carroll *Mike Carroll* General Supervisor II

Larry Koontz *Larry Koontz* Electrical/Maint Supv.

JAMIE BELDEN *Jamie Belden* OPERATIONS SUP.

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Extinguisher Available/Serviceable	YES	
First Aid Kit Available	YES	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	YES	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	IN O/M TRUCK BAY
First Aid Kit Available	YES	IN O/M
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	
First Aid Kit Available	YES	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	YES	
Evidence of Spill(s)	NO	
Spill Kit Available	YES	IN ICC
Fire Ext.—Available/Serviceable	YES	IN ICC
First Aid Kit Available	YES	IN ICC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	YES	
Evidence of Spill	NO	
Spill Kit Available	YES	
Fire Ext.—Available/Serviceable	YES	
First Aid Kit Available	YES	

Inspector's Name Vicente Hernandez  
 Inspector's Signature Vicente Hernandez

Date: 06/12/15

**Annual Facility Inspection Checklist -- Sewage Treatment Plant No. 2**

Date: 06-12-2015 Time: 10:06 AM Inspector: Vicente Hernandez

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?		<input checked="" type="checkbox"/>	
Are drums in good condition (no rusting, corrosion, etc.)	<input checked="" type="checkbox"/>		
Are drums closed?	<input checked="" type="checkbox"/>		
Are the containment basins in good condition (no leaks, cracks, etc.)?	<input checked="" type="checkbox"/>		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	<input checked="" type="checkbox"/>		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	<input checked="" type="checkbox"/>		
Is the tank foundation in good condition?	<input checked="" type="checkbox"/>		
Are the levels and alarms working properly?	<input checked="" type="checkbox"/>		
Are the vents obstructed?		<input checked="" type="checkbox"/>	
Is there any problem with the valves?		<input checked="" type="checkbox"/>	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	<input checked="" type="checkbox"/>		
Are the pipes in good condition (no rusting)?	<input checked="" type="checkbox"/>		
Are the concrete containment walls intact?	<input checked="" type="checkbox"/>		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			<u>N/A</u>

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 06-12-2015 and (will / will not) amend the plan as a result.

Vicente Hernandez

Signature

Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK Farm, WASTE OIL

Date: 06/12/2015 Type of Precipitation: N/A

Inspection Time: 10:16 AM hrs

Oil/Fuel Sheen Observed\*: Yes No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No

If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:

Clear?  Yes No

If No, Degree of Turbidity?

Low

(easily seen through)

Medium

(somewhat opaque)

High

(dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No

If yes, describe:

See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: \_\_\_\_\_ minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Vicente Hernandez  
Inspector's Name (Print)

Vicente Hernandez  
Inspector's Signature

06/12/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available		
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	some Rust	
Condition of Diesel AGT and Pump	some Rust	
Concrete Secondary Containment	Good	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available		
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name

Inspector's Signature

Mike Carroll  
Mike Carroll

Date:

5/13/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 5/13/85 Time: 9:51 A Inspector: Mike Carroll

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?	/		
Are drums in good condition (no rusting, corrosion, etc.)	/		
Are drums closed?	-		
Are the containment basins in good condition (no leaks, cracks, etc.)?	/		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	-		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	-		
Is the tank foundation in good condition?	/		
Are the levels and alarms working properly?	/		
Are the vents obstructed?		/	
Is there any problem with the valves?	/		
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	/		
Are the pipes in good condition (no rusting)?	/		
Are the concrete containment walls intact?	-		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 5/13/85 and (will / will not) amend the plan as a result.

Mike Carroll  
 \_\_\_\_\_  
 Signature

General Supervisor  
 \_\_\_\_\_  
 Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment Tank Farm WASK 0.1

Date: 5 13 15 Type of Precipitation: None

Inspection Time: 9:51 hrs

Oil/Fuel Sheen Observed\*: Yes  No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No  
If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:

Clear  No

If No, Degree of Turbidity?

Low

(easily seen through)

Medium

(somewhat opaque)

High

(dark—can't be described as low or medium)

Trash or Debris present\*?:  No

If yes, describe:

See Note grass clippings

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Mike Carroll  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

5 13 15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	Yes	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Good	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name  
 Inspector's Signature

Mike Carroll  
Mike Carroll

Date: 4/8/15

**Annual Facility Inspection Checklist -- Sewage Treatment Plant No. 2**

Date: 4-8-15 Time: 8:35 A Inspector: Mike Carroll

<b>Drum Storage</b>			
	Yes	No	Comments
Checked all container surfaces for signs of leakage?	✓		
Are drums in good condition (no rusting, corrosion, etc.)	✓		
Are drums closed?	✓		
Are the containment basins in good condition (no leaks, cracks, etc.)?	✓		
<b>Above Ground Tanks</b>			
	Yes	No	Comments
Checked tank surfaces for signs of leakage?	✓		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	✓		
Is the tank foundation in good condition?	✓		
Are the levels and alarms working properly?	✓		
Are the vents obstructed?		✓	
Is there any problem with the valves?		✓	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	✓		
Are the pipes in good condition (no rusting)?	✓		
Are the concrete containment walls intact?	✓		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 4-8-15 and (will / will not) amend the plan as a result.

Mike Carroll  
Signature

General Supervisor  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment Tank Farm Waste Oil

Date: 4/8/15 Type of Precipitation: none

Inspection Time: 8:35 a hrs

Oil/Fuel Sheen Observed\*: Yes  No

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No  
If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:  
Clear?  Yes  No

If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No  
If yes, describe:  
See Note

Other observations, field data collected, etc. \*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Willa Carroll  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

4/8/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes \_\_\_ No X
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes \_\_\_ No X
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes \_\_\_ No X
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes \_\_\_ No X
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	No	
Spill Kit Available	No	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	Surface Rust	
Condition of Diesel AGT and Pump	Surface Rust	
Concrete Secondary Containment	Good	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	Small	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	IN O/M
First Aid Kit Available	Yes	IN O/M
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	Yes	Small will clean up
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	No	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	IN FCC
First Aid Kit Available	Yes	IN FCC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	Yes	Cleaned up
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name Lee Phibice  
 Inspector's Signature [Signature]

Date: 3/31/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Inspector: \_\_\_\_\_

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?			
Are drums in good condition (no rusting, corrosion, etc.)			
Are drums closed?			
Are the containment basins in good condition (no leaks, cracks, etc.)?			
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?			
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?			
Is the tank foundation in good condition?			
Are the levels and alarms working properly?			
Are the vents obstructed?			
Is there any problem with the valves?			
Are the transfer hoses in good condition (no cracking, creasing, etc.)?			
Are the pipes in good condition (no rusting)?			
Are the concrete containment walls intact?			
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)			

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: \_\_\_\_\_ and (will / will not) amend the plan as a result.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM, waste OIL

Date: 3/31/15 Type of Precipitation: None

Inspection Time: 1507 hrs

Oil/Fuel Sheen Observed\*: Yes

If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes

If yes, describe:

Diesel Gasoline Other (Describe):

Appearance\*:

Clear? Yes No

If No, Degree of Turbidity?

Low

(easily seen through)

Medium

(somewhat opaque)

High

(dark—can't be described as low or medium)

Trash or Debris present?\*:  Yes No

If yes, describe: TRGS

See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Lee Ph. Brick  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

3/31/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes \_\_\_ No X

2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes \_\_\_ No X

3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes \_\_\_ No X

4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?

Yes \_\_\_ No X

5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

	ITEM CHECKED	NOTES
<b>Biosolids Maintenance Shop</b>		
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Extinguisher Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Tank Farm</b>		
Condition of Gasoline AGTs and Pumps	Good	
Condition of Diesel AGT and Pump	Good	
Concrete Secondary Containment	Yes	
Piping to/from AGTs and Pumps	Good	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	IN O&M truck bay
First Aid Kit Available	Yes	
<b>Sludge Dewatering Facility</b>		
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	
<b>Waste Oil Storage</b>		
Condition of Waste Oil AGTs	Good	
Concrete Secondary Containment	Yes	
Evidence of Spill(s)	NO	
Spill Kit Available	Yes	IN ICC
Fire Ext.—Available/Serviceable	Yes	in ICC
First Aid Kit Available	Yes	in ICC
<b>Bulk Oil Storage</b>		
Condition of Drums Stored	Good	
Containment Pallet In Place	Yes	
Evidence of Spill	NO	
Spill Kit Available	Yes	
Fire Ext.—Available/Serviceable	Yes	
First Aid Kit Available	Yes	

Inspector's Name LUCIUS HOWLAND  
 Inspector's Signature Lucius Howland

Date: 2 / 11 / 15

**Annual Facility Inspection Checklist -- Sewage Treatment Plant No. 2**

Date: 2/11/15 Time: 9 AM Inspector: Lucia Howland

	Yes	No	Comments
<b>Drum Storage</b>			
Checked all container surfaces for signs of leakage?	X		
Are drums in good condition (no rusting, corrosion, etc.)	X		
Are drums closed?	X		
Are the containment basins in good condition (no leaks, cracks, etc.)?	X		
<b>Above Ground Tanks</b>			
Checked tank surfaces for signs of leakage?	X		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	X		
Is the tank foundation in good condition?	X		
Are the levels and alarms working properly?	X		
Are the vents obstructed?		X	
Is there any problem with the valves?		X	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	X		
Are the pipes in good condition (no rusting)?	X		
Are the concrete containment walls intact?	X		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)		X	N/A

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: 2/11/15 and (will / will not) amend the plan as a result.

Lucia Howland  
Signature

\_\_\_\_\_  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM / Waste oil

Date: 2 / 11 / 15 Type of Precipitation: N/A

Inspection Time: 9:30 hrs

Oil/Fuel Sheen Observed\*: Yes No  
If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes No  
If yes, describe: Diesel Gasoline Other (Describe):

Appearance\*:  
Clear? Yes No If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes No  
If yes, describe:  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: \_\_\_\_\_ minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Lucius Howland  
Inspector's Name (Print)

Lucius Howland  
Inspector's Signature

2 / 11 / 15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes \_\_\_ No X
  
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes \_\_\_ No X
  
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes \_\_\_ No X
  
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes \_\_\_ No X
  
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

**SPCC MONTHLY TANK INSPECTION CHECKLIST**  
**CITY OF WICHITA—WATER AND SEWER DEPARTMENT**  
**SEWAGE TREATMENT PLANT NO. 2**

<b>Biosolids Maintenance Shop</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Extinguisher Available/Serviceable	yes	
First Aid Kit Available		
<b>Tank Farm</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Gasoline AGTs and Pumps	good	
Condition of Diesel AGT and Pump	good	
Concrete Secondary Containment	yes	
Piping to/from AGTs and Pumps	good	
Evidence of Spill(s)	NO	
Spill Kit Available	yes	<del>IN ICC</del>
Fire Ext.—Available/Serviceable	yes	<del>IN ICC</del> IN O&M Shop
First Aid Kit Available	yes	<del>IN ICC</del> IN O&M Shop
<b>Sludge Dewatering Facility</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	
First Aid Kit Available	yes	
<b>Waste Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Waste Oil AGTs	good	
Concrete Secondary Containment	yes	
Evidence of Spill(s)	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	IN ICC
First Aid Kit Available	yes	IN ICC
<b>Bulk Oil Storage</b>	<b>ITEM CHECKED</b>	<b>NOTES</b>
Condition of Drums Stored	good	
Containment Pallet In Place	yes	
Evidence of Spill	NO	
Spill Kit Available	yes	
Fire Ext.—Available/Serviceable	yes	
First Aid Kit Available	yes	

Inspector's Name \_\_\_\_\_  
 Inspector's Signature Mike Carroll

Date: 1/20/15

**Annual Facility Inspection Checklist – Sewage Treatment Plant No. 2**

Date: 1-20-15 Time: 1:16p Inspector: Ji Cull

<b>Drum Storage</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked all container surfaces for signs of leakage?	X		
Are drums in good condition (no rusting, corrosion, etc.)	X		
Are drums closed?	X		
Are the containment basins in good condition (no leaks, cracks, etc.)?	X		
<b>Above Ground Tanks</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Checked tank surfaces for signs of leakage?	X		
Are tanks in good condition (no rusting, corrosion, pitting, etc.)?	X		
Is the tank foundation in good condition?	X		
Are the levels and alarms working properly?	X		
Are the vents obstructed?		X	
Is there any problem with the valves?		X	
Are the transfer hoses in good condition (no cracking, creasing, etc.)?	X		
Are the pipes in good condition (no rusting)?	X		
Are the concrete containment walls intact?	X		
Has the next integrity test date been scheduled? (If yes, indicate when in the comments box)		X	N/A

**Remarks/Recommendations:**

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I have completed the review and evaluation of the SPCC plan for Sewage Treatment Plant No. 2 on Date: \_\_\_\_\_ and (will / will not) amend the plan as a result.

Ji Cull  
Signature

General Supervisor  
Title

**VISUAL INSPECTION FORM FOR WATER DISCHARGES FROM  
SECONDARY CONTAINMENT  
SEWAGE TREATMENT PLANT NO. 2  
WICHITA, KANSAS**

Location of Secondary Containment TANK FARM / waste oil

Date: 1/20/15 Type of Precipitation: None

Inspection Time: 1:15p hrs

Oil/Fuel Sheen Observed\*: Yes  No   
If yes, describe the relative degree:  
Low (Insignificant, incidental)  
High (Very obvious, lasted several minutes)

Odor Noticed\*: Yes  No   
If yes, describe: Diesel Gasoline Other (Describe):

Appearance\*:  
Clear? Yes  No  If No, Degree of Turbidity? Low (easily seen through)  
Medium (somewhat opaque)  
High (dark—can't be described as low or medium)

Trash or Debris present?\*: Yes  No   
If yes, describe:  
See Note

Other observations, field data collected, etc.\*:

Length of Time Discharged from Secondary Containment: 0 minutes.

\* If secondary containment accumulation is potentially contaminated, proper characterization will be performed before the secondary containment can be drained.

Mike Carroll  
Inspector's Name (Print)

[Signature]  
Inspector's Signature

1/20/15  
Date

**Certification of Applicability  
of the Substantial Harm Criteria Checklist**

Facility Name: City of Wichita, Water and Sewer Department, Sewage Treatment Plant No. 2

Facility Address: 2305 East 57<sup>th</sup> Street South, Wichita, Kansas

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?  
Yes \_\_\_ No X
  
- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?  
Yes \_\_\_ No X
  
- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.  
Yes \_\_\_ No X
  
- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix E, 40 CFR 112 or a comparable formula<sup>1</sup>) such that a discharge from the facility would shut down a public drinking water intake<sup>2</sup>?  
Yes \_\_\_ No X
  
- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?  
Yes \_\_\_ No X

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<sup>1</sup>If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

<sup>2</sup>For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

Worksheet #13

Monthly Site Inspections

Facility: Plant 2  
 Completed By: Mike Carroll  
 Title: General Supervisor II  
 Date: \_\_\_\_\_

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
1-20-15	Mike Carroll	Completed
2/11/15	Dwain Howland	inspected / completed
3-3-15	Lee Philbrick	Completed
4-8-15	Mike Carroll	Completed
5/13/15	Mike Carroll	Completed
6-12-15	Vicente Hernandez	Completed

Client: City of Wichita Attn: Jim Hardesty City Hall, 8th Floor 455 N. Main Wichita, KS 67202	Report Date: 10/13/2015 Date Sample(s) Recd: 9/24/2015 CAS File No: 8339 CAS Order No: 128697 PO/Proj. No: Purchase Auth.: BP240122
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Analyses and Preparation Performed	No. of Samples	Cost Per Sample	Discounted Price Per Sample	Total
BOD (5 Day)	2	42.00	28.50	57.00
Chemical Oxygen Demand	2	32.00	18.75	37.50
Oil & Grease, (HEM)	2	42.00	28.50	57.00
Nitrate/Nitrite, as N (FIA)	2	18.00	11.25	22.50
pH	2	11.00	8.25	16.50
Phosphorus, Total, as P	2	32.00	24.00	48.00
Solids, Total Suspended	2	15.00	11.25	22.50
Kjeldahl Nitrogen, as N (TKN)	2	35.00	26.25	52.50

Amount Due: 313.50

TERMS: Net 30 days from the date of invoice. Interest will be charged on past due accounts at the rate of 1.5% per month on unpaid account balance (annual percentage rate of 18%).

VISA, MasterCard and American Express Accepted. For your protection, our company does not accept credit card numbers via email.



525 N. Eighth St. - Salina, KS 67401  
 785-827-1273 800-535-3076 Fax 785-823-7830





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 (785) 827-1273 or (800) 535-3076  
 Fax (785) 823-7830  
 www.cas-lab.com

# CHAIN OF CUSTODY RECORD

Continental  
 Order No.:  
 [ Lab to enter Order No. ]

*1250M*

Page \_\_\_\_\_ of \_\_\_\_\_

Client/Reporting Information				Client Invoice Information				Requested Test (s)								Comments	
Company Name:				Company Name:												<p><b>Discrepancies</b>            See C/S, RF</p> <p>Is dry weight required?            Write Dry Wt. in this column for applicable samples. See (3) below.</p> <p>Is Rush or Emergency TAT required?            Write Rush or Emerg in this column for applicable samples. See (4) below.</p>	
Address:				Address:													
City:		State:	Zip:	City:		State:	Zip:										
Contact:				Contact:													
E-mail:				E-mail:													
Phone:		Fax:		Phone:		Fax:											
File No. / Project No.:		Project Name:				Purchase Order:											
Sampled by (Print): <i>David Ornelas</i>				Sampled by (Signature): <i>[Signature]</i>				G - Grab or C - Composite	Total No. of Containers	No. of Preserved Containers							
Sample Identification (30 characters or less - to appear on lab report)				Matrix (1)	Program (2)	DATE Sampled	TIME Sampled			HCl	NaOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	Not Preserved	Other :		
<i>Bus Transit</i>						<i>9-23-15</i>	<i>4:08 PM</i>										
<i>Bus Transit</i>						<i>9-23-15</i>	<i> </i>										
<i>Bus Transit</i>						<i>9-23-15</i>	<i> </i>										
<p>1. Matrix (sample type): DW = Drinking Water GW = Ground Water WW = Waste Water S = Soil / Solid SL = Sludge OL = Oil / Organic Liquid W = Wipe A = Air O = Other</p> <p>2. Regulatory Program: D = Drinking Water N = NPDES R = RCRA SL = 503 Sludge O = No program applies If Regulatory Program is "O" or blank, Continental will select the test method.</p> <p>3. Results will be reported on a wet weight (as received) basis unless dry weight is requested or required (503 regulation, PCB in solid, High level soil VOCs, etc.). Dry weight reporting is subject to an additional charge.</p> <p>4. Turnaround time (TAT): Standard TAT: 15 working days Rush TAT: 5 working days Emergency TAT: 2 - 3 working days Rush TAT and Emergency TAT are subject to an additional charge.</p>																	
RELINQUISHED BY: <i>[Signature]</i>				DATE: <i>9-23-15</i>		TIME: <i>4:36 PM</i>		RECEIVED BY:				DATE:		TIME:			
RELINQUISHED BY:				DATE:		TIME:		RECEIVED BY:				DATE:		TIME:			
RECEIVED AT LAB BY: <i>[Signature]</i>				DATE: <i>9-24-15</i>		TIME: <i>16:45</i>		SHIPPED VIA:				SEAL #:		SEAL DATE:			



525 N. 8th, Salina, KS 67401  
 (785) 827-1273 or (800) 535-3076  
 Fax (785) 823-7830  
 www.cas-lab.com

# CHAIN OF CUSTODY RECORD

Continental  
 Order No.:  
 [ Lab to enter Order No.]

120697

Page \_\_\_\_\_ of \_\_\_\_\_

Client/Reporting Information				Client Invoice Information						Requested Test (s)										Comments		
Company Name:				Company Name:																<p>Is dry weight required ?            Write Dry Wt. in this column for applicable samples. See (3) below.</p> <p>Is Rush or Emergency TAT required ?            Write Rush or Emerg in this column for applicable samples. See (4) below.</p>		
Address:				Address:																		
City:		State:		Zip:		City:		State:		Zip:												
Contact:				Contact:																		
E-mail:				E-mail:																		
Phone:		Fax:		Phone:		Fax:																
File No. / Project No.:		Project Name:				Purchase Order:																
Sampled by ( Print ) : David S O'Neal AS				Sampled by ( Signature ) : <i>[Signature]</i>		G - Grab or C - Composite		Total No. of Containers		No. of Preserved Containers												
Sample Identification ( 30 characters or less - to appear on lab report )		Matrix (1)	Program (2)	DATE Sampled	TIME Sampled	HCl	NaOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	Not Preserved	Other :											
North East Sub				9-23-15	4:24 PM																	
North East Sub																						
North East Sub																						
<p>1. Matrix (sample type): DW = Drinking Water GW = Ground Water WW = Waste Water S = Soil / Solid SL = Sludge OL = Oil / Organic Liquid W = Wipe A = Air O = Other</p> <p>2. Regulatory Program: D = Drinking Water N = NPDES R = RCRA SL = 503 Sludge O = No program applies If Regulatory Program is "O" or blank, Continental will select the test method.</p> <p>3. Results will be reported on a wet weight (as received) basis unless dry weight is requested or required (503 regulation, PCB in solid, High level soil VOCs, etc.). Dry weight reporting is subject to an additional charge.</p> <p>4. Turn around time (TAT): Standard TAT: 15 working days Rush TAT: 5 working days Emergency TAT: 2 - 3 working days Rush TAT and Emergency TAT are subject to an additional charge.</p>																						
RELINQUISHED BY: <i>[Signature]</i>				DATE: 9-23-15		TIME: 4:36 PM		RECEIVED BY:				DATE:		TIME:								
RELINQUISHED BY:				DATE:		TIME:		RECEIVED BY:				DATE:		TIME:								
RECEIVED AT LAB BY: <i>[Signature]</i>				DATE: 9-24-15		TIME: 16:45		SHIPPED VIA:				SEAL #:		SEAL DATE:								

Continental's standard Terms and Conditions of Sale will apply to all samples received unless a separate contractual agreement has been made. Please note the enclosed Continental Sample Acceptance Policy.

CONTINENTAL ANALYTICAL SERVICES, INC.

525 N. EIGHTH STREET  
 SALINA, KS 67401 - 785/823-1273  
 FAX: 785/823/7830

CAS ORDER NO: 128697

SHIPPING ORDER NO.: 47954

Date Requested: 6/12/2015

CAS File 8339

Requested By: JH

Received By: GJG

Freq

NextUse

SHIP TO:

City of Wichita Central  
 Sara Runyon  
 1801 S. McClean, Suite A  
 Wichita, KS 67213  
 316-2688317

REPORT TO:

City of Wichita  
 Jim Hardesty  
 City Hall, 8th Floor  
 Wichita, KS 67202  
 316-268-8317

Cooler:

3727

Ship Via: UPS

Project: Industrial sites

CAS Price Quote:

QUANTITY			SAMPLE CONTAINERS		
No. Samp.	Cont/Samp.	Total Cont.	Container Type	Preservative	Test Assignment
2	1	2	250mL Plastic	H2SO4	COD, TP, TKN, NO3/NO2, N Total
2	1	2	500mL Plastic	None	BOD, pH, TSS
2	2	4	1000mL Amber	H2SO4	HEM

Date Required at Destination: 6/15/2015

Client Instructions:

Enclosures: Chain of Custody, Custody Seals, Labels, Return Labels,

Order Completed By: ms Date Completed: 6-12-15 Checked By: [Signature]

Place ICE in ZIPLOC® BAGS provided to cool samples prior to shipping to Laboratory.  
 Verify CAS TEMPERATURE BLANK is located in cooler before adding ice bags.

Please return this SHIPPING ORDER with shipped samples.  
 To meet analytical holding times, please ship samples via overnight courier.

See the CAS Sample Acceptance Policy located on reverse side of the Chain of Custody.  
 CAS standard Terms and Conditions of Sale will apply to all samples received unless a separate contractual agreement has been made.

For CAS use only: Labels

Continental Analytical Services, Inc.  
Cooler/Sample Receipt Form ( C/S RF )

CAS Order No.: 128697  
CAS File No.: 8339

Client Name: Wichita

Sample ID's in cooler: 51-501

Cooler 1 of 1 for this CAS Order No.

Cooler Identification: CAS Cooler #: 3727 / Client's Cooler / Box / Letter / Hand-delivered  
Other: \_\_\_\_\_

Date/Time Cooler Received: 9 / 24 / 15 16 : 45

Delivered By: UPS / FedEx / AB Express / Field Svcs / Mail / Walk-In / Other: \_\_\_\_\_

Custody Seal: Present: Intact / Broken Absent: X Seal No: \_\_\_\_\_

Seal Name: \_\_\_\_\_ Seal Date: \_\_\_\_\_

Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: \_\_\_\_\_

Cooler Temperature (°C): Original Reading (°C) 3.7 Corrected Reading (°C) 2.2

*mu*  
*9,24/15*

Temperature. By: Temperature Blank Surface Temperature

Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.5

Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies:  No  Yes (See below for discrepancies.)

Note: If discrepancies are present, CAS will proceed with analyses until/unless directed otherwise by the client.

- |                                                                                                                                                                                                                                    |                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Chain of Custody not present - information taken from:<br>Cover Letter <input type="checkbox"/> Container <input type="checkbox"/><br>PO <input type="checkbox"/> CAS Proj. Mgr. <input type="checkbox"/> | <input type="checkbox"/> Sample excluded from Chain of Custody                                                                                    |
| <input type="checkbox"/> Container label absent                                                                                                                                                                                    | <input type="checkbox"/> Sample listed on Chain of Custody, not received                                                                          |
| <input type="checkbox"/> Chain of Custody incomplete [see detail below]                                                                                                                                                            | <input type="checkbox"/> Sample identification on container and Chain of Custody do not agree                                                     |
| <input type="checkbox"/> Chain of Custody missing date/time sampled (excl. TB or Dup.)                                                                                                                                             | <input type="checkbox"/> Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]                                                     |
| <input type="checkbox"/> Date or Time sampled obtained from container label                                                                                                                                                        | <input type="checkbox"/> Cooler temperature exceeded 0.1 - 6.0 °C requirement<br>[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.] |
| <input type="checkbox"/> Chain of Custody missing sampler's name                                                                                                                                                                   | <input type="checkbox"/> Broken or leaking containers (detail actions below)                                                                      |
| <input checked="" type="checkbox"/> Chain of Custody missing matrix (sample type)                                                                                                                                                  | <input type="checkbox"/> Sample container type or labeled chemical preservation inappropriate                                                     |
| <input type="checkbox"/> Missing relinquished information: signature date time                                                                                                                                                     | <input type="checkbox"/> Other discrepancies: _____                                                                                               |

Detail to discrepancies/comments: NO tests on COC, tests off shipping  
Order received with samples

Completed by: [Signature] Date Completed: 9/25/15

10/13/2015

Page: 1

City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date and Time Received: 09/24/2015 1645  
Continental File No.: 8339  
Continental Order No.: 128697  
Purchase Auth: BP240122

Dear Mr. Hardesty:

This laboratory report, containing the samples indicated below, includes 9 pages for the analytical report, 3 page(s) for the chain of custody and/or analysis request, and 1 page(s) for the sample receipt form.

<u>CAS LAB ID #</u>	<u>SAMPLE DESCRIPTION</u>	<u>SAMPLE TYPE</u>	<u>DATE SAMPLED</u>
15091667	Bus Transit	Liquid	9/23/2015
15091668	North East Sub	Liquid	9/23/2015

The Appendix and Quality Control sections are integral parts of this laboratory report and may contain important data qualifiers.

All results are reported on a wet weight basis unless otherwise stated.

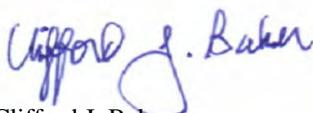
Samples will be retained for thirty days unless Continental is otherwise notified.

Continental is accredited by the State of Kansas through the National Environmental Laboratory Accreditation Program (NELAP). The results contained in this report were obtained using Continental's Standard Operating Procedures. These procedures are in substantial compliance with the approved methods referenced and the standards published by NELAP unless otherwise noted in the Appendix and Quality Control sections of this report.

This report may not be reproduced, except in full, without written approval from Continental Analytical Services, Inc.

Thank you for choosing Continental for this project.

CONTINENTAL ANALYTICAL SERVICES, INC.



Clifford J. Baker  
Technical Manager  
cjbaker@cas-lab.com



Gregory J. Groene  
Project Manager  
ggroene@cas-lab.com



525 N. Eighth St. - Salina, KS 67401  
785-827-1273 800-535-3076 Fax 785-823-7830  
KDHE Environmental Laboratory Accreditation No. E-10146



# Sample Results

Client: City of Wichita  
 Attn: Jim Hardesty  
 City Hall, 8th Floor  
 455 N. Main  
 Wichita, KS 67202

Date Reported: 10/13/2015  
 Date Received: 09/24/2015  
 Continental File No: 8339  
 Continental Order No: 128697

Lab Number: 15091667  
 Sample Description: Bus Transit

Date Sampled: 09/23/2015  
 Time Sampled: 1608

<u>Analysis</u>	<u>Concentration</u>	<u>Units</u>	<u>Book/Page</u>
BOD (5 Day)	41 H	mg/L	7427/515
Chemical Oxygen Demand	172	mg/L	7171/290
Kjeldahl Nitrogen, as N (TKN)	2.36	mg/L	7321/963
Nitrate/Nitrite, as N (FIA)	1.4	mg/L	7321/965
Nitrogen (TKN + NO3/NO2), as N	3.8	mg/L	9995/519
Oil & Grease, (HEM)	ND(5.8) L	mg/L	7198/534
pH	8.64 H	Std. units	7439/353
Phosphorus, Total, as P	0.55	mg/L	7321/962
Solids, Total Suspended	133	mg/L	7438/871

<u>Analysis</u>	<u>Date/Time Prepared</u>	<u>Date/Time Analyzed</u>	<u>QC Batch</u>	<u>Inst. Batch</u>	<u>Analyst</u>	<u>Method(s)</u>
BOD (5 Day)	N/A	09/25/15 1623	150925-1	150925-1	ASK	SM 5210B-2001
Chemical Oxygen Demand	N/A	10/08/15 1713	151008-1	151008-1	JND	SM 5220D-1997
Kjeldahl Nitrogen, as N (TKN)	09/29/15 1045	10/01/15 1615	150929-1	151001-2	JND	EPA 351.2
Nitrate/Nitrite, as N (FIA)	N/A	10/06/15 1518	151006-1	151006-1	MLL	4500-NO3(F)-2000
Nitrogen (TKN + NO3/NO2), as N	N/A	10/08/15 1407	N/A	N/A	CJB	Calculation
Oil & Grease, (HEM)	09/30/15 1008	09/30/15 1011	150930-1	150930-1	JND	1664 Rev. A
pH	N/A	09/25/15 0900	150925-1	150925-1	BLA	4500-H (B)-2000
Phosphorus, Total, as P	09/30/15 1315	09/30/15 2253	150930-2	150930-2	JND	4500-P(B&G)-1999
Solids, Total Suspended	N/A	09/28/15 1308	150928-1	150928-1	BLA	SM 2540 (D)-1997
HEM Preparation Method						1664 Rev. A

Conclusion of Lab Number: 15091667

## Sample Results

Page: 3

Client: City of Wichita  
 Attn: Jim Hardesty  
 City Hall, 8th Floor  
 455 N. Main  
 Wichita, KS 67202

Date Reported: 10/13/2015  
 Date Received: 09/24/2015  
 Continental File No: 8339  
 Continental Order No: 128697

Lab Number: 15091668  
 Sample Description: North East Sub

Date Sampled: 09/23/2015  
 Time Sampled: 1624

<u>Analysis</u>	<u>Concentration</u>	<u>Units</u>	<u>Book/Page</u>
BOD (5 Day)	27	mg/L	7427/515
Chemical Oxygen Demand	115	mg/L	7171/289
Kjeldahl Nitrogen, as N (TKN)	2.37	mg/L	7321/964
Nitrate/Nitrite, as N (FIA)	1.6	mg/L	7321/965
Nitrogen (TKN + NO3/NO2), as N	4.0	mg/L	9995/519
Oil & Grease, (HEM)	6.5	mg/L	7198/534
pH	8.13 H	Std. units	7439/353
Phosphorus, Total, as P	0.14	mg/L	7321/975
Solids, Total Suspended	112	mg/L	7438/871

<u>Analysis</u>	<u>Date/Time Prepared</u>	<u>Date/Time Analyzed</u>	<u>QC Batch</u>	<u>Inst. Batch</u>	<u>Analyst</u>	<u>Method(s)</u>
BOD (5 Day)	N/A	09/25/15 1623	150925-1	150925-1	ASK	SM 5210B-2001
Chemical Oxygen Demand	N/A	10/05/15 1043	151005-1	151005-1	JND	SM 5220D-1997
Kjeldahl Nitrogen, as N (TKN)	09/29/15 1045	10/01/15 1636	150929-1	151001-4	JND	EPA 351.2
Nitrate/Nitrite, as N (FIA)	N/A	10/06/15 1520	151006-1	151006-1	MLL	4500-NO3(F)-2000
Nitrogen (TKN + NO3/NO2), as N	N/A	10/08/15 1407	N/A	N/A	CJB	Calculation
Oil & Grease, (HEM)	09/30/15 1008	09/30/15 1012	150930-1	150930-1	JND	1664 Rev. A
pH	N/A	09/25/15 0902	150925-1	150925-1	BLA	4500-H (B)-2000
Phosphorus, Total, as P	10/09/15 1125	10/09/15 1510	151009-1	151009-1	JND	4500-P(B&G)-1999
Solids, Total Suspended	N/A	09/28/15 1308	150928-1	150928-1	BLA	SM 2540 (D)-1997
HEM Preparation Method						1664 Rev. A

Conclusion of Lab Number: 15091668

## Appendix

Page: 4

Client: City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

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ND( ), where reported, indicates the analyte was not detected above the Limit of Quantitation (LOQ). The concentration of the LOQ is inside the parentheses.

---

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

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The following table presents the date and time sampled, the date and time analyzed, and the total time elapsed for each analysis with an EPA recommended holding time of seventy-two hours or less.

<u>CAS LAB ID #</u>	<u>ANALYSIS</u>	<u>DATE/TIME SAMPLED</u>	<u>DATE/TIME ANALYZED</u>	<u>ELAPSED HRS:MIN</u>
15091667	BOD (5 Day)	09/23/2015 1608	09/25/2015 1623	48:15
15091667	pH	09/23/2015 1608	09/25/2015 0900	40:52
15091668	BOD (5 Day)	09/23/2015 1624	09/25/2015 1623	47:59
15091668	pH	09/23/2015 1624	09/25/2015 0902	40:38

---

H - Regulatory analytical holding time for this analysis was exceeded.

L - Reporting limit higher than normal due to limited sample volume available. If a result is provided it may be less accurate than normal.

---

# Accreditation Summary

Client: City of Wichita  
Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

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NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. Continental is NELAP accredited for each matrix/analyte/method and EPA program cited in this Laboratory Report, except for those listed in the table below and for analyses performed in the field. For most of the analyses listed in the table, NELAP accreditation is not offered under the listed EPA program and Continental is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA program. Continental's full NELAP accreditation status may be viewed at [www.kdheks.gov/envlab](http://www.kdheks.gov/envlab). Note that unless qualified otherwise in the Laboratory Report, Continental performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

<u>Test</u>	<u>Analysis</u>	<u>Matrix-Regulatory Program</u>	<u>Method</u>	<u>CAS NELAP Accredited in Other Reg. Program</u>
CAS is accredited for all analytes.				

## Quality Control Report Batch Summary

Page: 6

Client: City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL123	BOD (5 Day)	150925-1	150925BLK1 09/25/15 1623	150925LCS1 09/25/15 1623	15091576MS 09/25/15 1623
Lab numbers associated with this batch: 15091667 15091668					
GL140	Chemical Oxygen Demand	151005-1	151005BLK1 10/05/15 1040	151005LCS1 10/05/15 1041	15091745MS 10/05/15 1044
Lab numbers associated with this batch: 15091668					
GL140	Chemical Oxygen Demand	151008-1	151008BLK1 10/08/15 1711	151008LCS1 10/08/15 1711	15100042MS 10/08/15 1715
Lab numbers associated with this batch: 15091667					
GL595	Kjeldahl Nitrogen, as N (TKN)	150929-1	150929BLK1 10/01/15 1557	150929LCS1 10/01/15 1558	15091748MS 10/01/15 1638
Lab numbers associated with this batch: 15091667 15091668					
GL192	Nitrate/Nitrite, as N (FIA)	151006-1	151006BLK1 10/06/15 1511	151006LCS1 10/06/15 1513	15091646MS 10/06/15 1515
Lab numbers associated with this batch: 15091667 15091668					
GL343	Nitrogen (TKN + NO3/NO2), as N		N/A	N/A	
Lab numbers associated with this batch: 15091667 15091668					
GL188	Oil & Grease, (HEM)	150930-1	150930BLK1 09/30/15 1008	150930LCS1 09/30/15 1008	15091323MS 09/30/15 1008
Lab numbers associated with this batch: 15091667 15091668					
GL211	pH	150925-1	N/A	150925LCS1 09/25/15 0850	15091504MS 09/25/15 0854
Lab numbers associated with this batch: 15091667 15091668					
GL218	Phosphorus, Total, as P	150930-2	150930BLK2 09/30/15 2251	150930LCS2 09/30/15 2252	15091803MS 09/30/15 2256
Lab numbers associated with this batch: 15091667					
GL218	Phosphorus, Total, as P	151009-1	151009BLK1 10/09/15 1507	151009LCS1 10/09/15 1508	15100037MS 10/09/15 1521
Lab numbers associated with this batch: 15091668					

# Quality Control Report Batch Summary

Page: 7

Client: City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

---

Test Code	Testname	QC Batch	Method Blank Date/Time Analyzed	LCS Date/Time Analyzed	MS Lab No. Date/Time Analyzed
GL243	Solids, Total Suspended	150928-1	150928BLK1 09/28/15 1307	N/A	15091802MS 09/28/15 1310

---

Lab numbers associated with this batch:  
15091667 15091668

---

Quality Control Report  
Method Blank, LCS, MS/MSD Data

Page: 8

Client: City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

Analysis	Method Blank	LCS % Rec	LCS Limits	LCS Spike Level	Units	Spiked Sample (% Recovery)		MS/MSD Limits	MS/MSD Spike Level	Units	Spiked Sample Precision Data	
						MS	MSD				RPD	Limit
QC Batch: 150925-1 pH	For sample analyzed on: 09/25/2015			7.0	Std. u	Spiked sample: 15091504		#	N/A	Std. u	**	0.90
QC Batch: 150925-1 BOD (5 Day)	For sample analyzed on: 09/25/2015			198	mg/L	Spiked sample: 15091576		#	N/A	mg/L	**	13.4
QC Batch: 150928-1 Solids, Total Suspended	For sample analyzed on: 09/28/2015			N/A	mg/L	Spiked sample: 15091802		#	N/A	mg/L	**	24.1
QC Batch: 150929-1 Kjeldahl Nitrogen, as N (TKN)	For samples prepared on: 09/29/2015 1045			4.0	mg/L	Spiked sample: 15091748		73.3-126	4.0	mg/L	**	25.3
QC Batch: 150930-1 Oil & Grease, (HEM)	For samples prepared on: 09/30/2015 1008			40.0	mg/L	Spiked sample: 15091323		78.0-114	40.0	mg/L	**	18.0
QC Batch: 150930-2 Phosphorus, Total, as P	For samples prepared on: 09/30/2015 1315			2.0	mg/L	Spiked sample: 15091803		78.2-125	2.0	mg/L	**	13.7
QC Batch: 151005-1 Chemical Oxygen Demand	For sample analyzed on: 10/05/2015			50.0	mg/L	Spiked sample: 15091745		60.1-130	50.0	mg/L	**	19.3
QC Batch: 151006-1 Nitrate/Nitrite, as N (FIA)	For sample analyzed on: 10/06/2015			2.0	mg/L	Spiked sample: 15091646		81.3-113	2.0	mg/L	**	6.2
QC Batch: 151008-1 Chemical Oxygen Demand	For sample analyzed on: 10/08/2015			100	mg/L	Spiked sample: 15100042		60.1-130	100	mg/L	**	19.3
QC Batch: 151009-1 Phosphorus, Total, as P	For samples prepared on: 10/09/2015 1125			2.0	mg/L	Spiked sample: 15100037		78.2-125		mg/L	**	13.7

Data Qualifiers:

MN - The MS/MSD sample analyses were not performed on a sample from this Continental order number.

# - Limits not applicable/not available for this analysis.

\*\* - RPD calculation not applicable/not available for this analysis.

# Quality Control Report Continuing Calibration Report

Page: 9

Client: City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Reported: 10/13/2015  
Date Received: 09/24/2015  
Continental File No: 8339  
Continental Order No: 128697

<u>Analysis</u>	<u>Date of Analysis</u>	<u>Instrument Batch ID</u>	<u>Amount in Standard</u>	<u>Amount Detected</u>	<u>Units</u>	<u>Percent Recovery</u>
BOD (5 Day)	09/25/2015	150925-1	CCV recovery acceptable for this			Instrument Batch.
BOD (5 Day)	09/25/2015	150925-2	CCV recovery acceptable for this			Instrument Batch.
Chemical Oxygen Demand	10/05/2015	151005-1	CCV recovery acceptable for this			Instrument Batch.
Chemical Oxygen Demand	10/05/2015	151005-2	CCV recovery acceptable for this			Instrument Batch.
Chemical Oxygen Demand	10/08/2015	151008-1	CCV recovery acceptable for this			Instrument Batch.
Chemical Oxygen Demand	10/08/2015	151008-2	CCV recovery acceptable for this			Instrument Batch.
Oil & Grease, (HEM)	09/30/2015	150930-1	CCV recovery acceptable for this			Instrument Batch.
Oil & Grease, (HEM)	09/30/2015	150930-2	CCV recovery acceptable for this			Instrument Batch.
Nitrate/Nitrite, as N (FIA)	10/06/2015	151006-1	CCV recovery acceptable for this			Instrument Batch.
Nitrate/Nitrite, as N (FIA)	10/06/2015	151006-2	CCV recovery acceptable for this			Instrument Batch.
pH	09/25/2015	150925-1	CCV recovery acceptable for this			Instrument Batch.
pH	09/25/2015	150925-2	CCV recovery acceptable for this			Instrument Batch.
Phosphorus, Total, as P	09/30/2015	150930-2	CCV recovery acceptable for this			Instrument Batch.
Phosphorus, Total, as P	09/30/2015	150930-3	CCV recovery acceptable for this			Instrument Batch.
Phosphorus, Total, as P	10/09/2015	151009-1	CCV recovery acceptable for this			Instrument Batch.
Phosphorus, Total, as P	10/09/2015	151009-2	CCV recovery acceptable for this			Instrument Batch.
Kjeldahl Nitrogen, as N (TKN)	10/01/2015	151001-2	CCV recovery acceptable for this			Instrument Batch.
Kjeldahl Nitrogen, as N (TKN)	10/01/2015	151001-3	CCV recovery acceptable for this			Instrument Batch.
Kjeldahl Nitrogen, as N (TKN)	10/01/2015	151001-4	CCV recovery acceptable for this			Instrument Batch.
Kjeldahl Nitrogen, as N (TKN)	10/01/2015	151001-5	CCV recovery acceptable for this			Instrument Batch.



525 N. 8th, Salina, KS 67401  
 (785) 827-1273 or (800) 535-3076  
 Fax (785) 823-7830  
 www.cas-lab.com

# CHAIN OF CUSTODY RECORD

Continental  
 Order No.:  
 [ Lab to enter Order No. ]

*1250M*

Page \_\_\_\_\_ of \_\_\_\_\_

Client/Reporting Information				Client Invoice Information				Requested Test (s)								Comments					
Company Name:				Company Name:												<p><b>Discrepancies</b>            See C/S, RF</p> <p>Is dry weight required?            Write Dry Wt. in this column for applicable samples. See (3) below.</p> <p>Is Rush or Emergency TAT required?            Write Rush or Emerg in this column for applicable samples. See (4) below.</p>					
Address:				Address:																	
City:		State:	Zip:	City:		State:	Zip:														
Contact:				Contact:																	
E-mail:				E-mail:																	
Phone:		Fax:		Phone:		Fax:															
File No. / Project No.:		Project Name:				Purchase Order:															
Sampled by (Print): <i>David Ornelas</i>		Sampled by (Signature): <i>[Signature]</i>				G - Grab or C - Composite	Total No. of Containers	No. of Preserved Containers													
Sample Identification (30 characters or less - to appear on lab report)		Matrix (1)	Program (2)	DATE Sampled	TIME Sampled			HCl	NaOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	Not Preserved	Other :								
<i>Bus Transit</i>				<i>9-23-15</i>	<i>4:08 PM</i>																
<i>Bus Transit</i>				<i>9-23-15</i>	<i> </i>																
<i>Bus Transit</i>				<i>9-23-15</i>	<i> </i>																
<p>1. Matrix (sample type): DW = Drinking Water GW = Ground Water WW = Waste Water S = Soil / Solid SL = Sludge OL = Oil / Organic Liquid W = Wipe A = Air O = Other</p> <p>2. Regulatory Program: D = Drinking Water N = NPDES R = RCRA SL = 503 Sludge O = No program applies If Regulatory Program is "O" or blank, Continental will select the test method.</p> <p>3. Results will be reported on a wet weight (as received) basis unless dry weight is requested or required (503 regulation, PCB in solid, High level soil VOCs, etc.). Dry weight reporting is subject to an additional charge.</p> <p>4. Turnaround time (TAT): Standard TAT: 15 working days Rush TAT: 5 working days Emergency TAT: 2 - 3 working days Rush TAT and Emergency TAT are subject to an additional charge.</p>																					
RELINQUISHED BY: <i>[Signature]</i>				DATE: <i>9-23-15</i>		TIME: <i>4:36 PM</i>		RECEIVED BY:				DATE:				TIME:					
RELINQUISHED BY:				DATE:		TIME:		RECEIVED BY:				DATE:				TIME:					
RECEIVED AT LAB BY: <i>[Signature]</i>				DATE: <i>9-24-15</i>		TIME: <i>16:45</i>		SHIPPED VIA:				SEAL #:				SEAL DATE:					
AIR BILL:																					



525 N. 8th, Salina, KS 67401  
 (785) 827-1273 or (800) 535-3076  
 Fax (785) 823-7830  
 www.cas-lab.com

# CHAIN OF CUSTODY RECORD

Continental  
 Order No.:  
 [ Lab to enter Order No. ]

120697

Page \_\_\_\_\_ of \_\_\_\_\_

Client/Reporting Information				Client Invoice Information				Requested Test (s)								Comments				
Company Name:				Company Name:												Is dry weight required? Write Dry Wt. in this column for applicable samples. See (3) below.  Is Rush or Emergency TAT required? Write Rush or Emerg in this column for applicable samples. See (4) below.				
Address:				Address:																
City:		State:	Zip:	City:		State:	Zip:													
Contact:				Contact:																
E-mail:				E-mail:																
Phone:		Fax:		Phone:		Fax:														
File No. / Project No.:		Project Name:				Purchase Order:														
Sampled by (Print): David S. Orta LAS		Sampled by (Signature): <i>[Signature]</i>				G - Grab or C - Composite		Total No. of Containers		No. of Preserved Containers										
Sample Identification (30 characters or less - to appear on lab report)		Matrix (1)	Program (2)	DATE Sampled	TIME Sampled	HCl	NaOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	Not Preserved	Other:									
North East Sub				9-23-15	4:24 PM															
North East Sub																				
North East Sub																				
1. Matrix (sample type): DW = Drinking Water GW = Ground Water WW = Waste Water S = Soil / Solid SL = Sludge OL = Oil / Organic Liquid W = Wipe A = Air O = Other 2. Regulatory Program: D = Drinking Water N = NPDES R = RCRA SL = 503 Sludge O = No program applies If Regulatory Program is "O" or blank, Continental will select the test method. 3. Results will be reported on a wet weight (as received) basis unless dry weight is requested or required (503 regulation, PCB in solid, High level soil VOCs, etc.). Dry weight reporting is subject to an additional charge. 4. Turn around time (TAT): Standard TAT: 15 working days Rush TAT: 5 working days Emergency TAT: 2 - 3 working days Rush TAT and Emergency TAT are subject to an additional charge.																				
RELINQUISHED BY: <i>[Signature]</i>		DATE: 9-23-15		TIME: 4:36 PM		RECEIVED BY:		DATE:		TIME:										
RELINQUISHED BY:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:										
RECEIVED AT LAB BY: <i>[Signature]</i>		DATE: 9-24-15		TIME: 16:45		SHIPPED VIA:		SEAL #:		SEAL DATE:										

CONTINENTAL ANALYTICAL SERVICES, INC.

525 N. EIGHTH STREET  
 SALINA, KS 67401 - 785/823-1273  
 FAX: 785/823/7830

CAS ORDER NO: 128697

SHIPPING ORDER NO.: 47954

Date Requested: 6/12/2015

CAS File 8339

Requested By: JH

Received By: GJG

Freq

NextUse

SHIP TO:

City of Wichita Central  
 Sara Runyon  
 1801 S. McClean, Suite A  
 Wichita, KS 67213  
 316-2688317

REPORT TO:

City of Wichita  
 Jim Hardesty  
 City Hall, 8th Floor  
 Wichita, KS 67202  
 316-268-8317

Cooler:

3727

Ship Via: UPS

Project: Industrial sites

CAS Price Quote:

QUANTITY			SAMPLE CONTAINERS		
No. Samp.	Cont/ Samp.	Total Cont.	Container Type	Preservative	Test Assignment
2	1	2	250mL Plastic	H2SO4	COD, TP, TKN, NO3/NO2, N Total
2	1	2	500mL Plastic	None	BOD, pH, TSS
2	2	4	1000mL Amber	H2SO4	HEM

Date Required at Destination: 6/15/2015

Client Instructions:

Enclosures: Chain of Custody, Custody Seals, Labels, Return Labels,

Order Completed By: ms Date Completed: 6-12-15 Checked By: [Signature]

Place ICE in ZIPLOC® BAGS provided to cool samples prior to shipping to Laboratory.  
 Verify CAS TEMPERATURE BLANK is located in cooler before adding ice bags.

Please return this SHIPPING ORDER with shipped samples.  
 To meet analytical holding times, please ship samples via overnight courier.

See the CAS Sample Acceptance Policy located on reverse side of the Chain of Custody.  
 CAS standard Terms and Conditions of Sale will apply to all samples received unless a separate contractual agreement has been made.

For CAS use only: Labels

Continental Analytical Services, Inc.  
Cooler/Sample Receipt Form (C/S RF)

CAS Order No.: 128697  
CAS File No.: 8339

Client Name: Wichita

Sample ID's in cooler: 51-501

Cooler 1 of 1 for this CAS Order No.

Cooler Identification: CAS Cooler #: 3727 / Client's Cooler / Box / Letter / Hand-delivered  
Other: \_\_\_\_\_

Date/Time Cooler Received: 9 / 24 / 15 16:45

Delivered By: UPS / FedEx / AB Express / Field Svcs / Mail / Walk-In / Other: \_\_\_\_\_

Custody Seal: Present: Intact / Broken Absent: X Seal No: \_\_\_\_\_  
Seal Name: \_\_\_\_\_ Seal Date: \_\_\_\_\_  
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: \_\_\_\_\_

Cooler Temperature (°C): Original Reading (°C) 3.7 Corrected Reading (°C) 2.2  
Temperature By: Temperature Blank Surface Temperature  
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.5  
 Evidence of Cooling and date received = date sampled

mu  
9,24/15

Sample Receipt Discrepancies:  No  Yes (See below for discrepancies.)

Note: If discrepancies are present, CAS will proceed with analyses until/unless directed otherwise by the client.

- |                                                                                                                                                                                                                                    |                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Chain of Custody not present - information taken from:<br>Cover Letter <input type="checkbox"/> Container <input type="checkbox"/><br>PO <input type="checkbox"/> CAS Proj. Mgr. <input type="checkbox"/> | <input type="checkbox"/> Sample excluded from Chain of Custody                                                                                    |
| <input type="checkbox"/> Container label absent                                                                                                                                                                                    | <input type="checkbox"/> Sample listed on Chain of Custody, not received                                                                          |
| <input type="checkbox"/> Chain of Custody incomplete [see detail below]                                                                                                                                                            | <input type="checkbox"/> Sample identification on container and Chain of Custody do not agree                                                     |
| <input type="checkbox"/> Chain of Custody missing date/time sampled (excl. TB or Dup.)                                                                                                                                             | <input type="checkbox"/> Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]                                                     |
| <input type="checkbox"/> Date or Time sampled obtained from container label                                                                                                                                                        | <input type="checkbox"/> Cooler temperature exceeded 0.1 - 6.0 °C requirement<br>[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.] |
| <input type="checkbox"/> Chain of Custody missing sampler's name                                                                                                                                                                   | <input type="checkbox"/> Broken or leaking containers (detail actions below)                                                                      |
| <input checked="" type="checkbox"/> Chain of Custody missing matrix (sample type)                                                                                                                                                  | <input type="checkbox"/> Sample container type or labeled chemical preservation inappropriate                                                     |
| <input type="checkbox"/> Missing relinquished information: signature date time                                                                                                                                                     | <input type="checkbox"/> Other discrepancies: _____                                                                                               |

Detail to discrepancies/comments: NO tests on COC, tests off shipping  
Order received with samples

Completed by: [Signature] Date Completed: 9/25/15



9/25/2015

City of Wichita  
Attn: Jim Hardesty  
City Hall, 8th Floor  
455 N. Main  
Wichita, KS 67202

Date Received: 9/24/2015  
CAS File No.: 8339  
CAS Order No.: 128697  
Your P.O./Project No.:

Purchase Auth: BP240122

Re: Laboratory Receipt of Samples

Dear Mr. Hardesty:

Continental Analytical Services, Inc., received your sample(s) on the date referenced above. The enclosed Test Assignment Review Sheet(s) detail the test(s) and regulatory program that have been assigned to each sample. Also enclosed is the Billing Review Sheet itemizing the anticipated charges for the samples under this order. Please contact me directly at (800)535-3076 if corrections are necessary or fax (785)823-7830/email this letter to deny authorization to proceed with analysis. All samples on the order have been scheduled for Standard Turnaround.

All samples which require cooling were received at a temperature of less than 6 degrees Celsius.

***Please review the Test Assignment Review Sheet(s) and the Cooler/Sample Receipt Form(s), if enclosed, for discrepancies. Continental will proceed with analysis unless you inform us otherwise. If you DO NOT want the analysis performed please sign, date and return this form to Continental.***

Name \_\_\_\_\_ Date \_\_\_\_\_

Our Terms and Conditions of Sale are located on our website: [www.cas-lab.com](http://www.cas-lab.com). These Terms and Conditions will be in effect unless a separate contractual agreement has been made. Samples will be retained by the laboratory for 30 days following issuance of the final report unless an alternate arrangement is agreed to in writing.

Thank you for choosing Continental Analytical Services, Inc. If you have any questions, or require assistance, please contact me directly at (800)535-3076.

CONTINENTAL ANALYTICAL SERVICES, INC.

Gregory J. Groene  
Project Manager  
Email: [gjgroene@cas-lab.com](mailto:gjgroene@cas-lab.com)



CONTINENTAL ANALYTICAL SERVICES, INC.  
 525 N. Eighth St. - SALINA, KANSAS 67401  
 (800)535-3076 - (785)827-1273  
 FED ID #48-1062249

BILLING REVIEW SHEET

This is not an invoice.

The invoice will be issued following the final laboratory report.

Page: 1

Client:	City of Wichita Attn: Jim Hardesty City Hall, 8th Floor 455 N. Main Wichita, KS 67202	Report Date: Date Sample(s) Recd: 9/24/2015 CAS File No: 8339 CAS Order No: 128697 PO/Proj. No: Purchase Auth.: BP240122
---------	---------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------

Analyses and Preparation Performed	No. of Samples	Cost Per Sample	Discounted Price Per Sample	Total
BOD (5 Day)	2	42.00	28.50	57.00
Chemical Oxygen Demand	2	32.00	18.75	37.50
Oil & Grease, (HEM)	2	42.00	28.50	57.00
Nitrate/Nitrite, as N (FIA)	2	18.00	11.25	22.50
pH	2	11.00	8.25	16.50
Phosphorus, Total, as P	2	32.00	24.00	48.00
Solids, Total Suspended	2	15.00	11.25	22.50
Nitrogen (TKN + NO3/NO2), as N	2	0.00	0.00	0.00
Kjeldahl Nitrogen, as N (TKN)	2	35.00	26.25	52.50

Amount Due: 313.50



525 N. Eighth St. - Salina, KS 67401  
 785-827-1273 800-535-3076 Fax 785-823-7830



Continental Analytical Services, Inc.  
Accreditation Summary Report

Client: City of Wichita  
CAS Order Number: 128697

NELAP accreditation is issued under each EPA regulatory program for a given matrix/analyte/method combination. The table below summarizes Continental's NELAP accreditation status for each requested test for the matrix and regulatory program indicated. If an analyte is listed as Other Reg. Program, NELAP accreditation is not offered under the listed EPA regulatory program and Continental is NELAP accredited for the analysis, using the same analytical technology, but under a different EPA regulatory program. If an analyte is listed as None then Continental is not accredited for that analyte (normally NELAC accreditation is not available). Continental's full NELAP accreditation status may be viewed at [www.kdheks.gov/envlab](http://www.kdheks.gov/envlab). Note that unless qualified otherwise in the Laboratory Report, Continental performs all analyses, including each analysis listed in the table below, utilizing NELAP protocol.

<u>Test</u>	<u>Analysis</u>	<u>Matrix-Regulatory Program</u>	<u>Method</u>	<u>Certification</u>
GL123	BOD (5 Day)	L-NPDES	SM 5210B-2001	KS
GL140	Chemical Oxygen Demand	L-NPDES	SM 5220D-1997	KS
GL188	Oil & Grease, (HEM)	L-NPDES	1664 Rev. A	KS
GL192	Nitrate/Nitrite, as N (FIA)	L-NPDES	4500-NO3(F)-2000	KS
GL211	pH	L-NPDES	4500-H (B)-2000	KS
GL218	Phosphorus, Total, as P	L-NPDES	4500-P(B&G)-1999	KS
GL243	Solids, Total Suspended	L-NPDES	SM 2540 (D)-1997	KS
GL343	Nitrogen (TKN + NO3/NO2), as N	L-NPDES	Calculation	KS
GL595	Kjeldahl Nitrogen, as N (TKN)	L-NPDES	EPA 351.2	KS





525 N. 8th, Salina, KS 67401  
 (785) 827-1273 or (800) 535-3076  
 Fax (785) 823-7830  
 www.cas-lab.com

# CHAIN OF CUSTODY RECORD

Continental  
 Order No.:  
 [ Lab to enter Order No. ]

*1250M*

Page \_\_\_\_\_ of \_\_\_\_\_

Client/Reporting Information				Client Invoice Information				Requested Test (s)								Comments					
Company Name:				Company Name:												<p><b>Discrepancies</b>            See C/S, RF</p> <p>Is dry weight required?            Write Dry Wt. in this column for applicable samples. See (3) below.</p> <p>Is Rush or Emergency TAT required?            Write Rush or Emerg in this column for applicable samples. See (4) below.</p>					
Address:				Address:																	
City:		State:	Zip:	City:		State:	Zip:														
Contact:				Contact:																	
E-mail:				E-mail:																	
Phone:		Fax:		Phone:		Fax:															
File No. / Project No.:		Project Name:				Purchase Order:															
Sampled by (Print): <i>David Ornelas</i>		Sampled by (Signature): <i>[Signature]</i>				G - Grab or C - Composite	Total No. of Containers	No. of Preserved Containers													
Sample Identification (30 characters or less - to appear on lab report)		Matrix (1)	Program (2)	DATE Sampled	TIME Sampled			HCl	NaOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	Not Preserved	Other :								
<i>Bus Transit</i>				<i>9-23-15</i>	<i>4:08 PM</i>																
<i>Bus Transit</i>				<i>9-23-15</i>	<i> </i>																
<i>Bus Transit</i>				<i>9-23-15</i>	<i> </i>																
<p>1. Matrix (sample type): DW = Drinking Water GW = Ground Water WW = Waste Water S = Soil / Solid SL = Sludge OL = Oil / Organic Liquid W = Wipe A = Air O = Other</p> <p>2. Regulatory Program: D = Drinking Water N = NPDES R = RCRA SL = 503 Sludge O = No program applies If Regulatory Program is "O" or blank, Continental will select the test method.</p> <p>3. Results will be reported on a wet weight (as received) basis unless dry weight is requested or required (503 regulation, PCB in solid, High level soil VOCs, etc.). Dry weight reporting is subject to an additional charge.</p> <p>4. Turnaround time (TAT): Standard TAT: 15 working days Rush TAT: 5 working days Emergency TAT: 2 - 3 working days Rush TAT and Emergency TAT are subject to an additional charge.</p>																					
RELINQUISHED BY: <i>[Signature]</i>				DATE: <i>9-23-15</i>		TIME: <i>4:36 PM</i>		RECEIVED BY:				DATE:				TIME:					
RELINQUISHED BY:				DATE:		TIME:		RECEIVED BY:				DATE:				TIME:					
RECEIVED AT LAB BY: <i>[Signature]</i>				DATE: <i>9-24-15</i>		TIME: <i>16:45</i>		SHIPPED VIA:				SEAL #:				SEAL DATE:					
AIR BILL:																					



CONTINENTAL ANALYTICAL SERVICES, INC.

525 N. EIGHTH STREET  
 SALINA, KS 67401 - 785/823-1273  
 FAX: 785/823/7830

CAS ORDER NO: 128697

SHIPPING ORDER NO.: 47954

Date Requested: 6/12/2015

CAS File 8339

Requested By: JH

Received By: GJG

Freq

NextUse

SHIP TO:

City of Wichita Central  
 Sara Runyon  
 1801 S. McClean, Suite A  
 Wichita, KS 67213  
 316-2688317

REPORT TO:

City of Wichita  
 Jim Hardesty  
 City Hall, 8th Floor  
 Wichita, KS 67202  
 316-268-8317

Cooler:

3727

Ship Via: UPS

Project: Industrial sites

CAS Price Quote:

QUANTITY			SAMPLE CONTAINERS		
No. Samp.	Cont/ Samp.	Total Cont.	Container Type	Preservative	Test Assignment
2	1	2	250mL Plastic	H2SO4	COD, TP, TKN, NO3/NO2, N Total
2	1	2	500mL Plastic	None	BOD, pH, TSS
2	2	4	1000mL Amber	H2SO4	HEM

Date Required at Destination: 6/15/2015

Client Instructions:

Enclosures: Chain of Custody, Custody Seals, Labels, Return Labels,

Order Completed By: ms Date Completed: 6-12-15 Checked By: [Signature]

Place ICE in ZIPLOC® BAGS provided to cool samples prior to shipping to Laboratory.  
 Verify CAS TEMPERATURE BLANK is located in cooler before adding ice bags.

Please return this SHIPPING ORDER with shipped samples.  
 To meet analytical holding times, please ship samples via overnight courier.

See the CAS Sample Acceptance Policy located on reverse side of the Chain of Custody.  
 CAS standard Terms and Conditions of Sale will apply to all samples received unless a separate contractual agreement has been made.

For CAS use only: Labels

Continental Analytical Services, Inc.  
Cooler/Sample Receipt Form (C/S RF)

CAS Order No.: 128697  
CAS File No.: 8339

Client Name: Wichita

Sample ID's in cooler: 51-501

Cooler 1 of 1 for this CAS Order No.

Cooler Identification: CAS Cooler #: 3727 / Client's Cooler / Box / Letter / Hand-delivered  
Other: \_\_\_\_\_

Date/Time Cooler Received: 9/24/15 16:45

Delivered By: UPS / FedEx / AB Express / Field Svcs / Mail / Walk-In / Other: \_\_\_\_\_

Custody Seal: Present: Intact / Broken Absent: X Seal No: \_\_\_\_\_  
Seal Name: \_\_\_\_\_ Seal Date: \_\_\_\_\_  
Seal matches Chain of Custody: Yes / No / N/A

Type of Packing Material: Blue Ice / Ice / Melted Ice / Bubble / Foam / Paper / Peanuts / Vermiculite / None / Other: \_\_\_\_\_

Cooler Temperature (°C): Original Reading (°C) 3.7 Corrected Reading (°C) 2.2

*mu*  
*9,24/15*

Temperature. By: Temperature Blank Surface Temperature  
Thermo. ID No.: 585 Thermo. Correction Factor (°C): -0.5

Evidence of Cooling and date received = date sampled

Sample Receipt Discrepancies:  No  Yes (See below for discrepancies.)

Note: If discrepancies are present, CAS will proceed with analyses until/unless directed otherwise by the client.

- |                                                                                                                                                                                                                                    |                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Chain of Custody not present - information taken from:<br>Cover Letter <input type="checkbox"/> Container <input type="checkbox"/><br>PO <input type="checkbox"/> CAS Proj. Mgr. <input type="checkbox"/> | <input type="checkbox"/> Sample excluded from Chain of Custody                                                                                    |
| <input type="checkbox"/> Container label absent                                                                                                                                                                                    | <input type="checkbox"/> Sample listed on Chain of Custody, not received                                                                          |
| <input type="checkbox"/> Chain of Custody incomplete [see detail below]                                                                                                                                                            | <input type="checkbox"/> Sample identification on container and Chain of Custody do not agree                                                     |
| <input type="checkbox"/> Chain of Custody missing date/time sampled (excl. TB or Dup.)                                                                                                                                             | <input type="checkbox"/> Air bubbles in Aqueous VOA vials larger than pea-size [approx. 6 mm]                                                     |
| <input type="checkbox"/> Date or Time sampled obtained from container label                                                                                                                                                        | <input type="checkbox"/> Cooler temperature exceeded 0.1 - 6.0 °C requirement<br>[Do not mark if samples do not require cooling to 0.1 - 6.0 °C.] |
| <input type="checkbox"/> Chain of Custody missing sampler's name                                                                                                                                                                   | <input type="checkbox"/> Broken or leaking containers (detail actions below)                                                                      |
| <input checked="" type="checkbox"/> Chain of Custody missing matrix (sample type)                                                                                                                                                  | <input type="checkbox"/> Sample container type or labeled chemical preservation inappropriate                                                     |
| <input type="checkbox"/> Missing relinquished information: signature date time                                                                                                                                                     | <input type="checkbox"/> Other discrepancies: _____                                                                                               |

Detail to discrepancies/comments: NO tests on COC, tests off shipping  
Order received with samples

Completed by: [Signature] Date Completed: 9/25/15

**Worksheet #13**

*Monthly Site Inspections*

Facility: Wichita Transit TOC

Completed By:

Title:

Date:

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of inspection

7/2/15

Inspector

*[Signature]*

Notes

*Need lot swept - perme drums*

Worksheet #13

Facility: Wichita Transit TOC

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
1/5/15	GTW	No Issues
2/2/15	GTW	No Issues
3/2/15	GTW	No Issues
4/3/15	GTW	Need Cat Sweep
5/6/15	GTW	No Issues
6/3/15	GTW	No Issues

Worksheet #13

Facility: Wichita Transit TOC

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
7/1/14	Gross (signed)	Get empty barrels removed
8/4/14	GTR	No issues
9/2/14	GTR	No issues
10/5/14	GTR	Get empty drums removed
11/5/14	GTR	Street sweep lot
12/1/14	GTR	No issues

Worksheet #10

Employee Training Record

Facility: Wichita Transit TOC

Completed By: Josh Ramirez / Gregg Ringold

Title: Supervisor / Superintendent

Date: 8/21/11

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Use of spill kits	Containment of Spills using the Different Components of KFT	8-21-11	G. Allan, R. Acker, R. Cooley, N. Allen, P. Reed
Storm water pollution prevention	Video - A clear solution	12.6.12	C. Torres, D. Wheeler, C. Berry
Storm water pollution prevention	DVD - A drop in the Bucket	12.6.12	Fatima Perez, C. Angler
Storm water pollution prevention	DVD - A drop in the Bucket	4-18-13	A. Deshaizer, T. Brown, L. Aiken, R. Cooley, R. Strickland, M. Atherton
Storm water pollution prevention	DVD - A drop in the Bucket	7/14/14	Michael Ramirez, Doreen T. Arzeno, Maxwell Ringold
Storm water pollution prevention	DVD - A drop in the Bucket	1/20/15	Nicole Weaver, Trenton Hutton, Michael Cope

Worksheet #10

Employee Training Record

Facility: Wichita Transit TOC

Completed By: Gress Ringold

Title: Superintendent

Date: 1/21/15

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Storm Water Pollution Prevention	DVD - A drop in the bucket	3/30/15	Paul Shuler
Storm Water Pollution Prevention	DVD - A drop in the bucket	7/6/15	Leonard Jackson
Storm Water Pollution Training	DVD A drop in the bucket	7-9-15	D. J. Smith

<b>Worksheet #11</b>		Facility: <u>TRANSIT</u>
		Completed By: <u>JA</u>
<i>Site Compliance Inspection Report</i>		Title: _____
		Date: <u>7/28/15</u>
<p><b>Instructions:</b> Complete the following form in order to properly assess and evaluate changes at the facility, including assessing compliance with the SWPPP. Use to certify the annual site inspection and compliance with SWPPP, or any time a violation of the SWPPP is known or suspected.</p>		
<b>Compliance Assessment</b>		
	Observations	Compliance with SWPPP ?
1	<i>Fully Compliant</i>	
2		
3		
4		
<b>Response Actions</b>		
Actions Needed	Proposed Completion Date	Actual Completion Date
1		
2		
3		
4		
<b>Certification</b>		
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.</p>		
A. Name & Official Title (Type or Print)		B. Area Code and Telephone No.
<i>Tom Harnesky Int. Div MNGR</i>		<u>316-768-8317</u>
C. Signature		D. Date Signed
<i>Tom Harnesky</i>		<u>7-28-15</u>

Worksheet #13

Monthly Site Inspections

Facility: Wichita Transit TOC

Completed By:

Title:

Date:

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection

Inspector

Notes

7/2/15

*[Signature]*

*Need lot swept - remove drums*

Worksheet #13

Facility: Wichita Transit TOC

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
1/5/15	GTR	No Issues
2/2/15	GTR	No Issues
3/2/15	GTR	No Issues
4/3/15	GTR	Need to Sweep
5/6/15	GTR	No Issues
6/3/15	GTR	No Issues

Worksheet #13

Wichita Transit TOC

Facility:

Completed By:

Title:

Date:

Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
7/1/14	Greg Pugh	Get empty barrels removed
8/4/14	GTR	No Issues
9/2/14	GTR	No Issues
10/5/14	GTR	Get empty drums removed
11/5/14	GTR	Street sweep list
12/1/14	GTR	No Issues

Worksheet #10

Employee Training Record

Facility: Wichita Transit TOC

Completed By: Josh Ramirez /

Title: Supervisor /

Date: 8/21/11

Supervisor / Superintendent  
8/21/11

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Use of area location of Spill Kits	Containment of Spills using the Different Components of Kit	8.21-11	G. Allan, R. Anten, R. Cooley, N. Allen, P. Reed
Storm water pollution prevention	Video - A clear solution	12.6.12	C. Jones, D. Wheeler, C. Berry
Storm water pollution prevention	DVD - A drop in the Bucket	12.6.12	Fatima Perez, C. Ingler
Storm water pollution prevention	DVD - A drop in the Bucket	4-18-13	A. Desbazer, T. Brown, L. Anton, R. Cooley, R. Strickland, M. Atherton
Storm water pollution prevention	DVD - A drop in the Bucket	7/14/14	Michael Ramirez, Doree T. Centzner, M. Maxwell, R. Reed
Storm water pollution prevention	DVD - A drop in the Bucket	1/20/15	Nicole Weaver, Trenton Hutton, Michael Cope

Worksheet #10

Employee Training Record

Facility: Wichita Transit JOC

Completed By: Gregg Ringold

Title: Superintendent

Date: 1/21/15

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Storm Water Pollution Prevention Storm Water	DVD - A drop in the bucket	3/30/15	Paul Shuler
Pollution Prevention Storm Water	DVD - A drop in the bucket	7/6/15	Leonard Jackson
Pollution Training	DVD A drop in the bucket	7-9-15	[Signature]

# Worksheet #13

## Monthly Site Inspections

Facility: West Substation

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
04/30/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of Non-SW Discharge NOT OBSERVED.
05/27/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of Non-SW Discharge NOT OBSERVED.
06/19/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of Non-SW Discharge NOT OBSERVED.
07/22/15	Aaron Henning	Presence of SW pollutants NOT OBSERVED. Presence of Non-SW Discharge NOT OBSERVED.
		Presence of Non-SW Discharge NOT OBSERVED.

# Worksheet #13

Facility: West Substation

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
10/22/14	Aaron Henning	Presence of SW Accountants NOT OBSERVED.
11/26/14	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED.
12/22/14	Aaron Henning	Presence of SW Accountants NOT OBSERVED.
01/28/15	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED.
02/25/15	Aaron Henning	Presence of SW Accountants NOT OBSERVED.
03/25/15	Aaron Henning	Presence of NON-SW Discharge NOT OBSERVED.

# Worksheet #13

Facility: Northside Substation

Completed By:

Title:

Date:

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
03/25/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed. *SW discharge currently of an operation of designated storm water.
04/20/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
05/07/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
06/19/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.
07/02/15	Aaron Henning	Presence of SW pollutants not observed. Presence of non-SW discharge not observed.

# Worksheet #13

Facility: Northeast Substation

Completed By:

Title:

Date:

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
09/29/14	Aaron Henning	Presence of SW pollutants not observed.
10/22/14	Aaron Henning	Presence of non-SW discharge not observed.
11/26/14	Aaron Henning	Presence of SW pollutants not observed.
12/22/14	Aaron Henning	Presence of non-SW discharge not observed.
01/28/15	Aaron Henning	Presence of SW pollutants not observed.
02/25/15	Aaron Henning	Presence of non-SW discharge not observed.

# Worksheet #13

Facility: CME

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
04/30/15	Aaron Henningly	Presence of SW Pollutants NOT OBSERVED
05/22/15	Aaron Henningly	Presence of Non-SW Discharge NOT OBSERVED
06/19/15	Aaron Henningly	Presence of SW Pollutants NOT OBSERVED
07/22/15	Aaron Henningly	Presence of Non-SW Discharge NOT OBSERVED
		Presence of SW Pollutants NOT OBSERVED
		Presence of Non-SW Discharge NOT OBSERVED

# Worksheet #13

Facility: CMF

Completed By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Monthly Site Inspections

Instructions: Inspect the site for potential storm water pollutants. Attention should be paid to whether good housekeeping procedures are being practiced. Specifically, the potential pollutant sources should be checked for the presence of storm water pollutants and the storm water outfalls for the presence of non-storm water discharges.

Date of Inspection	Inspector	Notes
10/22/14	Aaron Henning	Presence of SW pollutants NOT OBSERVED.
11/20/14	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED. Presence of SW pollutants NOT OBSERVED.
12/02/14	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED. Presence of SW pollutants NOT OBSERVED.
01/22/15	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED. Presence of SW pollutants NOT OBSERVED.
02/25/15	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED. Presence of SW pollutants NOT OBSERVED.
03/25/15	Aaron Henning	Presence of Non-SW Discharge NOT OBSERVED. Presence of SW pollutants NOT OBSERVED.

\* SCHEDULE SUBMITTING UPON COMPLETION OF DESIGNATED SHOW ROUTES.

Worksheet #10

CMF

Facility:  
Completed By:  
Title:  
Date:

Employee Training Record

Instructions: Describe the employee training program for the facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule of Training (list dates)	Attendees
Spill Prevention + Response Good Housekeeping Material Management	Overview of SWP2 Plan Requirements and Compliant Practices	04/13/2010	Aaron Henning, Don Craddock, CMF Frontline Staff
Spill Prevention + Response Good Housekeeping Material Management	Film and Discussion	10/18/2010	CMF Management Bureau of Inspection
Spill Prevention + Response Good Housekeeping Material Management	Film and Discussion	10/19/2010	CMF Frontline Staff
Spill Prevention + Response Good Housekeeping Material Management	Film and Discussion	12/19/11, 14/28/11, 01/19/12, 02/04/12, 02/08/12	CMF Management and Frontline Staff
Spill Prevention + Response Good Housekeeping Material Management	Film and Discussion	04/18/2012	CMF Management and Frontline Staff
Spill Prevention + Response Good Housekeeping Material Management	Film and Discussion	10/29/2014	CMF Management and Frontline Staff



**City of Wichita  
K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.							
Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
Asp. millings	7-30-14	400	10,500				X
CRUSHED CONC.	"	400	17,400				X
Ruble - conc.	"		24,500				X
Asp. Ruble	"		23,500				X
ROAD GRAVEL	"	200	1100				X
<del>Asp</del> Diesel	"		50 gal	NONE	NO		X
Asp. milling	8-29-14	300	10,000				
CRUSHED CONC.		400	17,000				
CONCRETE Ruble			24,700				
Asp. Ruble			23,700				
Diesel			50 gal.	NONE			X
ROAD GRAVEL		100	1000				
Asp. milling	9-26-14	300	10,000				
CRUSHED CONC.		400	17,000				
CONC. Ruble			24,700				
Asp. Ruble			23,700				

**City of Wichita**  
**K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.							
Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
ROAD GRAVEL	9-26-14	100	900				
Diesel	11		50 gal		NONE		X
CRUSHED CONC.	10-31-14	200	16800				
ASPH. milling		200	9800				
CONC. Rubble			24800				
ASP Rubble			23900				
Diesel			50 gal		NONE		X
ROAD GRAVEL			800				
ASPH. milling	11-21-14	400	9400				
CRUSHED CONC		200	16600				
CONC. Rubble			25200				
ASP Rubble			24100				
Diesel			50 gal		NONE		X
ROAD GRAVEL			<del>50 gal</del> 900		<del>NONE</del>		X
ASPH. milling	12-23-14	400	9000				
CRUSHED CONC.		400	16200				

**City of Wichita  
K-96 & Hillside Reclamation Site**

**Monthly Material Inventory**

Instructions: List all materials used or stored onsite monthly. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.							
Material	Date	Quantity (yd <sup>3</sup> )		Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Stored			Yes	No
CONC. Rubble	12-23-14		25400				
ASPH Rubble	12-23-14		24300				
Diesel			50gal		NONE		X
ROAD GRAVEL		100	700				
ASPH. milling		500	8500				
CRUSHED CONC.		400	15800				
CONC. Rubble			25600				
ASPH. Rubble			24500				
Diesel			50gal		NONE		X
ASPH milling	1-28-15	500	8000				
CRUSHED CONC.		400	15400				
CONC. Rubble			25600				
ASPH Rubble			24500				
Diesel			50gal		NONE		X
ROAD GRAVEL		100	600				
ASPH milling	2-25-15	500	7500				









# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
Don Craddock	Don Craddock
MICHAEL FRATZEL	Michael Fratzel
Lee Brown	Lee Brown
Terry Winker	Terry Winker
JAMES BLACK	James Black
Aniceto Velazquez	Aniceto
Doug Jones	Doug Jones
Kevin Cope	Kevin Cope
Richard Mann	Richard Mann
DANNY R. SCHAUF	Danny R. Schauf
BILLY R. HUBBARD	Billy R. Hubbard
Michelle Wright	Michelle Wright
Andy Busarda	Andy Busarda
William Wool	William Wool
Robert A. Craddock	Robert A. Craddock
CURTIS FISHER	Curtis Fisher
Roberto Carrillo	Roberto Carrillo
Maveice Jansson	Maveice Jansson
Eugene Bryant	Eugene Bryant
Heath Evans	Heath Evans
Roger Whiteley	Roger Whiteley
Steve Dillo	Steve Dillo
OSCAR WALKER	Oscar Walker
David Craddock	David Craddock



WICHITA

Department of Public Works & Utilities  
Maintenance Division

# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
LYNN AVANTS	<i>[Signature]</i>
TODD A. NAVE	<i>[Signature]</i>
JASON WOHLDADMUTH	<i>[Signature]</i>
JOEL A. "BO" WILLIAMS	<i>[Signature]</i>
DAVID P. PANDITZER	<i>[Signature]</i>
Bolunil Vseticka	<i>[Signature]</i>
Andre Wilson	<i>[Signature]</i>
Tony Tatum	<i>[Signature]</i>
Mike Gabbert	<i>[Signature]</i>
Jimmy Legg	<i>[Signature]</i>
Steve Grimes	<i>[Signature]</i>
LEVI HARMON	<i>[Signature]</i>
Pedro Hernandez	<i>[Signature]</i>
Jerry Newton I	<i>[Signature]</i>
GARY TAMEL	<i>[Signature]</i>
Keith Kruse	<i>[Signature]</i>
Edwin Johnson	<i>[Signature]</i>
Jessie Ross	<i>[Signature]</i>
Roger Y. Brown	<i>[Signature]</i>
CHRISTOPHER R. HARRIS	<i>[Signature]</i>
Che Graham EOH	<i>[Signature]</i>
Daniel Sim	<i>[Signature]</i>
HARVEY L. GARDNER	<i>[Signature]</i>
KEVIN SHON	<i>[Signature]</i>



# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	Signature
Eric Smith	
Bobby Bell	
Jordan Lewis	
Bryant Moose	
Devintez Howard	
Alex Daniels	
Shawn Striplin	
TROY SHAW	
Karlin White	
NICK PENTORSKEY	
Lonnie Erwin	
Daniel Foster	
Brian Pennrod	
Larson Bowen	
Reshale Perez	
David Rose	
Tyrone Kiley	
Roger Skilling	
Steve Bernhardt	
Scott Perkins	
Goodenough	
Tim Heath	
Austin C. Shumate (TT)	
MATT SCHULTZ	





WICHITA

Department of Public Works & Utilities  
Maintenance Division

# Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure Training

Storm BMP Watch: Municipal Storm Water Pollution Prevention 21 min  
Terracon: SPCC Plan, City of Wichita, General Awareness Training 24 min  
Discussion 15 min

Date: 10/29/14

Name (Print)	2:00 pm	Signature
JASON WATERS		
Clyde Napier		
ERLIE STANG		
Nicholas Peoples		
Tim Stewart		
Michelle Wright		
Phillip Sells		
Billy R. Hubbard		
DANNY R. Schauf		
Nathan Eastman		
11:00 pm		
→ Marvies Hagans		
LARRY MARZETT		
ARIE JASO		
Garek Spurge		
William BUSH		
Charlotte Dowell		
Daniel Ashcraft		
Fred MASON		
TERRY NICHOLAS		

To determine values of total suspended solids (TSS) sediment, phosphorus and nitrogen from the developed city on an annual basis for the MS4 permit requirement, the City elects to model these parameters by the use of WinSLAMM. WinSLAMM is a computer program developed by the University of Wisconsin to assess water quality from various landuses being directed through different best management practices (BMP).

The City determined its land mass on the four key landuses of commercial, residential, industrial and institutional. Institutional land is typically schools and universities. We found that approximately 105,245 acres comprise the city in these four main landuses. All subcategories of landuses were put into these four major landuses. Table 1 shows this breakdown.

We considered that older and internal part of the city that has these same landuses, but not modern BMPs like detention ponds. This area is approximately 16.6% of the entire city. Figure 1 shows all of the detention ponds throughout the city that we have mapped. You can see the less density of BMP sites in the center of the city.

We used the standard land use databases within WinSLAMM to estimate an amount of TSS, phosphorus and nitrogen that would be generated by these landuses during typical small rainfall events of about one-inch. Wichita had available rainfall records from 1953 to 2013 and constructed a 59.7 year rainfall file that was used in a continuous rainfall simulation in the software.

The predominate BMP used by the city area wide is detention ponds and this analysis is limited to this BMP. Runoff parameters without any pond BMP controls is the entire city whereas 83.4% of the city processes these runoff parameters through detention ponds.

We took actual parts of the city that represented the four landuses that drain into an existing detention pond. Table 2 presents these data of a drainage basin and detention pond. A typical pond depth for adequate sedimentation of six feet was assumed in the analysis. Pond sideslopes below their static water level were considered for a realistic representation of pond volume geometry.

We created WinSLAMM models for each landuse of different sizes of drainage basins and pond. All landuse characteristics were attributed to silty soils with the standard landuse databases parameters contained in the software.

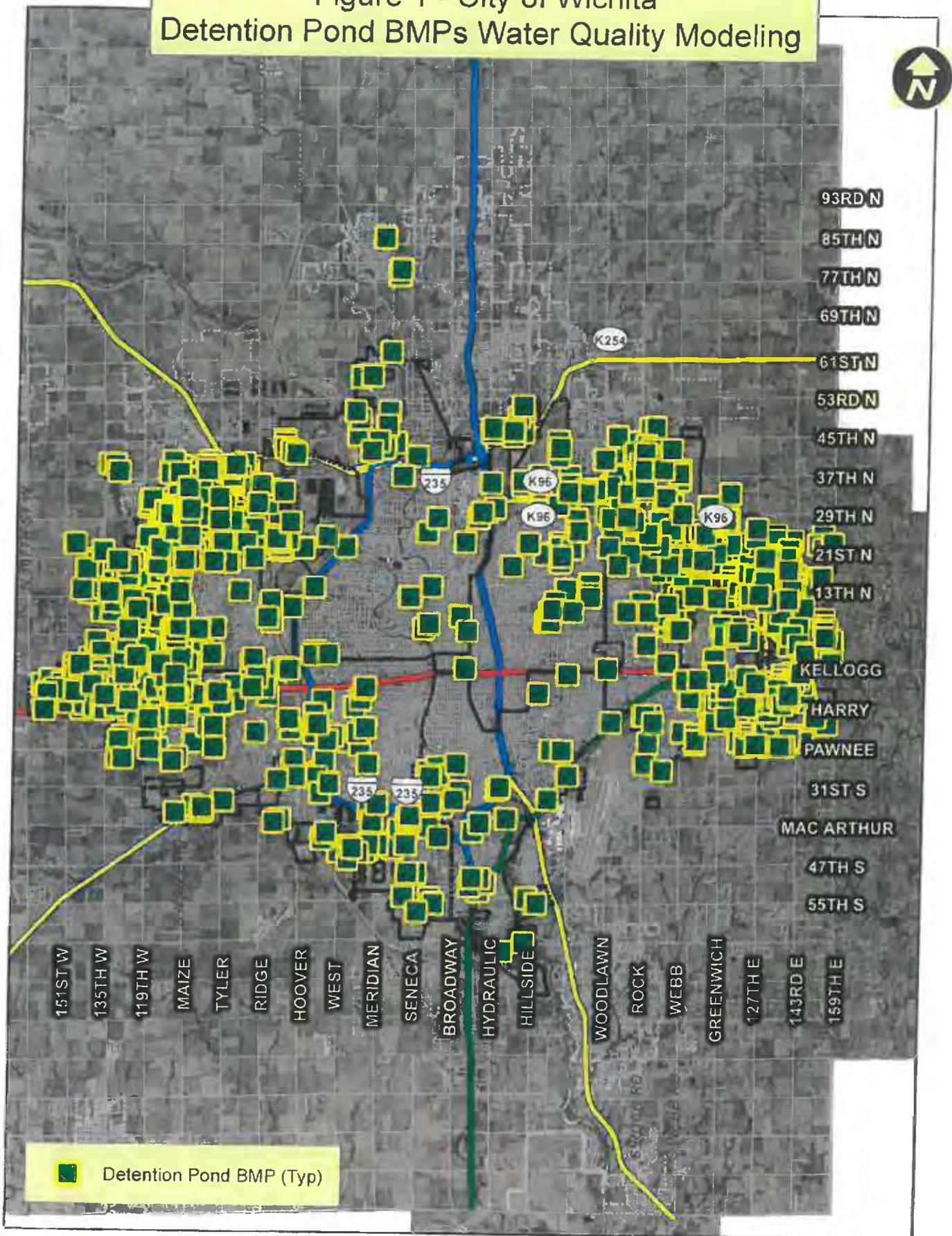
Table 3 shows the modeling results. We estimated suburban residential landuse over three actual areas to get a representative sample area production of TSS, phosphorus and nitrogen annually. These values were then prorated for the entire city's acreage for each landuse without BMP controls and then for 83.4% of the city's landuse with BMP controls on an annual and per acre basis. These city landuse values were then averaged to determine the parameter value. The summation of the four landuse parameter averages represent the city total value. An example WinSLAMM model output is enclosed for a 101.28 acre suburban residential development.

Two sample areas for light industrial, institutional and limited commercial areas were similarly computed. Reading the table 3 we see that approximately 3,236,773 tons of TSS were in runoff coming to detention ponds or to receiving streams. Only 536,904 tons of TSS passed through the retention ponds, leaving 2,699,869 tons of sediment captured. This represents an actual TSS reduction rate of 83.4% and is consistent with an accepted reduction percentage of 80% in the technical literature.

Values for phosphorus and nitrogen are similarly read. Total Phosphorus runoff is 2,993 tons, while 1,066 tons pass through detention ponds, leaving 1,927 tons captured. Total Nitrogen runoff is 13,478 tons, while 5,289 tons pass through detention ponds, leaving 8,189 tons captured.

The City of Wichita believes these approximate values of TSS, phosphorus and nitrogen in stormwater runoff and being removed from the environment is representative of the current size of the city.

Figure 1 - City of Wichita  
Detention Pond BMPs Water Quality Modeling



LAND USE TYPE	COMMON NAME	ACRES	PERCENT	INDUSTRIAL acre	COMMERCIAL acre	RESIDENTIAL acre	INSTITU acre	% Total
Single-Family District	Suburban Residential	61817.90	58.737			61817.90		58.737
Limited Industrial District	Light Industrial	13375.57	12.709	13375.57				71.446
Limited Commercial District	Shopping Center	5718.96	5.434		5718.96			76.880
Two-Family District		5057.85	4.806			5057.85		81.686
Multi-Family District		4833.37	4.593			4833.37		86.279
Rural Residential District		3556.21	3.379			3556.21		89.658
Air Force Base		2433.12	2.312	2433.12				91.970
General Industrial District		2408.96	2.289	2408.96				94.258
General Commercial District	Downtown commercial (sweeping)	2033.09	1.932		2033.09			96.190
General Office District		1207.04	1.147		1207.04			97.337
Manufactured Housing District		1173.45	1.115			1173.45		98.452
Central Business District		502.12	0.477		502.12			98.929
Industrial Park District		425.08	0.404	425.08				99.333
Planned Unit Development		404.33	0.384			404.33		99.717
Industrial Park ù Airport District		91.40	0.087	91.40				99.804
Neighborhood Retail District		72.87	0.069		72.87			99.873
University	Misc Institutional	59.69	0.057				59.69	99.930
Office Warehouse District		38.97	0.037		38.97			99.967
Neighborhood Office District		34.64	0.033		34.64			100.000
Total		105245	100	18734	9608	76843	60	105245
With BMP Pond		87725.8	83.4	15615.7	8008.4	64051.9	49.8	
Without BMP Pond		17518.9	16.6	3118.5	1599.3	12791.2	9.9	

Modeled		BMP Pond		Depth
Area Name	Landuse	Acres	Acres	Feet
Bell Terre	Suburban Residential	101.28	3.29	6
Springdale Lakes 2nd on 143rd	Suburban Residential	27.77	1.825	6
Woodland Lakes Estates, E Lincoln	Suburban Residential	39.48	1.95	6
Spirit	Light Industrial	58.62	2.985	6
Boeing	Light Industrial	500.00	7.8	6
Friends	University	38.94	0.57	6
WSU	University	66.32	1.63996786	
Newmarket Square	Limited Commercial	86.30	12.73	6
Bradley Fair	Limited Commercial	30.19	4.22	6

	W/O BMP		WITH BMP		TSS	W/O BMP		WITH BMP		PHOS NET LBS	W/O BMP		WITH BMP		W/O BMP CITYWIDE TONS N IN	WITH BMP		W/O BMP CITYWIDE TONS N IN	WITH BMP		NITROGEN CITYWIDE TONS N CAPT		
	TSS IN LBS	TSS OUT LBS	TSS NET LBS	TSS TONS IN		TSS TONS OUT	PHOS IN LBS	PHOS OUT LBS	PHOS NET LBS		PHOS IN LBS	PHOS OUT LBS	PHOS NET LBS	PHOS IN LBS		PHOS OUT LBS	PHOS NET LBS		PHOS IN LBS	PHOS OUT LBS		PHOS NET LBS	PHOS IN LBS
Landuse																							
Suburban Residential	1440000	603706	836294	546,278	190,899	355,379	5321	2357	2964	2,019	745	1,273	22011	8484	13527	8,350	2,683	8,350	2,683	13527	8,350	2,683	5,667
Suburban Residential	394758	152449	242309	546,173	175,813	370,360	1459	596	863	2,019	687	1,331	6035	2060	3975	8,350	2,376	8,350	2,376	3975	8,350	2,376	5,974
Suburban Residential	561215	225280	335935	546,169	182,746	363,423	2074	881	1193	2,018	715	1,304	8580	3102	5478	8,350	2,516	8,350	2,516	5478	8,350	2,516	5,834
SR Average	3776000	1998000	1728000	546,207	183,153	363,054	4211	1992	2219	2,019	716	1,303	408	22363	8365	8,350	2,525	8,350	2,525	8365	8,350	2,525	5,825
Light Industrial	31780000	38870000	12910000	595,371	294,668	300,703	35918	19943	16575	673	302	371	190724	128250	62474	3573	1864	3573	1864	62474	3573	1864	1,709
LI Average	1467000	896645	570355	1,124	687	437	3011	1678	1333	673	284	389	371	128250	62474	3573	2003	3573	2003	62474	3573	2003	1,570
University	2499000	1381000	1137000	1,124	511	614	5128	2464	2664	2,3	1,1	1,2	12173	8522	3651	9,3	5,4	9,3	5,4	3651	9,3	5,4	1,640
Univ Average	3762000	1516000	2246000	1,124	599	525	5375	1374	4051	2,3	1,0	1,3	20732	13471	7311	9,3	5,0	9,3	5,0	7311	9,3	5,0	4,3
Limited Commercial	1316000	566787	749213	2,094,089	70,340	2,023,759	5375	1374	4051	2,3	1,0	1,3	27768	17495	10773	1546	812	1546	812	10773	1546	812	734
LC Average				2,094,026	75,175	2,018,851	1880	527	1353	299	69,9	229	9714	6321	3993	1546	838	1546	838	3993	1546	838	707
				2,094,062	72,758	2,021,305				399	65,7	233,506787				1546	825	1546	825		1546	825	721
CITYWIDE TOTAL				3,236,773	536,904	2,699,869				2,993	1,066	1,927				13,478	5,289	13,478	5,289		13,478	5,289	8,189

File Name:

\\Engineering\Water Quality Units Performance\Wichita WQ residential.mdb

### Outfall Output Summary

Total of All Land Uses without Controls	Runoff Volume (cu. ft.)	Percent Runoff Reduction	Runoff Coefficient (Rv)	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
	7.162E+07	0.38 %	0.11	217.8	973939	
Outfall Total with Controls	7.135E+07	0.38 %	0.11	31.98	142421	85.38 %
Current File Output: Annualized Total After Outfall Controls	1.194E+06	Years in Model Run:	59.74		2384	

Pollutant	Concentration - No Controls	Concentration - With Controls	Concentration Units	Pollutant Yield - No Controls	Pollutant Yield - With Controls	Pollutant Yield Units	Percent Yield Reduction
Total Solids	322.0	135.5 mg/L	mg/L	1.440E+06	603706 lbs	lbs	58.07 %
Total Phosphorus	1.190	0.5291 mg/L	mg/L	5321	2357 lbs	lbs	55.70 %
Total TKN	4.923	1.905 mg/L	mg/L	22011	8484 lbs	lbs	61.45 %

Print Output Summary to Text File

Print Output Summary to .csv File

Total Area Modeled (ac)

101.280

### Total Control Practice Costs

Capital Cost	N/A
Fixed Cost	N/A
Annual Maintenance Cost	N/A
Present Value of All Costs	N/A
Annualized Value of All Costs	N/A

### Receiving Water Impacts Due To Stormwater Runoff (CWP ImperVIOUS Cover Model)

Perform Outfall Flow Duration Curve Calculations	Without Controls	With Controls
	0.11	0.11
Calculated Rv	0.11	0.11
Approximate Urban Stream Classification	Good	Good

2015 NPDES Report

Prepared by Thomas Nordick 01/11/2016

Type of Weed or Area Treated	Name of Product	Amount	Unit	Acres Treated
Broadleaf and Common Grassy Weeds	3D by Quali-Pro	42.3	GAL	107.7
Broadleaf and Common Grassy Weeds	Pendamethalin	8.31	GAL	13.31
Broadleaf and Common Grassy Weeds	Plateau	14.42	GAL	450.25
Broadleaf and Common Grassy Weeds	Super Trimec	7.49	GAL	23
Broadleaf and Common Grassy Weeds	Surge	18.68	GAL	45
Broadleaf and Common Grassy Weeds	Weedestroy	75.89	GAL	141.39
Broadleaf and Common Grassy Weeds	Glyphosate 41%	10.81	GAL	21.62
<b>Broadleaf and Common Grassy Weeds</b>				<b>802.27</b>
<hr/>				
<b>Bindweed</b>	Plateau	11.44	GAL	<b>132.25</b>
<hr/>				
<b>Johnsongrass</b>	Plateau	10.25	GAL	<b>121.5</b>
<hr/>				
<b>Musk Thistle</b>	Escort	1	OZ	1
	Tordon	16	OZ	1
	<b>Tordon /Escort (Mixed)</b>			<b>1</b>
<hr/>				
Bareground	Glyphosate 41%	38.25	GAL	29.64
Bareground	Sahara	732	Lb.	91.25
<b>Bareground</b>				<b>120.89</b>

**SWR - Residential Construction Projects Stormwater Inspection List**

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SWR2015-0001	02/03/15	02/17/15	Closed		TAYLOR, GARREN & AMY L	9315 BRIARWOOD	Wichita, KS	67212	3015 N DEN HOLLOW CIR	FOX RIDGE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	02/03/15	02/17/15	02/17/15			Regular Mail	5
SWR2015-0002	02/03/15	02/17/15	Closed		WESSLEY ADAM & STACY	2829 N PEPPER RIDGE	Wichita, KS	67205	3027 N DEN HOLLOW CT	FOX RIDGE ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/03/15	02/17/15	02/17/15			Regular Mail	5
SWR2015-0003	02/03/15	02/17/15	Closed		INGRAM, DAVID G & NICOL	2828 N PEPPER RIDGE	Wichita, KS	67205	LOT 57 BLOCK 4 FOX RIDGE ADD	FOX RIDGE ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/03/15	02/17/15	02/17/15			Regular Mail	5
SWR2015-0004	02/03/15	02/17/15	Closed		HOLMES DREW W & AMANDA M	3135 N DEN HOLLOW ST	Wichita, KS	67205	LOT 56 BLOCK 4 FOX RIDGE ADD	FOX RIDGE ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/03/15	02/17/15	02/17/15			Regular Mail	5
SWR2015-0005	02/10/15	02/20/15	Closed		TCDC LLC	5310 W 63RD ST S	Wichita, KS	67215	832 N ACADIA	COUNTRY ACRES 2ND. ADD.	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	5
SWR2015-0006	02/10/15	02/20/15	Closed		RELPH CONSTRUCTION	8550 NW PARALLEL ST	Towanda, KS	67144	15922 E ROSEWOOD CT	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0007	02/10/15	02/20/15	Closed		FIVE STAR HOMES LLC	PO BOX 781572	Wichita, KS	67278	15830 E ROSEWOOD CT	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0008	02/10/15	02/20/15	Closed		VICTORIA HOMES INC	13533 E MOUNT VERNON CT	Wichita, KS	67230	15502 E ROSEWOOD	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0009	02/10/15	02/20/15	Closed		RELPH CONSTRUCTION	8550 NW PARALLEL ST	Towanda, KS	67144	5409 E ROSEWOOD	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0010	02/10/15	02/20/15	Closed		FIVE STAR HOMES LLC	PO BOX 781572	Wichita, KS	67278	15405 E ROSEWOOD	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0011	02/10/15	02/20/15	Closed		VICTORIA HOMES INC	13533 E MOUNT VERNON CT	Wichita, KS	67230	LOT 16 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	02/10/15	02/20/15	02/20/15			Regular Mail	2
SWR2015-0012	03/06/15	05/06/15	Closed		USD 259 ATTN: Chris Schaeffer	201 N Water	Wichita, KS	67202	Kensler Elem. 1030 Wilber SW2011-0028	Country Acres 2nd Add	NW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498027	2
SWR2015-0013	03/06/15	05/06/15	Closed		USD 259	201 N Water	Wichita, KS	67202	Grace Med Dodge Elem. 4801 W@ 2nd SW2012-0023	DODGE ELEMENTARY ADDITION	NW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498034	6
SWR2015-0014	03/06/15	05/06/15	Closed		West Wichita Asst. Living	7200 W 13th	Wichita, KS	67212	West Wichita Asst. Living 629 S Maize Ct. SW2011-0021	LILLIE 2ND ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498041	4
SWR2015-0015	03/06/15	05/06/15	Closed		Cabela's Wholesale Inc.	One Cabela Dr	Sidney, NE	69160	Cabela's 2427 N Greenwich SW2011-0030	Regency Lakes Commercial 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498058	2

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SWR2015-0016	03/06/15	05/06/15	Closed		Kwik Shop	P.O. BOX 22845	Oklahoma City, OK	73123	Kwiki Shop 4811 S Seneca SW2011-0043	John Art Add	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498065	4
SWR2015-0017	03/06/15	05/06/15	Closed		Wal-Mart Market	P.O. Box 8050	Bentonville, AK	72716	Wal-Mart Market #5873-01 4794 E 13th N. SW2011-0046	Providence Square Add	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103498072	1
SWR2015-0018	03/06/15	05/06/15	Closed		Surgicare of Wichita	4900 S Monoco	Denver, CO	87237	Surgicare of Wichita 2812 N Greenwich SW2011-0049	GREENWICH BUSINESS CENTER ADD	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495033	2
SWR2015-0019	03/06/15	05/06/15	Closed		J-T Acquisitions LLC	2130 N Keeneland Cir	Wichita, KS	67206	LTC Warehouse 2045 S Edwards SW2011-0055	SOUTHWEST INDUSTRIAL ADD.	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495040	4
SWR2015-0020	03/11/15	05/06/15	Closed		Klaw Ventures Inc.	3450 N Rock Rd #201	Wichita, KS	67226	Comotara Industrial Park 8551 E 34th Cir N SW2011-0061	COMOTARA INDUSTRIAL PARK SECOND ADD	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/11/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495231	2
SWR2015-0021	03/06/15	05/06/15	Closed		Vision Partners LLC	150 N Market	Wichita, KS	67202	Longhorn Steakhouse 440 S Towne east mall dr. SW2012-0010	Rockwood South 3rd Add	SE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495064	2
SWR2015-0022	03/06/15	05/06/15	Closed		GREENWICH MEDICAL AND OFFICE PARK LLC	8100 E 22nd N BLDG 1000	Wichita, KS	67226	Greenwich Business Center Add SW2011-0066	Greenwich Business Center Add	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495071	2
SWR2015-0023	03/06/15	05/06/15	Closed		HAMPTON SQUARE LLC	7926 W 21st	Wichita, KS	67205	HAMPTON SQUARE 2ND ADDITION NW 39th & Maize SW2011-0074	HAMPTON SQUARE 2ND ADDITION	NW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495088	5

**SWR - Residential Construction Projects Stormwater Inspection List**

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SWR2015-0024	03/06/15	05/06/15	Closed		HOLLAND VENTURES	1255 S TYLER	Wichita, KS	67209-1830	HOLLAND COMMERCIAL PHASE 1 SW2011-0074	HOLLAND COMMERCIAL	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495095	4
SWR2015-0025	03/06/15	05/06/15	Closed		S & S STORAGE CENTER INC	6900 W MONTEZUMA	Wichita, KS	67209	Air Capital RV 609 E 47th South SW2011-0076	Southglen 3rd Add	SE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495101	3
SWR2015-0026	03/06/15	05/06/15	Closed		LAMPTON BROTHERS	601 N WASHINGTON	Wichita, KS	67214	Lampton Welding Supply 601 N WASHINGTON SW2012-0001	LAMPTON BROTHERS 2ND ADDITION	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495118	6
SWR2015-0027	03/06/15	05/06/15	Closed		BJ's Restaurant	7755 Center Ave	Huntington Beach CA	92647	BJ's Restaurant 7960 E Kellogg SW2012-0004	Kellogg Mall Add	SE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495125	2
SWR2015-0028	03/06/15	05/06/15	Closed		Primrose School	2072 N 127TH ST E	Wichita, KS	67207	Primrose School 2072 N 127TH ST E SW2012-0005	REED COMMERCIAL ADD	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495132	2
SWR2015-0029	03/06/15	05/06/15	Closed		BEH 10535 21ST LLC	1313 N WEBB RD STE 230	Wichita, KS	67206	Mattress Hub 10535 W 21st North SW2012-0008	PEARSON FARMS 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495149	5
SWR2015-0030	03/06/15	05/06/15	Closed		Bombardier Learjet	P.O. BOX 7707	Wichita, KS	67277	Learjet Parking Lots 1 W Learjet Way SW2012-0009	GATES LEARJET ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495156	4
SWR2015-0031	03/06/15	05/06/15	Closed		Integrity Auto	11 N SCOTTSDALE	Wichita, KS	67230	Integrity Auto 14422 E Kellogg Dr SW2012-0015	PRAIRIE POND PLAZA 2ND ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495163	2

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SWR2015-0032	03/06/15	05/06/15	Closed		MOTORCAR REALTY LLC	11212 E KELLOGG DR	Wichita, KS	67207	Scholfield Auto Plaza 1333 N Greenwich SW2012-0022	KISER WEST 2ND ADDITION	NE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495170	2
SWR2015-0033	03/06/15	05/06/15	Closed		INLAND TRUCK PARTS CO	4400 COLLEGE BLVD STE 145	OVERLAND PARK, KS	66211	Inland Truck Parts 3610 S Norman SW2012-0026	MID-CONTINENT INDUSTRIAL PARK I	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495187	4
SWR2015-0034	03/06/15	05/06/15	Closed		Americas Drive in Restaurants LLC	300 Jonny Bench Dr.	Oklahoma City, OK	73104	Sonic N Maize Rd. 3648 N Maize Rd. SW2012-0037	Stonebridge Commercial Add	NW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495194	5
SWR2015-0035	03/06/15	05/06/15	Closed		Davis-Moore	P.O. BOX 780047	Wichita, KS	67278	Davis-Moore collision Center 10603 E Kellogg SW2012-0046	Davis Moore 14th Add	SE	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495200	2
SWR2015-0036	03/06/15	05/06/15	Closed		Leasecorp Financial	8650 E 32nd North	Wichita, KS	67226	Lease Corp Hanger 1404 S Airport Rd. SW2012-0047	Mid Continent Airport Add	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495217	4
SWR2015-0037	03/06/15	05/06/15	Closed		QUIK TECH MACHINING LLC	1901 Southwest Blvd	Wichita, KS	67213	Wichita Sheet Metal 1616 S Leonine SW2012-0003	Isabella 2nd Add	SW	x										Illegal Discharge / Illegal Dumping into SSS /	03/06/15	05/06/15		Failure to complete and provide a Bi-Annual BMP Inspection report before February 3rd 2015 deadline.	16.32.096 (B) Failure to complete and provide a Bi-Annual BMP Inspection report	70132630000103495224	4
SWR2015-0038	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2217 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0039	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2219 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0040	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2221 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0041	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2223 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0042	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2225 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0043	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2227 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0044	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2229 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0045	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2231 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0046	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2233 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0047	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2235 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0048	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2237 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3
SWR2015-0049	05/14/15	05/21/15	Closed		RESIDENCES AT LINWOOD LLC	2002 S Hydraulic	Wichita, KS	67211	2239 S Minnesota	Darrah's 1st	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	05/14/15	05/21/15	05/21/15			Regular Mail	3





**SWR - Residential Construction Projects Stormwater Inspection List**

ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B	A.1	A.6	A.7	A.2	A.2	A.2	A.1	A	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District		
SWR2015-0128	06/24/15	07/07/15	Closed		MOODY BRIAN J & DEBRA S	214 N RACEHORSE	Wichita, KS	67235	218 Kennedy	WOODS ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0129	06/26/15	07/07/15	Closed		FROST RUSSELL D & TAMMIE L	2321 S LEECREST ST	Wichita, KS	67209	226 Kennedy	WOODS ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/26/16	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0130	06/24/15	07/07/15	Closed		CRAIG PATE CONSTRUCTION LLC	7732 W CENTRAL PARK ST	Wichita, KS	67205	245 Fawnwood	WOODS ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0131	06/24/15	07/07/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	216 Fawnwood	WOODS ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0132	06/24/15	07/07/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	217 Fawnwood Ct	WOODS ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0133	06/24/15	07/07/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK D WOODS ADD	WOODS ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0134	06/24/15	07/07/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK D WOODS ADD	WOODS ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/26/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0135	06/24/15		Closed		ROBL CONSTRUCTION INC	5842 W 21ST ST N	Wichita, KS	67205	105 Fawnwood	WOODS ADD	SW																			5	
SWR2015-0136	06/24/15	07/07/15	Closed		D & M ENTERPRISES OF WICHITA LLC	10008 W YORK	Wichita, KS	67215	1321 Forestview Ct	LIBERTY PARK 2ND ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/25/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0137	06/24/15	07/07/15	Closed		D & M ENTERPRISES OF WICHITA LLC	10008 W YORK	Wichita, KS	67125	1313 Forestview Ct	LIBERTY PARK 2ND ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/25/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0138	06/24/15	07/07/15	Closed		KICK N DEVELOPMENT CORP	716 N 119th W	Wichita, KS	67235	1110 Forestview	LIBERTY PARK 2ND ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	06/25/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0139	06/24/15	07/07/15	Closed		KICK N DEVELOPMENT CORP	716 N 119th W	Wichita, KS	67235	LOT 36 BLOCK C LIBERTY PARK 3RD	LIBERTY PARK 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	06/25/15	07/07/15	07/07/15			Regular Mail	5		
SWR2015-0140	06/24/15		Closed		KICK N DEVELOPMENT CORP	716 N 119th W	Wichita, KS	67235	13510 W Lostcreek	LIBERTY PARK 3RD ADD	NW																			5	
SWR2015-0141	07/06/15		Closed		LIPPOLDT, BRIAN CLAYTON & GINGER MARIE	1419 N BLACKSTONE CT	Wichita, KS	67235	1419 N BLACKSTONE CT	BLACKSTONE ADD	NW																				5
SWR2015-0142	07/06/15	07/15/15	Closed		BLACKSTONE LLC	716 N 119TH W	Wichita, KS	67235	1412 N BLACKSTONE CT	BLACKSTONE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0143	07/06/15	07/15/15	Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	14508 W PRICE ST	BLACKSTONE ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0144	07/06/15	07/15/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	14505 W PRICE ST	BLACKSTONE ADD	NW																				5
SWR2015-0145	07/06/15	07/15/15	Closed		JACKSON, DERRICK W & MELISSA S	14605 W PRICE ST	Wichita, KS	67235	14605 W PRICE ST	BLACKSTONE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0146	07/06/15	07/15/15	Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	1521 N OBSIDIAN CT	BLACKSTONE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0147	07/06/15	07/15/15	Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	1530 N OBSIDIAN ST	BLACKSTONE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/06/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0148	07/06/15	07/15/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	1448 N BLACKSTONE ST	BLACKSTONE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/06/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0149	07/06/15	07/15/15	Closed		CRESTWOOD BUILDERS LLC	2300 N 219TH ST W	ANDALE, KS	67001	1609 N KENTUCKY	CHERYL'S HOLLOW 2ND ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0150	07/06/15	07/15/15	Closed		MOORE, DENA & BEVERLY J CARESWELL	1234 N FORESTVIEW ST	Wichita, KS	67235	1406 N KENTUCKY	CHERYL'S HOLLOW 2ND ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0151	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11122 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0152	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11124 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0153	07/06/15	07/15/15	Closed		SILVERTON LLC	10008 W YORK	Wichita, KS	67215	13946 W WESTPORT CT	SILVERTON ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0154	07/06/15	07/15/15	Closed		SILVERTON LLC	10008 W YORK	Wichita, KS	67215	LOT 48 BLOCK C SILVERTON ADD	SILVERTON ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0155	07/06/15	07/15/15	Closed		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	14102 W WESTPORT	SILVERTON ADD	NW																				5

**SWR - Residential Construction Projects Stormwater Inspection List**

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SWR2015-0156	07/06/15	07/15/15	Closed		REGIER, JAYME A & WHITNEY R MILFORD	14106 W WESTPORT ST	Wichita, KS	67235	14106 W WESTPORT	SILVERTON ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0157	07/09/15	07/18/15	Closed		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	14205 WEST WESTPORT ST	SILVERTON ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0158	07/09/15	07/18/15	Closed		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	14213 W WESTPORT	SILVERTON ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0159	07/09/15	07/18/15	Closed		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	14302 W WESTPORT	SILVERTON ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0160	07/06/15	07/15/15	Closed		SHURTLEFF, WILLIAM T & TAHNEE N VILLALOBOS	1822 N KENTUCKY CT	Wichita, KS	67235	1822 N KENTUCKY CT	SILVERTON ADD	NW	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0161	07/06/15	07/15/15	Closed		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	1842 N KENTUCKY CT	SILVERTON ADD	NW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0162	07/06/15	07/15/15	Closed		WINTER, AARON C & REBEKAH R	1862 N KENTUCKY CT	Wichita, KS	67235	1862 N KENTUCKY CT	SILVERTON ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0163	07/06/15	07/15/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	1882 N KENTUCKY CT	SILVERTON ADD	NW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0164	07/06/15	07/15/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	14305 W WILLOUGHBY CIR	SILVERTON ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0165	07/06/15	07/15/15	Closed		WILSON, SHERYL W	12305 MERIBEAU ST	Wichita, KS	67235	9812 W 2ND ST N	WESTLINK VILLAGE ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0166	07/06/15	07/15/15	Closed		BOB COOK HOMES LLC	121 S WATER ST	Derby, KS	67037	3912 N MANCHESTER ST	PRAIRIE POINTE ADD FAWN GROVE	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/07/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0167	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11042 E FAWN GROVE	AT SUNSET LAKES ADD	SE	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0168	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11044 E FAWN GROVE	AT SUNSET LAKES ADD	SE	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0169	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11048 E FAWN GROVE	AT SUNSET LAKES ADD	SE	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0170	07/08/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11050 E FAWN GROVE	AT SUNSET LAKES ADD	SE	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/08/15	07/15/15	07/15/15			Regular Mail	2		
SWR2015-0171	07/09/15	07/18/15	Closed		ROBL CONSTRUCTION INC	5824 W 21ST ST N	Wichita, KS	67205	9925 W WESTLAKES CT	FOX RIDGE ADD	NW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0172	07/09/15	07/18/15	Closed		HOLMES DREW W & AMANDA M	3135 N DEN HOLLOW ST	Wichita, KS	67205	3035 DEN HOLLOW CT	FOX RIDGE ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0173	07/09/15	07/15/15	Closed		CLINT MILLER PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	217 Fawnwood Ct	WOODS ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/15/15	07/15/15			Regular Mail	5		
SWR2015-0174	07/09/15	07/18/15	Closed		REICHENBERGER, JARED M & KATIE	3005 N BRUSH CREEK CIR	Wichita, KS	67205	LOT 55 BLOCK 4 FOX RIDGE ADD	FOX RIDGE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0175	07/09/15	07/18/15	Closed		NGRAM, DAVID G & NICOL	2828 N PEPPER RIDGE	Wichita, KS	67205	LOT 57 BLOCK 4 FOX RIDGE ADD	FOX RIDGE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0176	07/09/15	07/18/15	Closed		ROBL CONSTRUCTION INC	5824 W 21ST ST N	Wichita, KS	67205	3219 GREY MEADOW	FOX RIDGE ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0177	07/09/15	07/18/15	Closed		GERACE, VINCENT J & TERESA G	3307 N FLAT CREEK ST	Wichita, KS	67205	3307 N FLAT CREEK ST	FOX RIDGE ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0178	07/09/15	07/18/15	Closed		CHAPMAN CUSTOM HOMES LC	PO BOX 9491	Wichita, KS	67277-0491	3332 N FLAT CREEK	FOX RIDGE ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/19	07/18/15			Regular Mail	5		
SWR2015-0179	07/09/15	07/18/15	Closed		ROBL CONSTRUCTION INC	5824 W 21ST ST N	Wichita, KS	67205	3324 N FLAT CREEK CT	FOX RIDGE ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0180	07/09/15	07/18/15	Closed		ALBERT LIV TR	1807 WHETZEL AVE	Kingman, KS	67068	3317 N BRUSH CREEK CT	FOX RIDGE ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0181	07/09/15		Closed		MORTENSEN, DAVID	10237 W 21ST ST N	Wichita, KS	67205	3337 N BRUSH CREEK CT	FOX RIDGE ADD	NW																				5
SWR2015-0182	07/09/15	07/18/15	Closed		MCCLELLAN HOMES INC	2714 N WILD ROSE	Wichita, KS	67205	LOT 163 Block 1 FOX RIDGE ADD	FOX RIDGE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		
SWR2015-0183	07/09/15		Closed		MCCLELLAN HOMES INC	2714 N WILD ROSE	Wichita, KS	67205	8930 W WESTLAKES CT	FOX RIDGE ADD	NW																				5
SWR2015-0184	07/09/15	07/18/15	Closed		CHAPMAN CUSTOM HOMES LC	PO BOX 9491	Wichita, KS	67227-0461	8906 W WESTLAKES CT	FOX RIDGE ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	5		

**SWR - Residential Construction Projects Stormwater Inspection List**

ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B	A.1	A.6	A.7	A.2	A.2	A.2	A.1	A	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District	
SWR2015-0185	07/09/15	07/18/15	Closed		GRANDFIELD, DEREK B & JENNIFER K	154 E TIMBER CREEK CT	HAYSVILLE, KS	67060	4202 W SHORELINE	EMERALD BAY ESTATES 2ND	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0186	07/09/15	07/18/15	Closed		CHENG NICK & EMILIE S	8634 W MEADOW PASS CT	Wichita, KS	67205	4206 W SHORELINE	EMERALD BAY ESTATES 2ND	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0187	07/09/15	07/18/15	Closed		CRAIG SHARP HOMES INC	430 WALNUT	AUGUSTA, KS	67010	4210 W SHORELINE	EMERALD BAY ESTATES 2ND	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0188	07/09/15	07/18/15	Closed		CRAIG SHARP HOMES INC	430 WALNUT	AUGUSTA, KS	67101	4214 W SHORELINE	EMERALD BAY ESTATES 2ND	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0189	07/09/15	07/18/15	Closed		CRAIG STUART HOMES INC	2708 LAKERIDGE	Wichita, KS	67205	4516 W SHORELINE	EMERALD BAY ESTATES 2ND	NW	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0190	07/09/15	07/18/15	Closed		KROEKER CUSTOM HOMES LLC	2605 N NORTH SHORE CR	Wichita, KS	67205	2415 N BAYSIDE	EMERALD BAY ESTATES 2ND	NW	x						x				Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0191	07/09/15	07/18/15	Closed		CRAIG STUART HOMES INC	2708 LAKERIDGE	Wichita, KS	67205	LOT 50 BLOCK 1 EMERALD BAY ESTATES 2ND ADD	EMERALD BAY ESTATES 2ND	NW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0192	07/09/15	07/18/15	Closed		HIEBERT TERRANCE LANE	705 N BROADWAY	Wichita, KS	67214	2530 PARADISE CT	EMERALD BAY ESTATES 2ND	NW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	6	
SWR2015-0193	07/09/15	07/18/15	Closed		ZIMBELMAN J TAYLOR & MERILEE G	8912 W 2ND ST N	Wichita, KS	67212	8912 W 2ND ST N	WESTLINK VILLAGE ADD	NW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	07/09/15	07/18/15	07/18/15			Regular Mail	5	
SWR2015-0194	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0195	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 20 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0196	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT19 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0197	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0198	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 17 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0199	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 16 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0200	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 15 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0201	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 14 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0202	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 13 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0203	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0204	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0205	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0206	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 8 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0207	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 7 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0208	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 6 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0209	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 47 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0210	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 48 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0211	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 49 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0212	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 52 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0213	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 13 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0214	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 14 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0215	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0216	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0217	06/26/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0218	06/26/15		Closed		DAVIS, KIMBERLY C	204 W AUTUMN BLAZE	GODDARD, KS	67052	LOT 7 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0219	07/06/15		Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	LOT 3 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																			5

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SWR2015-0220	07/06/15		Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	LOT 4 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																		5
SWR2015-0221	07/06/15		Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	LOT 6 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																		5
SWR2015-0222	07/06/15		Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	LOT 7 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																		5
SWR2015-0223	07/06/15		Closed		BLACKSTONE LLC	716 N 119th W	Wichita, KS	67235	LOT 8 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																		5
SWR2015-0224	07/06/15		Closed		LIES-BUGNER CONSTRUCTION LLC	1339 S BEBE	Wichita, KS	67209	LOT 9 BLOCK C BLACKSTONE ADD	BLACKSTONE ADD	NW																		5
SWR2015-0225	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	Lot 1 Block 1 Fawn Grove Sunset Lakes Add	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0226	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11116 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0227	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11118 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0228	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11122 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0229	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11124 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0230	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11110 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0231	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	11112 E FAWN GROVE	FAWN GROVE AT SUNSET LAKES ADD	SE	x		x	x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	2	
SWR2015-0232	08/17/15	08/24/15	Closed		CLINT MILLER CONSTRUCTION INC	1907 S HYDRAULIC ST	Wichita, KS	67211	217 Fawnwood Ct	WOODS ADD	NW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	08/17/15	08/24/15	08/24/15		7013 2630 0001 0349 5255	5	
SWR2015-0233	08/31/15	09/09/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	1541 N Terhune	Stonedridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	08/31/15	09/09/15	09/09/15		Regular Mail	2	
SWR2015-0234	08/31/15	09/09/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	LOT 23 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	08/31/15	09/09/15	09/09/15		Regular Mail	2	
SWR2015-0235	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 26 BLOCK A STONBREDGE 3RD	STONEBRIDGE 3RD ADD	NE																	2	
SWR2015-0236	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 25 BLOCK A STONBREDGE 3RD	STONEBRIDGE 3RD ADD	NE																	2	
SWR2015-0237	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 24 BLOCK A STONBREDGE 3RD	STONEBRIDGE 3RD ADD	NE																	2	
SWR2015-0238	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 23 BLOCK A STONBREDGE 3RD	STONEBRIDGE 3RD ADD	NE																	2	
SWR2015-0239	08/31/15	09/09/15	Closed		Leewood Homes Inc	3500 N Rock Rd	Wichita, KS	67226	1706 N Terhune	Stonedridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	08/31/15	09/09/15	09/09/15		Regular Mail	2	
SWR2015-0240	08/31/15		Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	1710 N Terhune	Stonedridge 2nd Add	NE																	2	
SWR2015-0241	08/31/15		Closed		Rebecca Nichols Trust	13214 Bridlewood Ct	Wichita, KS	67230	1714 N Terhune	Stonedridge 2nd Add	NE																	2	
SWR2015-0242	08/31/15		Closed		Matthew G & Lisa M Catlin	1530 S Bebe	Wichita, KS	67209	1718 N Terhune	Stonedridge 2nd Add	N																	2	
SWR2015-0243	08/31/15		Closed		Fahsholtz Constustion	P.O. Box 818	Andover, KS	67002	1722 N Terhune	Stonedridge 2nd Add	NE																	2	
SWR2015-0244	08/31/15	09/09/15	Closed		NAGRECHA, MRINAL VIJAY & NGHI BOL LAM	770 N Silversprings Blvd	Wichita, KS	67212	15505 E Summerfield	STONEBRIDGE 3RD ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	08/31/15	09/09/15	09/09/15		Regular Mail	2	
SWR2015-0245	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 21 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																	2	
SWR2015-0246	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 20 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																	2	

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SWR2015-0247	08/31/15	09/09/15	Closed		Fahsholtz Constustion	P.O. Box 818	Andover, KS	67002	Lot 19 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0248	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 18 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0249	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 17 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0250	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 16 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0251	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 15 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0252	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 14 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0253	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 13 Block A Stonebridge 3rd Add	STONEBRIDGE 3RD ADD	NE																			2
SWR2015-0254	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 17 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0255	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 16 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0256	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 15 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0257	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 14 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0258	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 13 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0259	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 12 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0260	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 11 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0261	08/31/15		Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	15220 E Summerfield	Stonebridge 2nd Add	NE																			2
SWR2015-0262	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 9 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0263	08/31/15		Closed		Gustaf, Peter & Mary Beth	1521 N Graystone	Wichita, KS	67230	15212 E Summerfield	Stonebridge 2nd Add	NE																			2
SWR2015-0264	08/31/15	09/09/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	15211 E Summerfield	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0265	08/31/15		Closed		FURSTENBERG, CONNIE D	3229 N LAKECREST	Wichita, KS	67205	Lot 7 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0266	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 6 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0267	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 5 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0268	08/31/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	Lot 4 Block B Stonebridge 2nd Add	Stonebridge 2nd Add	NE																			2
SWR2015-0269	08/31/15	09/09/15	Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	15212 E Sundance	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0270	08/31/15	09/09/15	Closed		Leewood Homes Inc	3500 N Rock Rd	Wichita, KS	67226	15302 E Sundance	Stonebridge 3rd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0271	08/31/15	09/09/15	Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	1611 N Graystone	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0272	08/31/15	09/09/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	1607 N Graystone	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0273	08/31/15	09/09/15	Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	1603 N Graystone	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	08/31/15	09/09/15	09/09/15			Regular Mail	2	
SWR2015-0274	08/31/15		Closed		CRAIG SHARP HOMES INC	430 WALNUT	AUGUSTA, KS	67010	1533 N Graystone	Stonebridge 2nd Add	NE																			2
SWR2015-0275	09/15/15	09/25/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	LOT 23 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/17/15	09/25/15	09/25/15			7013 2630 0001 0349 5316	2	
SWR2015-0276	09/15/15	09/25/15	Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	15212 E Sundance	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	09/17/15	09/25/15	09/25/15			7013 2630 0001 0349 5309	2	

**SWR - Residential Construction Projects Stormwater Inspection List**

ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B	A.1	A.6	A.7	A.2	A.2	A.2	A.1	A	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District
SWR2015-0277	09/15/15	09/25/15	Closed		Fahsholtz Constustion	P.O. BOX 818	Andover, KS	67002	1611 N Graystone	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	09/17/15	09/25/15	09/25/15		7013 2630 0001 0349 5309	2	
SWR2015-0278	09/15/15	09/25/15	Closed		CRAIG SHARP HOMES INC	430 WALNUT	AUGUSTA, KS	67010	1553 N Greystone	Stonebridge 2nd Add	NE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/17/15	09/25/15	09/25/15			2	
SWR2015-0279	09/21/15	09/29/15	Closed		STEVE MILLER	11601 E Harry	Wichita, KS	67207	1647 Lynnrae Ct	CREEK EAST 2ND ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	2	
SWR2015-0280	09/21/15	09/29/15	Closed		STEVE MILLER	11601 E Harry	Wichita, KS	67207	1651 Lynnrae Ct	CREEK EAST 2ND ADD	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	2	
SWR2015-0281	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10804 W Yosemite	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0282	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10808 W Yosemite	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0283	09/21/15	09/29/15	Closed		MAIZE ROAD LLC	P.O. Box 75337	Wichita, KS	67275	Lot 7 Block B Southern Ridge 4th Add	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0284	09/21/15		Closed		Ward, Kara C.	10816 W Yosemite	Wichita, KS	67215	10816 W Yosemite	SOUTHERN RIDGE 4TH ADD	SW																		4
SWR2015-0285	09/21/15	09/29/15	Closed		HILLARD, RYAN T & KEELY N SMITH	2707 S Westgate	Wichita, KS	67215	2702 S Westgate	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0286	09/21/15	09/29/15	Closed		ECK, ANTHONY RAY & STACY LYNN	2709 S Westgate	Wichita, KS	67125	2709 S Westgate	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0287	09/21/15	09/29/15	Closed		POH, ALICE A & CORBIN W	2713 S Westgate	Wichita, KS	67215	2713 S Westgaet	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0288	09/21/15	09/29/15	Closed		WALLACE, JEREMY & ELIZABETH	2718 S Westgate	Wichita, KS	67215	2718 S Westgate	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0289	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	2725 S Westgate	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0290	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10618 W Greenfield Cir	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0291	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10707 W Greenfield	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0292	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10611 W Greenfield Cir	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0293	09/21/15	09/29/15	Closed		ONSTOTT, LANCE	10607 W Greenfield	Wichita, KS	67215	10607 W Greenfield Cir	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0294	09/21/15	09/29/15	Closed		MAIZE ROAD LLC	P.O. Box 75337	Wichita, KS	67275	Lot 35 Block C Southern Ridge 4th	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0295	09/21/15	09/29/15	Closed		KESTER, DEWAYNE L & JULIE A	10602 W Greenfield Cir	Wichita, KS	67215	10602 W Greenfield Cir	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0296	09/21/15	09/29/15	Closed		MAIZE ROAD LLC	P.O. Box 75337	Wichita, KS	67275	Lot 33 Block C Southern Ridge 4th Add	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0297	09/21/15	09/29/15	Closed		MAIZE ROAD LLC	P.O. Box 75337	Wichita, KS	67275	Lot 32 Block C Southern Ridge 4th Add	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0298	09/21/15	09/29/15	Closed		FAWN GROVE PROPERTIES INC	P.O. Box 226	GODDARD, KS	67052	10614 W Greenfield Cir	SOUTHERN RIDGE 4TH ADD	SW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0299	09/21/15	09/29/15	Closed		HAFFA, ROGER JOEL & AMANDA FRANCES	10613 W Dallas	Wichita, KS	67215	10613 W Dallas	SOUTHERN RIDGE 4TH ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	09/21/15	09/29/15	09/29/15		Regular Mail	4	
SWR2015-0300	10/22/15	11/05/15	Closed		FIVE STAR HOMES LLC	PO BOX 781572	Wichita, KS	67278	2229 S Michelle Cir	Casa Bella Add	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/22/15	11/05/15	11/05/15		Regular Mail	2	
SWR2015-0301	10/22/15	11/05/15	Closed		TARA DEVELOPMENT INC	P O BOX 781974	Wichita, KS	67278	Lot 42 Block 1 Casa Bella Add	Casa Bella Add	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/02/15	11/05/15		Regular Mail	2	
SWR2015-0302	10/22/15	11/05/15	Closed		CRAGER MATTHEW R & DEBRA J	8403 W NORTHRIDGE	Wichita, KS	67205	2221 S TARA FALLS CT	Casa Bella Add	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15		Regular Mail	2	
SWR2015-0303	10/22/15	11/05/15	Closed		CHERRYWOOD CONSTRUCTION INC	PO BOX 781974	Wichita, KS	67278	2225 S TARA FALLS CT	Casa Bella Add	SE	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15		Regular Mail	2	

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SWR2015-0304	10/22/15	11/05/15	Closed		CHERRYWOOD CONSTRUCTION INC	PO BOX 781974	Wichita, KS	67278	2229 S TARA FALLS CT	Casa Bella Add	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0305	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 38 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0306	10/22/15		Closed		LYON AMY K	2237 S TARA FALLS CT	Wichita, KS	67207	2237 S TARA FALLS CT	Casa Bella Add	SE																			2
SWR2015-0307	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 36 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0308	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 35 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0309	10/22/15	11/05/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67144	2249 S TARA FALLS CT	Casa Bella Add	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0310	10/22/15	11/05/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67144	2253 S TARA FALLS CT	Casa Bella Add	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0311	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 32 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0312	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 31 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0313	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 30 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0314	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 29 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0315	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 28 BLOCK 1 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0316	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 1 BLOCK 2 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0317	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 3 BLOCK 2 CASA BELLA ADD	Casa Bella Add	SE																			2
SWR2015-0318	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	2216 S TARA FALLS ST	Casa Bella Add	SE																			2
SWR2015-0319	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 18 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0320	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 19 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0321	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 20 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0322	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 21 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0323	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 22 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0324	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 23 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0325	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 24 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0326	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 25 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0327	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 26 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0328	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 27 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2
SWR2015-0329	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 17 BLOCK 1 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																			2

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SWR2015-0330	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 7 BLOCK 2 CASA BELLA 2ND ADD	Casa Bella 2nd Add	SE																		2	
SWR2015-0331	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 8 BLOCK 2 CASA BELLA 2ND	Casa Bella 2nd Add	SE																		2	
SWR2015-0332	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 14 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0333	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 13 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0334	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 12 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0335	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 11 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0336	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 10 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0337	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 14 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0338	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 9 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0339	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 8 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0340	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 7 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0341	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 6 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0342	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 5 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0343	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 4 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0344	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 3 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0345	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 2 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0346	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 1 BLOCK 2 CASA BELLA 3RD ADD	Casa Bella 3rd Add	SE																		2	
SWR2015-0347	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 32 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0348	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 31 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0349	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 30 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0350	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 29 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0351	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 28 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0352	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 27 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0353	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 26 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0354	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 25 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0355	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 24 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	

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SWR2015-0356	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 23 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																		2	
SWR2015-0357	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 22 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0358	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 21 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0359	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 20 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0360	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 19 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0361	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 17 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0362	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 16 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0363	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 15 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0364	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 14 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0365	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 13 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0366	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 12 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0367	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 11 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0368	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 10 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0369	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 9 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0370	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 8 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0371	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 7 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0372	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 6 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0373	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 5 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0374	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 4 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0375	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 3 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0376	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 2 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0377	10/22/15		Closed		TARA DEVELOPMENT INC	PO BOX 781974	Wichita, KS	67278	LOT 1 BLOCK 1 CASA BELLA 3rd Add	Casa Bella 3rd Add	SE																			2
SWR2015-0378	10/22/15		Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	1541 N TERHUNE ST	Stonebridge 2nd Add	NE																			2
SWR2015-0379	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 8 BLOCK E STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0380	10/22/15	11/05/15	Closed		NIES HOMES INC	10333 E 21ST ST N	Wichita, KS	67206	LOT 23 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0381	10/22/15		Closed		LEEWOOD HOMES INC	3500 N ROCK RD BLDG 2200	Wichita, KS	67226	1706 N TERHUNE ST	Stonebridge 2nd Add	NE																			2
SWR2015-0382	10/22/15	11/05/15	Closed		Fahsholtz Constustion	PO BOX 818	Andover, KS	67002	1710 N TERHUNE ST	Stonebridge 2nd Add	NE	x				x						Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/22/15	11/05/15	11/05/15			Regular Mail	2	

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ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B.	A. 1	A. 6	A. 7	A. 2	A. 2	A.2	A.1	A	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District	
SWR2015-0383	10/22/15	11/05/15	Closed		NICHOLS REBECCA J TR	13214 E BRIDLEWOOD CT	Wichita, KS	67230	1714 N TERHUNE ST	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0384	10/22/15		Closed		CATLIN MATTHEW G & LISA M	1530 S BEBE ST	Wichita, KS	67209	1718 N TERHUNE ST	Stonebridge 2nd Add	NE																			2
SWR2015-0385	10/22/15	11/05/15	Closed		Fahsholtz Constustion	PO BOX 818	Andover, KS	67002	1722 N TERHUNE ST	Stonebridge 2nd Add	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0386	10/22/15		Closed		NAGRECHA MRINAL VIJAY & NGHI BOL LAM	770 N SILVER SPRINGS BLVD A	Wichita, KS	67212	15505 E SUMMERFIELD ST	Stonebridge 2nd Add	NE																			2
SWR2015-0387	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 20 BLOCK A STONEBRIDGE 3RD ADD	Stonebridge 3rd Add	NE																			2
SWR2015-0388	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 21 BLOCK A STONEBRIDGE 3RD ADD	Stonebridge 3rd Add	NE																			2
SWR2015-0389	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 16 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0390	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 15 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0391	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 14 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0392	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 13 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0393	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 12 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0394	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 11 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0395	10/22/15		Closed		Fahsholtz Constustion	PO BOX 818	Andover, KS	67002	15407 E SUMMERFIELD ST	Stonebridge 3rd Add	NE																			2
SWR2015-0396	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 14 BLOCK A STONEBRIDGE 3RD ADDITION	Stonebridge 3rd Add	NE																			2
SWR2015-0397	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 15 BLOCK A STONEBRIDGE 3RD ADDITION	Stonebridge 3rd Add	NE																			2
SWR2015-0398	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 16 BLOCK A STONEBRIDGE 3RD ADDITION	Stonebridge 3rd Add	NE																			2
SWR2015-0399	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 17 BLOCK A STONEBRIDGE 3RD ADDITION	Stonebridge 3rd Add	NE																			2
SWR2015-0400	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 18 BLOCK A STONEBRIDGE 3RD ADDITION	Stonebridge 3rd Add	NE																			2
SWR2015-0401	10/22/15		Closed		GUSTAF PETER A & MARY BETH	1521 N GRAYSTONE	Wichita, KS	67230	15212 E SUMMERFIELD ST	Stonebridge 2nd Add	NE																			2
SWR2015-0402	10/22/15		Closed		NIES HOMES INC	10333 E 21ST ST N STE 303	Wichita, KS	67206	15211 E SUMMERFIELD ST	Stonebridge 3rd Add	NE																			2
SWR2015-0403	10/22/15	11/05/15	Closed		FURSTENBERG CONNIE D	3229 N LAKECREST	Wichita, KS	67205	LOT 7 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0404	10/22/15	11/05/15	Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 6 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/22/15	11/05/15	11/05/15			Regular Mail	2	
SWR2015-0405	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 5 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0406	10/22/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N Market	Wichita, KS	67202	LOT 4 BLOCK B STONEBRIDGE 2ND ADD	Stonebridge 2nd Add	NE																			2
SWR2015-0407	10/22/15		Closed		Fahsholtz Constustion	PO BOX 818	Andover, KS	67002	1603 N GRAYSTONE ST	Stonebridge 2nd Add	NE																			2
SWR2015-0408	10/22/15		Closed		CRAIG SHARP HOMES INC	430 WALNUT	AUGUSTA, KS	67010	1553 N GRAYSTONE ST	Stonebridge 2nd Add	NE																			2
SWR2015-0409	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 24 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																			2
SWR2015-0410	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 25 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																			2

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SWR2015-0411	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 26 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0412	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 27 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0413	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 28 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0414	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 29 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0415	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 30 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0416	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 31 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0417	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 21 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0418	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 22 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0419	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 23 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0420	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 32 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0421	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 33 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0422	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 34 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0423	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 35 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0424	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 36 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0425	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 37 BLOCK 5 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0426	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 4 BLOCK 1 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0427	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 3 BLOCK 1 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0428	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 2 BLOCK 1 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0429	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 1 BLOCK 1 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0430	10/26/15	11/09/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67114	LOT 5 BLOCK 1 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15		Regular Mail	2	
SWR2015-0431	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 27 BLOCK 3 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0432	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 26 BLOCK 3 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0433	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 25 BLOCK 3 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0434	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 24 BLOCK 3 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0435	10/26/15		Closed		PALLADIO DEVELOPERS INC	PO BOX 781974	Wichita, KS	67278	LOT 23 BLOCK 3 SIERRA HILLS 2ND ADD	SIERRA HILLS 2ND ADD	SE																		2
SWR2015-0436	10/26/15		Closed		HAMILTON GREGORY J & REBECCA N	701 TRAIL DR.	MULVANE	67110	LOT 2 BLOCK 2 CAMBRIA ADD	CAMBRIA ADD	SE																		2

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SWR2015-0437	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 5 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																		2	
SWR2015-0438	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 6 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0439	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 4 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0440	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 2 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0441	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 1 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0442	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 8 BLOCK 3 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0443	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 5 BLOCK 2 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0444	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 7 BLOCK 2 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0445	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 1 BLOCK 1 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0446	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 6 BLOCK 1 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0447	10/26/15		Closed		LCS ENTERPRISES INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67230	LOT 7 BLOCK 1 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0448	10/26/15		Closed		BORDON GEORGE G & CARYN M	14624 E CAMBRIA ST	Wichita, KS	67230	14624 E CAMBRIA ST	CAMBRIA ADD	SE																			2
SWR2015-0449	10/26/15		Closed		O HAIR BOB & PATRICIA	2044 S WELSH ST	Wichita, KS	67230	2044 S WELSH ST	CAMBRIA ADD	SE																			2
SWR2015-0450	10/26/15		Closed		BINNS JULIAN J & KARLA F	8433 E HUNTINGTON ST	Wichita, KS	67206	LOT 6 BLOCK 4 CAMBRIA ADD	CAMBRIA ADD	SE																			2
SWR2015-0451	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 2 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0452	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 3 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0453	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 4 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0454	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 5 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0455	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 6 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0456	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	LOT 7 BLOCK 1 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0457	10/26/15		Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	LOT 11 BLOCK 2 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0458	10/26/15	11/09/15	Closed		BELLE CHASE DEVELOPMENT LLC	PO BOX 780789	Wichita, KS	67278	1318 S ROCKY CREEK RD	BELLECHASE 3RD ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0459	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	1322 S ROCKY CREEK RD	BELLECHASE 3RD ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0460	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	LOT 14 BLOCK 2 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0461	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	1330 S ROCKY CREEK RD	BELLECHASE 3RD ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0462	10/26/15		Closed		ROST JENNIFER	1334 S ROCKY CREEK RD	Wichita, KS	67230	1334 S ROCKY CREEK RD	BELLECHASE 3RD ADD	SE																			2
SWR2015-0463	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 1 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0464	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	RESERVE C BELLECHASE 3RD ADD	BELLECHASE 3RD ADD	SE																			2
SWR2015-0465	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 52 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0466	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 51 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																			2
SWR2015-0467	10/26/15		Closed		STONER ROBERT A & NANCY M	9275 AVIANO DR	FORT MYERS FL	33913	13328 E BELLECHASE ST	BELLECHASE 3RD ADD	SE																			2
SWR2015-0468	10/26/15	11/09/15	Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 48 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	

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SWR2015-0469	10/26/15		Closed		K & A HOLDINGS LLC	1400 N BRUNSWICK	Wichita, KS	67212	13400 E BELLECHASE ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0470	10/26/15		Closed		K & A HOLDINGS LLC	1400 N BRUNSWICK	Wichita, KS	67212	13404 E BELLECHASE ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0471	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 45 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0472	10/26/15	11/09/15	Closed		FARRELL CONSTRUCTION INC	10030 N HYDRAULIC	Valley Center, KS	67147	13412 E BELLECHASE ST	BELLECHASE 3RD ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2
SWR2015-0473	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 43 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0474	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 42 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0475	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 41 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0476	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 40 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0477	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 39 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0478	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 38 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0479	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 37 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0480	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 36 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0481	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 35 BLOCK 3 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0482	10/26/15		Closed		CARRASCO LATOSHA M	1457 S SHILOH CT	Wichita, KS	67207	LOT 7 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0483	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 8 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0484	10/26/15		Closed		MCNIEL NATHAN R	1304 S GATEWAY ST	Wichita, KS	67230	1304 S GATEWAY ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0485	10/26/15		Closed		WILSON KEVIN N & CYNTHIA L	1308 S GATEWAY ST	Wichita, KS	67230	1308 S GATEWAY ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0486	10/26/15		Closed		SODOWSKY JESS B JR	1312 S GATEWAY ST	Wichita, KS	67230	1312 S GATEWAY ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0487	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	1316 S GATEWAY ST	BELLECHASE 3RD ADD	SE	x		x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0488	10/26/15		Closed		JONES RAY D	1320 S GATEWAY ST	Wichita, KS	67230	1320 S GATEWAY ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0489	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	1324 W GATEWAY ST	BELLECHASE 3RD ADD	SE	x		x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0490	10/26/15	11/09/15	Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	1328 S GATEWAY ST	BELLECHASE 3RD ADD	SE	x		x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	10/26/15	11/09/15	11/09/15			Regular Mail	2	
SWR2015-0491	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC ETAL	PO BOX 780789	Wichita, KS	67278	LOT 16 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0492	10/26/15		Closed		BELLE CHASE DEVELOPMENT LLC ETAL	PO BOX 780789	Wichita, KS	67278	LOT 17 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0493	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 18 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0494	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 19 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2

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SWR2015-0495	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 20 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0496	10/26/15		Closed		YATES ELIZABETH M & DAVID M	13417 E BELLECHASE ST	Wichita, KS	67230	13417 E BELLECHASE ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0497	10/26/15		Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 22 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE																		2
SWR2015-0498	10/26/15		Closed		BUILD WICHITA INC	PO BOX 780789	Wichita, KS	67278	13409 E BELLECHASE ST	BELLECHASE 3RD ADD	SE																		2
SWR2015-0499	10/26/15	11/09/15	Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/26/15	11/09/15	11/09/15			Regular Mail	2
SWR2015-0500	10/26/15	11/09/15	Closed		JBC INVESTMENT INC	PO BOX 780789	Wichita, KS	67278	LOT 25 BLOCK 5 BELLECHASE 3RD ADDITION	BELLECHASE 3RD ADD	SE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	10/26/15	11/09/15	11/09/15			Regular Mail	2
SWR2015-0501	11/03/15	11/12/15	Closed		FIVE STAR HOMES LLC	PO BOX 781572	Wichita, KS	67278	15815 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0502	11/03/15	11/12/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67144	15807 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0503	11/03/15	11/12/15	Closed		ELITE USA CONSTRUCTION LLC	1972 S LONGFORD CT	Wichita, KS	67207	15707 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0504	11/03/15	11/12/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67144	15537 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0505	11/03/15	11/12/15	Closed		BDS REAL ESTATE VENTURES LLC	200 W DOUGLAS STE 250	Wichita, KS	67202	15533 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0506	11/03/15	11/12/15	Closed		CHERRYWOOD CONSTRUCTION INC	PO BOX 781974	Wichita, KS	67278	15608 E HAZEL NUT CIR	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0507	11/03/15	11/12/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL ST	Towanda, KS	67144	15429 E ROSEWOOD CT	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0508	11/03/15	11/12/15	Closed		VICTORIA HOMES INC	13533 E MOUNT VERNON CT	Wichita, KS	67230	15502 E ROSEWOOD ST	WHISPERING LAKES ESTATES ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0509	11/03/15	11/12/15	Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	131 S GRAND MERE CT	BELLE TERRE SOUTH ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0510	11/03/15	11/12/15	Closed		ELITE USA CONSTRUCTION LLC	1109 S Rock Rd	Wichita, KS	67207	109 S GRAND MERE CT	BELLE TERRE SOUTH ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0511	11/03/15	11/12/15	Closed		EDWARDS STEVEN S	1739 S ESTELLE ST	Wichita, KS	67211	LOT 19 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0512	11/03/15	11/12/15	Closed		ELITE USA CONSTRUCTION LLC	1109 S Rock Rd	Wichita, KS	67207	15607 E LYNNWOOD ST	BELLE TERRE SOUTH ADD	SE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0513	11/03/15	11/12/15	Closed		LCS BUILDERS INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67206	15708 E MAJESTIC ST	TERRADYNE WEST	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0514	11/03/15	11/12/15	Closed		WAPENSCHAW LLC	8100 E 22ND ST N STE 600	Wichita, KS	67226	15710 E MAJESTIC ST	TERRADYNE WEST	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0515	11/03/15	11/12/15	Closed		WAPENSCHAW LLC	8100 E 22ND ST N STE 600	Wichita, KS	67226	15702 E MAJESTIC ST	TERRADYNE WEST	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0516	11/03/15	11/12/15	Closed		LCS BUILDERS INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67206	15602 E MAJESTIC ST	TERRADYNE WEST	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0517	11/03/15	11/12/15	Closed		LCS BUILDERS INC	6505 E CENTRAL AVE UNIT 192	Wichita, KS	67206	15604 E MAJESTIC ST	TERRADYNE WEST	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/03/15	11/12/15	11/12/15			Regular Mail	2
SWR2015-0518	11/10/15	11/18/15	Closed		URBAN ERIC J & CANDICE M	513 N PARKRIDGE ST	Wichita, KS	67212	LOT 35 BLOCK A SHADOW WOODS ADD	SHADOW WOODS ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/10/15	11/18/15	11/18/15			Regular Mail	5
SWR2015-0519	11/12/15	11/23/15	Closed		DUGAN CHRISTOPHER J	1155 N 135TH ST W	Wichita, KS	67235	LOT 19 BLOCK B WOODS ADD	WOODS ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/12/15	11/23/15	11/23/15			Regular Mail	5

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SWR2015-0520	11/12/15	11/23/15	Closed		DUGAN CHRISTOPHER J	1155 N 135TH ST W	Wichita, KS	67235	LOT 20 BLOCK B WOODS ADD	WOODS ADD	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0521	11/12/15	11/23/15	Closed		PATE CHRISTOPHER J & LESLIE A	1352 N MURRAY CT	Wichita, KS	67212	LOT 9 BLOCK D WOODS ADD	WOODS ADD	NW	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0522	11/12/15	11/23/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK D WOODS ADD	WOODS ADD	NW	x						x				Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0523	11/12/15	11/23/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK D WOODS ADD	WOODS ADD	NW	x						x				Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0524	11/12/15	11/23/15	Closed		DAVIS KIMBERLY C	204 W AUTUMN BLAZE	GODDARD, KS	67052	LOT 7 BLOCK D WOODS ADD	WOODS ADD	NW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0525	11/12/15	11/23/15	Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 52 BLOCK B WOODS ADD	WOODS ADD	NW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	11/12/15	11/23/15	11/23/15			Regular Mail	5	
SWR2015-0526	11/12/15		Closed		WHITE STEPHEN C & ADRIENNE M	11822 W JEWELL	Wichita, KS	67209	LOT 14 & N 15 FT LOT 13 BLOCK D WOODS ADDITION	WOODS ADD	NW																			5
SWR2015-0527	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 13 EXC N 15 FT THEREOF BLOCK D WOODS ADDITION	WOODS ADD	NW																			5
SWR2015-0528	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 6 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0529	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 7 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0530	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 8 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0531	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0532	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0533	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0534	11/12/15		Closed		CARNAHAN BRIAN K & JACLYN	331 S NINEIRON ST	Wichita, KS	67235	LOT 13 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0535	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 14 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0536	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 15 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0537	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 16 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0538	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 17 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0539	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS		LOT 18 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0540	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 19 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0541	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 20 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0542	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK C WOODS AD	WOODS ADD	NW																			5
SWR2015-0543	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 47 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0544	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 48 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0545	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 49 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0546	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 46 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0547	11/12/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK B WOODS ADD	WOODS ADD	NW																			5
SWR2015-0548	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 9 BLOCK 5 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																			2
SWR2015-0549	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 10 BLOCK 5 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																			2
SWR2015-0550	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 11 BLOCK 5 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																			2
SWR2015-0551	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 13 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																			2

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ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B.	A.	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District							
SWR2015-0552	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 14 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0553	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 15 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0554	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 17 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0555	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 18 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0556	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 21 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0557	11/12/15		Closed		CHERRYWOOD CONSTRUCTION INC	PO BOX 781974	Wichita, KS	67278	LOT 22 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0558	11/12/15		Closed		GRATE KELLI & SHANNO	15702 E WOODCREEK	Wichita, KS	67230	LOT 23 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0559	11/12/15		Closed		GRATE KELLI & SHANNO	15702 E WOODCREEK	Wichita, KS	67230	LOT 24 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0560	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 26 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0561	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 27 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0562	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 28 BLOCK 4 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0563	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 21 BLOCK 3 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0564	11/12/15		Closed		BDS REAL ESTATE VENTURES LLC	200 W DOUGLAS STE 250	Wichita, KS	67203	LOT 22 BLOCK 3 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0565	11/12/15		Closed		BDS REAL ESTATE VENTURES LLC	200 W DOUGLAS STE 250	Wichita, KS	67203	LOT 23 BLOCK 3 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0566	11/12/15		Closed		BDS REAL ESTATE VENTURES LLC	200 W DOUGLAS STE 250	Wichita, KS	67203	LOT 24 BLOCK 3 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0567	11/12/15		Closed		KEITH GARY	1555 S CREEKSIDE LN	Wichita, KS	67203	LOT 27 BLOCK 3 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0568	11/12/15		Closed		TWISTED OAK HOMES LLC	1460 N SPORT OF KINGS CT	Wichita, KS	67230	LOT 26 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0569	11/12/15		Closed		TWISTED OAK HOMES LLC	1460 N SPORT OF KINGS CT	Wichita, KS	67230	LOT 31 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0570	11/12/15		Closed		MAXTON ROBERT MICHAEL	15510 E ROSEWOOD ST	Wichita, KS	67230	LOT 34 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2

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SWR2015-0571	11/12/15		Closed		MCQUILLAN MICHAEL E & RACHEL M WHITE-	15410 E WOODCREEK ST	Wichita, KS	67230	LOT 15 BLOCK 5 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0572	11/12/15		Closed		ELITE USA CONSTRUCTION LLC	1109 S Rock Rd	Wichita, KS	67207	LOT 2 BLOCK 2 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0573	11/12/15		Closed		ELITE USA CONSTRUCTION LLC	1109 S Rock Rd	Wichita, KS	67207	LOT 3 BLOCK 2 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0574	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 11 BLOCK 2 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0575	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 12 BLOCK 2 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0576	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	LOT 13 BLOCK 2 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0577	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	RESERVE A WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0578	11/12/15		Closed		HILL JEFF W	15926 E ROSEWOOD CT	Wichita, KS	67230	LOT 1 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0579	11/12/15		Closed		WHISPERING LAKES LLC	2026 S TRIPLE CROWN	Wichita, KS	67230	RESERVE B WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0580	11/12/15		Closed		SHIELDS PAULA S	15914 E ROSEWOOD CT	Wichita, KS	67230	LOT 7 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0581	11/12/15		Closed		SHIELDS PAULA S	15914 E ROSEWOOD CT	Wichita, KS	67230	LOT 8 BLOCK 1 WHISPERING LAKES ESTATES ADD	WHISPERING LAKES ESTATES ADD	SE																		2
SWR2015-0582	11/12/15		Closed		TANIELIAN SAHAG & BILLIE JEAN	2250 N ROCK RD STE 118-118D	Wichita, KS	67226	LOT 36 BLOCK 3 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0583	11/12/15		Closed		HEFEL LORI A & ANTHONY J	15510 E LYNNWOOD ST	Wichita, KS	67230	15510 E LYNNWOOD ST	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0584	11/12/15		Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	15603 E LYNNWOOD ST	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0585	11/12/15		Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	LOT 9 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0586	11/12/15		Closed		JENKINS CHRISTOPHER L	2667 N PERSHING CT	Wichita, KS	67220	LOT 37 BLOCK 4 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0587	11/12/15		Closed		STREIFF MARCIA G & LAUREN A	5119 N OSPREY CIR	Wichita, KS	67219	LOT 7 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0588	11/12/15		Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	LOT 5 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0589	11/12/15		Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	LOT 3 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0590	11/12/15		Closed		SUPERIOR HOME LP	12101 E KILLENWOOD DR	Wichita, KS	67206	LOT 1 BLOCK 5 BELLE TERRE SOUTH ADD	BELLE TERRE SOUTH ADD	SE																		2
SWR2015-0591	12/08/15	12/14/15	Closed		Conco Construction	3051 N Ohio St	Wichita, KS	67219	3540 N MAIZE RD	Fox Ridge Plaza Add	NW	x	x			x						Illegal Discharge / Illegal Dumping into SSS / Failure to Prepare or Implement a PPP / Failure to Use BMP (Contractor) / Failure to Repair BMP Devices /	12/09/15	12/14/15	12/14/15			Regular Mail	5
SWR2015-0592	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8697 W 37th N Ct.	Tylers Landing 5th Add	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15			Regular Mail	5
SWR2015-0593	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8695 W 37th N Ct	Tylers Landing 5th Add	NW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15			Regular Mail	5

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SWR2015-0594	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8691 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0595	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8689 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0596	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8685 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0597	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8683 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0598	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8679 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0599	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8677 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0600	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8673 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0601	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8671 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0602	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8667 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0603	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8665 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0604	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8661 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0605	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8659 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0606	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8655 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0607	12/08/15	12/17/15	Closed		PBR29 LLC	7818 W MEADOW PARK CT	Wichita, KS	67205	8653 W 37th N Ct	Tylers Landing 5th Add	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0608	12/08/15	12/17/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	3735 N PEPPER RIDGE ST	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0609	12/08/15	12/17/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	3716 N HIGH PT	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0610	12/08/15	12/17/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	3709 N HIGH PT	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0611	12/08/15	12/17/15	Closed		D & M ENTERPRISES LLC	10008 W YORK	Wichita, KS	67215	LOT 12 BLOCK B TYLER'S LANDING 3RD ADD	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0612	12/08/15	12/17/15	Closed		D & M ENTERPRISES LLC	10008 W YORK	Wichita, KS	67215	8701 W CONREY ST	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0613	12/08/15	12/17/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67125	8704 W CONREY ST	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/08/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0614	12/08/15	12/17/15	Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	3613 N PEPPER RIDGE ST	TYLER'S LANDING 3RD ADD	NW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0615	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8301 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0616	12/08/12	12/17/15	Closed		ALEXANDER HOLDINGS LLC	7540 W NORTHWIND ST STE 100	Wichita, KS	67205	8215 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0617	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8207 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0618	12/08/15	12/17/15	Closed		K-2 PROPERTIES LLC	7540 W NORTHWIND ST BLDG 20	Wichita, KS	67205	8203 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0619	12/08/15	12/17/15	Closed		ALEXANDER HOLDINGS LLC	7540 W NORTHWIND ST STE 100	Wichita, KS	67205	8210 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0620	12/08/15	12/17/15	Closed		ALEXANDER HOLDINGS LLC	7540 W NORTHWIND ST STE 100	Wichita, KS	67205	8304 W KACKLEY CIR	TYLER'S LANDING 3RD ADD	NW	x	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/09/15	12/17/15	12/17/15		Regular Mail	5	
SWR2015-0621	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1151 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0622	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1145 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	x			x							Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	

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SWR2015-0623	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1137 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0624	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1131 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0625	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1125 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0626	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1119 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0627	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1111 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0628	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	1105 W MAYWOOD CT	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0629	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	5501 S DODGE	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0630	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	5507 S DODGE	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0631	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	5513 S DODGE	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0632	12/08/15	12/17/15	Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	5519 S DODGE	SOUTHERN SHORES ADDITION	SW	X		X									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/09/15	12/17/15	12/17/15		Regular Mail	4	
SWR2015-0633	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 12 BLOCK B SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0634	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 13 BLOCK B SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0635	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 14 BLOCK B SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0636	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 15 BLOCK B SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0637	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 16 BLOCK B SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0638	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 23 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0639	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 22 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0640	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 21 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0641	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 20 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0642	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 19 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0643	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 18 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0644	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 17 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0645	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 16 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0646	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 15 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0647	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 14 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4
SWR2015-0648	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 13 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																			4

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SWR2015-0649	12/08/15		Closed		ANGEL FIRE LLC	2418 S HOOVER RD	Wichita, KS	67215	LOT 12 BLOCK A SOUTHERN SHORES ADDITION	SOUTHERN SHORES ADDITION	SW																		4
SWR2015-0650	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 1 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0651	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 3 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0652	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 4 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0653	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 5 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0654	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 6 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0655	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 7 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0656	12/08/15		Closed		FREEDOM PROPERTY SOLUTIONS	1207 S WICHITA	Wichita, KS	67213	1315 E Maywood	RIVENDALE ADD	SE																		3
SWR2015-0657	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 8 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0658	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 9 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0659	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 10 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0660	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 2 BLOCK D RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0661	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 49 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0662	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 48 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0663	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 47 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0664	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 46 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0665	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 45 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0666	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 44 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0667	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 43 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0668	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 42 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0669	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 40 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0670	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 39 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0671	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 38 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0672	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 37 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0673	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 36 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0674	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 35 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0675	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 33 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0676	12/08/15		Closed		MH370 INC	906 N MAIN ST STE 1	Wichita, KS	67203	LOT 30 BLOCK C RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0677	12/08/15		Closed		LEMMONS DONALD C	533 W CAMPUS	Wichita, KS	67217	LOT 15 BLOCK E RIVENDALE ADD	RIVENDALE ADD	SE																		3

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SWR2015-0678	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 14 BLOCK E RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0679	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 13 BLOCK E RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0680	12/08/15		Closed		MALONE CONSTRUCTION LLC	1608 S WASHINGTON	Wichita, KS	67211	LOT 12 BLOCK E RIVENDALE ADD	RIVENDALE ADD	SE																		3
SWR2015-0681	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	5009 N MARBLEFALLS ST	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0682	12/11/15	12/23/15	Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	5005 N MARBLEFALLS CT	FALCON FALLS 2ND ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1
SWR2015-0683	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 25 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0684	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	4975 N MARBLEFALLS CT	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0685	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 23 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0686	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 22 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0687	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0688	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 20 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0689	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 19 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0690	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0691	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 17 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0692	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 16 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0693	12/11/15	12/23/15	Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	4939 N MARBLEFALLS ST	FALCON FALLS 2ND ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1
SWR2015-0694	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 14 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0695	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 13 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0696	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0697	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0698	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0699	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0700	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 8 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0701	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 7 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0702	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 6 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0703	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 5 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1

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SWR2015-0704	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 4 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0705	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 3 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0706	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 2 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0707	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 1 BLOCK E FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0708	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0709	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0710	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0711	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0712	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0713	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0714	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0715	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0716	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0717	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0718	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0719	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																		1
SWR2015-0720	12/11/15	12/23/15	Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	5002 N MARBLEFALLS ST	FALCON FALLS 2ND ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15		Regular Mail	1	
SWR2015-0721	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67257	LOT 18 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																	1	
SWR2015-0722	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																	1	
SWR2015-0723	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																	1	
SWR2015-0724	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK A FALCON FALLS 2ND ADD	FALCON FALLS 2ND ADD	NE																	1	
SWR2015-0725	12/11/15	12/23/15	Closed		ROBL CONSTRUCTION INC	5842 W 21ST ST N	Wichita, KS	67205	4727 N HOBBY ST	FALCON FALLS 2ND ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15		Regular Mail	1	
SWR2015-0726	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 16 BLOCK E FALCON FALLS 3RD ADD	FALCON FALLS 2ND ADD	NE																Regular Mail	1	
SWR2015-0727	12/11/15		Closed		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK	Wichita, KS	67215	4707 N MARBLEFALLS ST	FALCON FALLS 2ND ADD	NE																	1	
SWR2015-0728	12/11/15		Closed		ALFORD LICHILLE R	4703 N MARBLEFALLS ST	Wichita, KS	67219	4703 N MARBLEFALLS ST	FALCON FALLS 2ND ADD	NE																	1	

**SWR - Residential Construction Projects Stormwater Inspection List**

ES Number	Inspection Date	Recheck Date	Closed	Citation Number	Contractor Name	Mailing - Street Address	Mailing - City	Zip Code	Property Location	Subdivision	City Quadrant	A	B	A.1	A.6	A.7	A.2	A.2	A.2	A.1	A	Notice of Violation Details	NOV Issue Date	Compliance Date	Cleanup Date	Violation Details	Other Violations (E)	Certified Mail Receipt Number	Council District	
SWR2015-0729	12/11/15		Closed		HEIGHTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 22 BLOCK E FALCON FALLS 3RD ADD	FALCON FALLS 2ND ADD	NE																		1	
SWR2015-0730	12/11/15		Closed		ROBL CONSTRUCTION INC	5842 W 21ST ST N	Wichita, KS	67205	LOT 1 BLOCK A FALCON FALLS 4TH ADD	FALCON FALLS 2ND ADD	NE																		1	
SWR2015-0731	12/11/15	12/23/15	Closed		ROBINSON KELLY K & ALVIN D JACOB	8718 E MILLRUN ST	Wichita, KS	67226	8718 E MILLRUN ST	SAWMILL CREEK ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0732	12/11/15	12/23/15	Closed		MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67451	8617 E MILLRUN ST	SAWMILL CREEK ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0733	12/11/15	12/23/15	Closed		ASCENT PARTNERS INC	710 N MAIN ST	Wichita, KS	67205	8521 E MILLRUN ST	SAWMILL CREEK ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0734	12/11/15	12/23/15	Closed		GUSTAF PETER A & MARY BETH	1521 N GRAYSTONE	Wichita, KS	67230	15212 E SUMMERFIELD ST	STONEBRIDGE 2ND ADD	NE	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0735	12/11/15	12/23/15	Closed		FURSTENBERG CONNIE D	3229 N LAKECREST	Wichita, KS	67205	1713 N GRAYSTONE ST	STONEBRIDGE 2ND ADD	NE	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0736	12/11/15	12/23/15	Closed		NIES HOMES INC	10333 E 21ST ST N STE 303	Wichita, KS	67206	1541 N TERHUNE ST	STONEBRIDGE 2ND ADD	NE	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/14/15	12/23/15	12/23/15			Regular Mail	1	
SWR2015-0737	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 26 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																		1	
SWR2015-0738	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 25 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																		1	
SWR2015-0739	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 24 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0740	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 23 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0741	12/11/15		Closed		NIES HOMES INC	10333 E 21ST ST N STE 303	Wichita, KS	67206	1702 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0742	12/11/15		Closed		LEEWOOD HOMES INC	3500 N ROCK RD BLDG 2200	Wichita, KS	67226	1706 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0743	12/11/15		Closed		FAHSOLTZ CONSTRUCTION INC	PO BOX 818	ANDOVER	67002	1710 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0744	12/11/15		Closed		NICHOLS REBECCA J TR	13214 E BRIDLEWOOD CT	Wichita, KS	67230	1714 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0745	12/11/15		Closed		CATLIN MATTHEW G & LISA M	1530 S BEBE ST	Wichita, KS	67209	1718 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0746	12/11/15		Closed		FAHSOLTZ CONSTRUCTION INC	PO BOX 818	ANDOVER	67002	1722 N TERHUNE ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0747	12/11/15		Closed		NAGRECHA MRINAL VIJAY & NGHI BOL LAM	770 N SILVER SPRINGS BLVD A	Wichita, KS	67212	15505 E SUMMERFIELD ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0748	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 21 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0749	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 20 BLOCK A STONEBRIDGE 3RD ADDITION	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0750	12/11/15		Closed		FAHSOLTZ CONSTRUCTION INC	PO BOX 818	ANDOVER	67002	15407 E SUMMERFIELD ST	STONEBRIDGE 3RD ADD	NE																			1
SWR2015-0751	12/11/15		Closed		SAWMILL CREEK HOMEOWNERS ASSOC	15413 MCCORMICK	GODDARD, KS	67052	RESERVE C SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																			1
SWR2015-0752	12/11/15		Closed		SUPERIOR HOMES LP	1109 S ROCK RD	Wichita, KS	67207	8133 E OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0753	12/11/15		Closed		KRICHATI BASEM & KELLY	12101 E KILLENWOOD DR	Wichita, KS	67206	8137 N OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0754	12/11/15		Closed		KRICHATI BASEM & KELLY	12101 E KILLENWOOD DR	Wichita, KS	67206	8141 E OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0755	12/11/15		Closed		SUPERIOR HOMES LP	1109 S ROCK RD	Wichita, KS	67207	8145 E OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0756	12/11/15		Closed		KRICHATI BASEM & KELLY	12101 E KILLENWOOD DR	Wichita, KS	67206	8153 N OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0757	12/11/15		Closed		FAWN GROVE PROPERTIES LLC	1907 S HYDRAULIC ST	Wichita, KS	67211	8229 E OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0758	12/11/15		Closed		KHAN MUHAMMAD A & RAFIYA FATIMA	8165 E OLD MILL CT	Wichita, KS	67226	8165 E OLD MILL CT	SAWMILL CREEK ADD	NE																			1
SWR2015-0759	12/11/15	12/23/15	Closed		PETERS CONSTRUCTION LLC	2117 N CROOKED PINE ST	Wichita, KS	67230	LOT 45 BLOCK 5 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	21/14/15	12/23/15	12/23/15			Regular Mail	1	

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SWR2015-0760	12/11/15		Closed		MULLIN ASHLEY L	8617 E SCRAGG CIR	Wichita, KS	67226	8617 E SCRAGG CIR	SAWMILL CREEK ADD	NE																	1
SWR2015-0761	12/11/15		Closed		NGUYEN BIDEN D	8613 E SCRAGG CIR	Wichita, KS	67226	8613 E SCRAGG CIR	SAWMILL CREEK ADD	NE																	1
SWR2015-0762	12/11/15	12/23/15	Closed		RELPH CONSTRUCTION INC	8550 NW PARALLEL RD	Towanda, KS	67144	8605 E SCRAGG CIR	SAWMILL CREEK ADD	NE	x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Contractor) /	12/14/15	12/23/15	12/23/15			Regular Mail	1
SWR2015-0763	12/11/15		Closed		WARD CHARLES L & LINDA	8710 E SCRAGG ST	Wichita, KS	67226	8710 E SCRAGG ST	SAWMILL CREEK ADD	NE																	1
SWR2015-0764	12/11/15		Closed		RENN STEVEN L & AMY K	8714 E SCRAGG ST	Wichita, KS	67226	8714 E SCRAGG ST	SAWMILL CREEK ADD	NE																	1
SWR2015-0765	12/11/15		Closed		VISION HOMES INVESTMENTS INC	PO BOX 224	COLWICH, KS	67030	LOT 47 BLOCK 2 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0766	12/11/15		Closed		VISION HOMES INVESTMENTS INC	PO BOX 224	COLWICH, KS	67030	LOT 15 BLOCK 3 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0767	12/11/15		Closed		VISION HOMES INVESTMENTS INC	PO BOX 224	COLWICH, KS	67030	LOT 14 BLOCK 3 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0768	12/11/15		Closed		VISION HOMES INVESTMENTS INC	PO BOX 224	COLWICH, KS	67030	LOT 13 BLOCK 3 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0769	12/11/15		Closed		VISION HOMES INVESTMENTS INC	PO BOX 224	COLWICH, KS	67030	LOT 12 BLOCK 3 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0770	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67451	LOT 21 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0771	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 20 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0772	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 19 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0773	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 17 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0774	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 15 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0775	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 14 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0776	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 13 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0777	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 12 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0778	12/11/15		Closed		JACOB MANAGEMENT CO LLC	1160 400 AVE	Hope, KS	67415	LOT 11 BLOCK 4 SAWMILL CREEK ADD	SAWMILL CREEK ADD	NE																	1
SWR2015-0779	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 11 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0780	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 12 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0781	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 13 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0782	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 14 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0783	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 15 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0784	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 16 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0785	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 17 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1
SWR2015-0786	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 9 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																	1

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SWR2015-0787	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 6 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																		1
SWR2015-0788	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 5 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																		1
SWR2015-0789	12/11/15		Closed		FLKS LAND DEVELOPMENT LLC	150 N MARKET	Wichita, KS	67202	LOT 4 BLOCK B STONEBRIDGE 2ND ADD	STONEBRIDGE 2ND ADD	NE																		1
SWR2015-0790	12/21/15	01/07/16	Open		K & A HOLDINGS LLC	1815 SOUTHWEST BLVD	Wichita, KS	67213	2521 S MAIZE CT	SOUTHERN RIDGE ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0791	12/21/15	01/07/16	Open		K & A HOLDINGS LLC	1815 SOUTHWEST BLVD	Wichita, KS	67213	2529 S MAIZE CT	SOUTHERN RIDGE ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0792	12/21/15	01/07/16	Open		K & A HOLDINGS LLC	1815 SOUTHWEST BLVD	Wichita, KS	67213	2527 S MAIZE CT	SOUTHERN RIDGE ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0793	12/21/15	01/07/16	Open		HAFFA ROGER JOEL & AMANDA FRANCES	10613 W DALLAS ST	Wichita, KS	67215	10613 W DALLAS ST	SOUTHERN RIDGE ADD	SW	x						x				Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0794	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10808 W YOSEMITE ST	SOUTHERN RIDGE ADD	SW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0795	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10804 W YOSEMITE ST	SOUTHERN RIDGE ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0796	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	LOT 7 BLOCK B SOUTHERN RIDGE 4TH ADD	SOUTHERN RIDGE ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0797	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10703 W GREENFIELD ST	SOUTHERN RIDGE ADD	SW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0798	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10615 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0799	12/21/15	01/07/16	Open		KESTER DEWAYNE L & JULIE A	10602 W GREENFIELD CIR	Wichita, KS	67215	10602 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0800	12/21/15	01/07/16	Open		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10614 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW	x									x	Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0801	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 42 BLOCK C SOUTHERN RIDGE 4TH ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0802	12/21/15		Closed		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10711 W GREENFIELD ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0803	12/21/15		Closed		BRADSHAW JOSHUA C	10707 W GREENFIELD ST	Wichita, KS	67215	10707 W GREENFIELD ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0804	12/21/15		Closed		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10611 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0805	12/21/15		Closed		ONSTOTT LANCE	10607 W GREENFIELD CIR	Wichita, KS	67215	10607 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0806	12/21/15		Closed		RUSSELL INVESTMENTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 35 BLOCK C SOUTHERN RIDGE 4TH ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0807	12/21/15		Closed		RUSSELL INVESTMENTS LLC	PO BOX 75337	Wichita, KS	67275	LOT 33 BLOCK C SOUTHERN RIDGE 4TH ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0808	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 32 BLOCK C SOUTHERN RIDGE 4TH ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0809	12/21/15		Closed		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	10618 W GREENFIELD CIR	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0810	12/21/15		Closed		JONES ZACHARY M	2726 S WESTGATE ST	Wichita, KS	67215	2726 S WESTGATE ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0811	12/21/15		Closed		THACKERY BRENDON L & HILLARY J	2725 S WESTGATE ST	Wichita, KS	67215	2725 S WESTGATE ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0812	12/21/15		Closed		CAPPS KIP O & TABITHA D	2717 S WESTGATE ST	Wichita, KS	67215	2717 S WESTGATE ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0813	12/21/15		Closed		POH ALICE A & CORBIN W	2713 S WESTGATE ST	Wichita, KS	67215	2713 S WESTGATE ST	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0814	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 72 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0815	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 71 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0816	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 70 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																	4	
SWR2015-0817	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 69 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																	4	

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SWR2015-0818	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 68 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0819	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 67 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0820	12/21/15		Closed		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	2745 S LARK CT	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0821	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 65 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0822	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 64 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0823	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 63 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0824	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 62 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0825	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 61 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0826	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 60 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0827	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 59 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0828	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 58 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0829	12/21/15		Closed		MAIZE ROAD LLC	PO BOX 75337	Wichita, KS	67275	LOT 57 BLOCK C SOUTHERN RIDGE 3RD ADD	SOUTHERN RIDGE ADD	SW																		4
SWR2015-0830	12/21/15	01/07/16	Open		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 13 BLOCK C TURKEY CREEK 2ND ADD	TURKEY CREEK 2ND ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/15	01/07/15		Regular Mail	4	
SWR2015-0831	12/21/15	01/07/16	Open		COMFORT HOMES INC	4313 N 119TH ST W	MAIZE, KS	67101	2213 S LIMUEL ST	TURKEY CREEK 3RD ADD	SW	x					x					Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/32/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0832	12/21/15	01/07/16	Open		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK ST	Wichita, KS	67215	2210 S LIMUEL CT	TURKEY CREEK 3RD ADD	SW	x							x			Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0833	12/21/15	01/07/16	Open		REEVES SHAUN M	13001 W GRANT ST	Wichita, KS	67235	13001 W GRANT ST	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0834	12/21/15	01/07/16	Open		HECKETHORN LAUREN D	12750 W GRANT CT	Wichita, KS	67235	12750 W GRANT CT	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0835	12/21/15	01/07/16	Open		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK ST	Wichita, KS	67215	12742 W GRANT CT	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0836	12/21/15	01/07/16	Open		MIAGAN DANIEL & JENNIFER	12710 W GRANT CT	Wichita, KS	67235	12710 W GRANT CT	TURKEY CREEK 3RD ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0837	12/21/15	01/07/16	Open		HILL TROY B & STEPHANIE J	12706 W GRANT CT	Wichita, KS	67235	12706 W GRANT CT	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0838	12/21/15	01/07/16	Open		NGUYEN THANH VAN & KIMBERLY TRAN	2133 S WHEATLAND ST	Wichita, KS	67235	2133 S WHEATLAND ST	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	10/07/16		Regular Mail	4	
SWR2015-0839	12/21/15	01/07/16	Open		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK ST	Wichita, KS	67215	2121 S WHEATLAND ST	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0840	12/21/15	01/07/16	Open		DON KLAUSMEYER CONSTRUCTION LLC	10008 W YORK ST	Wichita, KS	67215	2117 S WHEATLAND ST	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0841	12/21/15	01/07/16	Open		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	2113 S WHEATLAND ST	TURKEY CREEK 3RD ADD	SW	x								x		Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16		Regular Mail	4	
SWR2015-0842	12/21/15	01/07/16	Open		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 107 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16		Regular Mail	4	

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SWR2015-0843	12/21/15	01/07/16	Open		MOORE BETTY J LIV TR	10842 W DORA CT	Wichita, KS	67209	2049 S WHEATLAND ST	TURKEY CREEK 3RD ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	4	
SWR2015-0844	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 104 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0845	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 102 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0846	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 101 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0847	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 100 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0848	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 99 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0849	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 98 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0850	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 97 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0851	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 96 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0852	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 95 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0853	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 94 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0854	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 93 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0855	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 92 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0856	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 91 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0857	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 90 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0858	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 89 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0859	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 88 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0860	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 87 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0861	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 86 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0862	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 85 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0863	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 84 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0864	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 83 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0865	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 82 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0866	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 103 BLOCK A	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0867	12/21/15		Closed		JOHN E DUGAN FAMILY PTNS LP	2416 MORNING DEW	Wichita, KS	67205	LOT 1 BLOCK H	TURKEY CREEK 3RD ADD	SW																			4
SWR2015-0868	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 2 BLOCK H	TURKEY CREEK 3RD ADD	SW																			4

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SWR2015-0869	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 3 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0870	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 4 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0871	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 5 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0872	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 6 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0873	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 7 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0874	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 8 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0875	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 9 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0876	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 10 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0877	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 11 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0878	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 12 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0879	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 13 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0880	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 14 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0881	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 15 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0882	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 16 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0883	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 17 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0884	12/21/15		Closed		JOHN E DUGAN FAMILY PTNS LP	2416 MORNING DEW	Wichita, KS	67205	LOT 18 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0885	12/21/15		Closed		JOHN E DUGAN FAMILY PTNS LP	2416 MORNING DEW	Wichita, KS	67205	LOT 19 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0886	12/21/15		Closed		JOHN E DUGAN FAMILY PTNS LP	2416 MORNING DEW	Wichita, KS	67205	LOT 20 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0887	12/21/15		Closed		KICK N DEVELOPMENT CORP ETAL	716 N 119TH ST W STE 112	Wichita, KS	67235	LOT 21 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0888	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 22 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0889	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 23 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0890	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 24 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0891	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 25 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0892	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 26 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0893	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 27 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0894	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 28 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	

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SWR2015-0895	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 29 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0896	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 30 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0897	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 31 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0898	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 32 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0899	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 33 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0900	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 34 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0901	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 35 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0902	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 36 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0903	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 37 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0904	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 38 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0905	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 39 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0906	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 40 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0907	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 41 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0908	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 42 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0909	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 43 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0910	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 44 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0911	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 60 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0912	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 58 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0913	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 57 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0914	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 56 BLOCK H TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0915	12/21/15		Closed		MIAGAN DANIEL & JENNIFER	12710 W GRANT CT	Wichita, KS	67235	12710 W GRANT CT	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0916	12/21/15		Closed		HILL TROY B & STEPHANIE J	12706 W GRANT CT	Wichita, KS	67235	12706 W GRANT CT	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0917	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 114 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0918	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 115 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0919	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 116 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4
SWR2015-0920	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 117 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																		4

**SWR - Residential Construction Projects Stormwater Inspection List**

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SWR2015-0921	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 118 BLOCK A TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0922	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 10 BLOCK G TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0923	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 13 BLOCK G TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0924	12/21/15		Closed		TURKEY CREEK LLC	10008 W YORK ST	Wichita, KS	67215	LOT 14 BLOCK G TURKEY CREEK 3RD ADD	TURKEY CREEK 3RD ADD	SW																	4	
SWR2015-0925	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 15 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0926	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 14 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0927	12/21/15		Closed		DAKIN LETITIA	2413 S CANYON ST	Wichita, KS	67227	2413 S CANYON ST	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0928	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 2 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0929	12/21/15		Closed		DANAHY CONSTRUCTION INC	PO BOX 75638	Wichita, KS	67275	LOT 3 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0930	12/21/15		Closed		DANAHY CONSTRUCTION INC	PO BOX 75638	Wichita, KS	67275	LOT 10 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0931	12/21/15		Closed		DANAHY CONSTRUCTION INC	PO BOX 75638	Wichita, KS	67275	LOT 8 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0932	12/21/15		Closed		DEWEY BRANDON & EMILY	13017 W RED ROCK ST	Wichita, KS	67235	13017 W RED ROCK ST	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0933	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 4 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0934	12/21/15		Closed		SOUTHWEST PASSAGE HOA INC	2404 S MONUMENT	Wichita, KS	67235	LOT 3 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0935	12/21/15		Closed		RODMAN STACI A & BILLY R DEAN	13005 W RED ROCK ST	Wichita, KS	67235	13005 W RED ROCK ST	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0936	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 1 BLOCK 4 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0937	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 1 BLOCK 3 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0938	12/21/15		Closed		MIKE LOVE CONSTRUCTION INC	PO BOX 7	Valley Center, KS	67147	13006 W RED ROCK ST	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0939	12/21/15		Closed		BOLDEN CHARLES T	2250 N ROCK RD STE 118 110	Wichita, KS	67226	LOT 8 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0940	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 9 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0941	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	2419 S MONUMENT ST	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0942	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 11 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0943	12/21/15		Closed		DOLD MICHAEL J	7318 BARRINGTON CT	Wichita, KS	67212	LOT 12 BLOCK 5 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0944	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 5 BLOCK 2 SOUTHWEST PASSAGE	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0945	12/21/15		Closed		DANAHY CONSTRUCTION INC	PO BOX 75638	Wichita, KS	67275	LOT 1 BLOCK 2 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	
SWR2015-0946	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	LOT 3 BLOCK 1 SOUTHWEST PASSAGE ADD	SOUTHWEST PASSAGE ADD	SW																	4	

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SWR2015-0947	12/21/15		Closed		ROGER OSWALD CONSTRUCTION LLC	3206 N WILD THICKET ST	Wichita, KS	67205	2408 S MONUMENT ST	SOUTHWEST PASSAGE ADD	SW																			4
SWR2015-0948	12/21/15	01/07/16	Open		URBAN ERIC J & CANDICE M	513 N PARKRIDGE ST	Wichita, KS	67212	14013 W TEXAS CIR	SHADOW WOODS ADD	SW	x											Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0949	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 37 BLOCK A SHADOW WOODS ADD	SHADOW WOODS ADD	SW																			5
SWR2015-0950	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 50 BLOCK A SHADOW WOODS ADD	SHADOW WOODS ADD	SW																			5
SWR2015-0951	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 49 BLOCK A SHADOW WOODS ADD	SHADOW WOODS ADD	SW																			5
SWR2015-0952	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 4 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0953	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 5 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0954	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 6 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0955	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 7 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0956	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 8 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0957	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 9 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0958	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0959	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0960	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0961	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 13 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0962	12/21/15		Closed		DUGAN CHRISTOPHER J	1155 N 135TH ST W	Wichita, KS	67235	LOT 19 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0963	12/21/15		Closed		DUGAN CHRISTOPHER J	1155 N 135TH ST W	Wichita, KS	67235	106 S COUNTRY VIEW LN	WOODS ADD	SW																			5
SWR2015-0964	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK B WOODS ADD	WOODS ADD	SW																			5
SWR2015-0965	12/21/15	01/07/16	Open		CRAIG PATE CONSTRUCTION LLC	7732 W CENTRAL PARK ST	Wichita, KS	67205	212 N FAWNWOOD ST	WOODS ADD	NW	x		x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0966	12/21/15	01/07/16	Open		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 8 BLOCK C WOODS ADD	WOODS ADD	NW	x		x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0967	12/21/15	01/07/16	Open		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 7 BLOCK C WOODS ADD	WOODS ADD	NW	x		x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0968	12/21/15	01/07/16	Open		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 6 BLOCK C WOODS ADD	WOODS ADD	NW	x		x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0969	12/21/15	01/07/16	Open		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK C WOODS ADD	WOODS ADD	NW	x		x									Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0970	12/21/15	01/07/16	Open		WEBSTER MITCHELL D & JENNIFER	5248 TIMBERCREEK RD	GREAT BEND, KS	67530	LOT 52 BLOCK B WOODS ADD	WOODS ADD	NW	x											Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	5
SWR2015-0971	12/21/15		Closed		FAWN GROVE PROPERTIES INC	1907 S HYDRAULIC ST	Wichita, KS	67211	217 N FAWNWOOD CT	WOODS ADD	NW																			5
SWR2015-0972	12/21/15		Closed		DAVIS KIMBERLY C	204 W AUTUMN BLAZE	GODDARD, KS	67052	LOT 7 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0973	12/21/15		Closed		PATE CHRISTOPHER J & LESLIE A	1352 N MURRAY CT	Wichita, KS	67212	LOT 9 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0974	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 10 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0975	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 11 BLOCK D WOODS ADD	WOODS ADD	NW																			5
SWR2015-0976	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 12 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0977	12/21/15		Closed		CARNAHAN BRIAN K & JACLYN	2214 EASTRIDGE CT	GODDARD, KS	67052	LOT 13 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0978	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 14 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0979	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 15 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0980	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 16 BLOCK C WOODS ADD	WOODS ADD	NW																			5
SWR2015-0981	12/21/15		Closed		COOK JUDE T & BARBARA J	104 N KENNEDY ST	Wichita, KS	67235	LOT 17 BLOCK C WOODS ADD	WOODS ADD	NW																			5

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SWR2015-0982	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 18 BLOCK C WOODS ADD	WOODS ADD	NW																		5
SWR2015-0983	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 19 BLOCK C WOODS ADD	WOODS ADD	NW																		5
SWR2015-0984	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 20 BLOCK C WOODS ADD	WOODS ADD	NW																		5
SWR2015-0985	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 21 BLOCK C WOODS ADD	WOODS ADD	NW																		5
SWR2015-0986	12/21/15		Closed		MAPLE GROUP LLC	PO BOX 75337	Wichita, KS	67275	LOT 46 BLOCK B WOODS ADD	WOODS ADD	NW																		5
SWR2015-0987	12/21/15	01/07/16	Open		ARMSTRONG GARY L & ROSZNIA M	441 S FAWNWOOD CT	Wichita, KS	67235	441 S FAWNWOOD CT	AUBURN HILLS 16TH ADD	SW	x										Illegal Discharge / Illegal Dumping into SSS / Failure to Use Effective BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0988	12/21/15		Closed		BLUE CHRISTOPHER RYAN & ASHLEY LYNNE	437 S FAWNWOOD CT	Wichita, KS	67235	437 S FAWNWOOD CT	AUBURN HILLS 16TH ADD	SW																		4
SWR2015-0989	12/21/15	01/07/16	Open		WEST WICHITA DEVELOPMENT INC	PO BOX 75337	Wichita, KS	67275	450 S FAWNWOOD ST	AUBURN HILLS 16TH ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0990	12/21/15	01/07/16	Open		MOEDER CONSTRUCTION LLC	4700 W IRVING	Wichita, KS	67209	14806 W VALLEY HI CIR	AUBURN HILLS 16TH ADD	SW	x				x						Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0991	12/21/15		Closed		BLUE CUSTOM HOMES LLC	14802 W VALLEY HI CIR	Wichita, KS	67235	14802 W VALLEY HI CIR	AUBURN HILLS 16TH ADD	SW																		4
SWR2015-0992	12/21/15		Closed		DRAUT ANDREW & ALISON	650 S FAWNWOOD ST	Wichita, KS	67235	650 S FAWNWOOD ST	AUBURN HILLS 16TH ADD	SW																		4
SWR2015-0993	12/21/15		Closed		MOEDER CONSTRUCTION LLC	4700 W IRVING	Wichita, KS	67209	651 S FAWNWOOD ST	AUBURN HILLS 16TH ADD	SW																		4
SWR2015-0994	12/21/15	01/07/16	Open		WEST WICHITA DEVELOPMENT INC	PO BOX 75337	Wichita, KS	67275	LOT 4 BLOCK E AUBURN HILLS 16TH ADD	AUBURN HILLS 16TH ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0995	12/21/15	01/07/16	Open		GAYED SARAH E	14506 W VALLEY HI CT	Wichita, KS	67235	14506 W VALLEY HI CT	AUBURN HILLS 16TH ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0996	12/21/15	01/07/16	Open		CHEEK WILLIAM JEFFREY & MEAGAN J	14725 E LAKEVIEW DR	Wichita, KS	67230	14522 W VALLEY HI CT	AUBURN HILLS 16TH ADD	SW	x				x						Illegal Discharge / Illegal Dumping into SSS / Failure to Repair BMP Devices /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0997	12/21/15	01/07/16	Open		SKLADZIEN PAUL S & VALERIE H	14624 W VALLEY HI CT	Wichita, KS	67235	14624 W VALLEY HI CT	AUBURN HILLS 16TH ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0998	12/21/15	01/07/16	Open		ABBOTT DAVID G	10625 W MAPLE STE E2	Wichita, KS	67209	15021 E HAYDEN ST	HIGH POINT WEST ADD	SW	x		x								Illegal Discharge / Illegal Dumping into SSS / Failure to Use BMP (Owner) /	12/23/15	01/07/16	01/07/16			Regular Mail	4
SWR2015-0999	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 11 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1000	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 10 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1001	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 9 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1002	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 8 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1003	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 6 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1004	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	RESERVE C HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1005	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 5 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1006	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 1 BLOCK 2 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1007	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 2 BLOCK 2 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4
SWR2015-1008	12/21/15		Closed		TD DEVELOPMENTS LLC	10625 W MAPLE AVE STE E2	Wichita, KS	67209	LOT 18 BLOCK 1 HIGH POINT WEST ADD	HIGH POINT WEST ADD	SW																		4



**Stormwater Advisory Board**  
Unofficial Meeting Minutes  
January 09, 2015

I. Welcome and Call to Order the regular meeting of the Stormwater Advisory Board. The meeting was called to order at 8:04 am on January 9th, 2015 in the W.A.T.E.R. Center by Chris Bohm (Chair).

**Present**

**Board Members**

Greg Allison  
Rich Basore  
Chris Bohm  
Hoyt Hillman  
David Leyh  
Gary Oborny

**Absent**

**Board Members**

Mitch Mitchell  
Don Kirkland  
Joseph Pajor  
Jim Weber

**City of Wichita Staff**

Jim Hardesty  
Mark Hall  
Joe Hickle

**City of Wichita Staff**

Dale Goter (CMO)  
Don Henry  
Scott Lindebak

**Visitors**

Trisha Moore  
Josh Golka  
Rachel Enns  
Tom Stiles  
Ron Graber

**II. Approval of Minutes**

Bohm opened the meeting by asking that everyone introduce themselves since it is the start of the new year. Bohm then opened up the floor to the new public comment period for anyone from the public wishing to speak. No one from the public motioned, Bohm closed the comment period and parked the minutes until a quorum was met. He turned over the floor to Trisha Moore for review of her preliminary report.

**III. Preliminary Report Trisha Moore Kansas State University**

Moore started out by saying that an email was sent out including the report or there were printed versions at the front table if anyone needed them. She said that everyone could watch the slides that she had or follow along with the packet but if anyone had questions to please ask. (See handout) Moore indicated that she would be going over tasks one and two and then would give updates on tasks three and four that are not in the report. In task one, there could be more thought put into this but the take home is that there needs to be something more additional. Either BMPs implemented by the developer or something off site as opposed to expanding an existing program. Task two the goal was to look at the economic efficiencies a little more closely than they have been in the past. Moore said they looked at onsite, commercial and residential basis and then they looked at offsite like rural or WRAPS type of mediated plan. They looked at the number and life cycle costs as well as sediment reduction benefits. (See handout) They calculated on an annual basis dollars to remove a ton of sediment. There is quite a

big difference even more than the preliminary that Josh Rowe put together, on average there are three orders of magnitude greater in terms of the cost of what it takes to remove a ton of sediment in an urban landscape vs rural. The difference that is driving that is a lot more sediment in the rural even if the land values were the same it would still be more efficient in terms of sediment. Some urban BMPs are more on the engineered side so there are costs associated, these are occurring in the rural but not as great of a cost. Moving forward they need to start looking at crediting ratios. Moore said the urban numbers came out very high so she looked at another study done by the Center of Watershed Protection and they are pretty much in line with those numbers as well and she doesn't think that the urban numbers are inflated. Bohm asked Moore to go to the last slide, he said that this is a greater order of magnitude than they had originally thought. He said that it is just stunning, he went on to ask a question about the on-site BMPs and asked if the cost for inspection was added into those costs and Moore said yes as maintenance. Moore said that in the rural the mechanical maintenance is included but she needs to talk to Ron more about the personnel aspect and that has not been built into those figures yet. Moore went on to say that there is a significant cost benefit difference between rural vs urban, primarily because in the rural there is more sediment. Bohm said that WRAPS has luxury of finding the worst areas and finding those land owners, Leyh said it is targeting the problems. Moore said that not just anyone can come and do a BMP, there are incentives for the most erodible lands to get enrolled in the conservation programs. It targets the highest sediment loading areas. Leyh said that this is the solution and Bohm said yes but the question is how we implement it. How does the City of Wichita create this program to make this happen? Bohm then asked if there were comments, Greg Allison asked if there was any way to correlate properties that can do a certain amount or all of the BMPs without any additional costs, he said that some people are going to need this but not everyone will need it but a lot of people will need it. Moore said that the larger developments will still need to provide some rate control and there will some costs difference minimum for rate control vs making extended detention or whatever is needed to get the water quality piece. Maybe they could look at those economics and that would not be difficult. Discussion went on about what is going to be cheaper. Allison then asked how stream channel volume fits into all of this, Bohm said that is a good question because that is part of the manual. Bohm said that you may meet water quality standards by virtue of doing that part of it and you wouldn't need this program. Bohm said that he knows that Moore has not gotten to the funding part of this program but asked if Moore could give some guidance on how would a property get enrolled and how would they annually meet the commitment on an annual basis. Bohm then asked if there were other questions or comments. Hillman said that he thought that the State should give some input on this, Tom Stiles said that it is but there needs to be some side bars on this. Stiles said that Trisha's numbers lay out two things that they thought were happening and they are confirmed. One is that land in the city is more expensive than land in the rural area and two sediment generated from parcel land in the city is so much less than one generated in the rural area. To the state a table of unit of sediment reduction for these practices, now can start a tradeoff. In Moore's example, there was never an envision of a 10/1 ration, but a 3/5 is good and you can break that into three parts. 1/1 exchange of particle of urban sediment vs exchange for a particle of rural sediment, the second is to borrow over and above, and the third is mental thresholds no one is going to want to enroll a partial acre you are going to want one acre or two acres, that is the city's banking credit. You can hold on to that and use that as more development comes in and you continue to build that bank account of credits. The notion of the credit ratios is important, this invokes some of the states "what's in it for us" and it sweeps away some the uncertainty of "do we really have a firm fix on an acre here is going to someone out there." This becomes a bankable commodity that the management of the program and development within the city can use to facilitate the permitting without having to wait. Use the bank and reimburse over time and refill and rebuild the bank. Stiles went on to say that selfishly the state viewed it as another revenue stream for WRAPS. WRAPS has been operating five plus years of their

watershed plan, they know where the critical areas are. That is where you start focusing, you help them implement their plan so that linkage has to be there. Everything that Moore has generated is the right way to do it. Because of the NPDES permit something has to be done, hydraulically still not absolved of taking care of downstream resources and neighbors. The little add on of water quality and finding the most cost effective way to do that and recognizing that putting this in place you have added the value of time. You can go ahead and proceed with the development, the City and WRAPS will run the inventory. Use the sediment reduction table to assign bankable credits. Bohm asked if WRAPS files an annual report to KDHE, Stiles said yes. Stiles went on to say that report back to get credit. Basore said that WRAPS would continue to do over and above what the program would generate for their activities, this would be one more piece for their puzzle and they would get another credit. Basore asked Graber how long the plan is and Graber said that it is for 40 years but he is not sure if they can meet that timeline. Bohm asked Moore to add in the report the order of magnitude, one grain of sediment in the city is the recommendation would be....3, 4, or 5 that would help frame it up. Bohm asked Stiles if EPA would like a WRAPS connection. Stiles said that certainly, their end game is water quality. Some crediting ratios, thresholds, and linking into WRAPS and documenting how much sediment offset is used as a credit. Discussion went on about the banking system and how it would work. Bohm asked Stiles if the discussion about the way the banking system would work, start out with a reserve and then replace per year. Initially there is some operating capital for the WRAPS to get going. Stiles said that a front end investment to get going would be preferable. Oborny asked Graber what the time period for 6,000 acres would be, Graber replied two years. He said that he bases that off the project that he did in the Black Kettle two years ago, they enrolled a little over 5,000 acres. Bohm said that doing quick numbers at a 1/1 the bank would need \$31,000 if you tripled it that would be \$90,000/\$100,000 for the bank that would get about ten years' worth. Basore asked where the money would come from and Bohm said that is a very important question, what kicks off the bank. Oborny said that it depends on what position is taken, offer incentive to companies that want to come here by reducing development costs. Those are things that businesses look at when they go to other cities, Oborny went on to say, we can reduce costs and still raise the tax base. Bohm asked if there were any questions, there was none so he recapped the banking system. Moore said that part of the project team is Vireo and her take home from discussions with them is that with projects of this nature are most successful when there is diversified funding, both public and private, so showing that everyone is sharing the burden. Leyh replied that the trigger is new development but the entire community benefits from it. He said that there is a system already in place from monies collected from the water department, he said that this is a logical place for this to be implemented. Bohm said that the hardest part is finding out where the funding is coming from, he went on to say that ultimately it is up to the City Council but it would be nice to give them some solid recommendations. Bohm went on to say that KDHE likes the premise, looks like there may be a bank that takes inventory for ten years, perhaps a mathematical calculation on what the bank would be, 50/50 for sediment load, assign an order of magnitude, and then a cost and in that scenario he bank would be X dollars to kick off the program. Then the guidance would be how you pay for property that comes on during the course of the year. If a property doesn't need it, they are out and it is on them and the city would have to monitor their facilities over time and they have to maintenance it over time. Bohm said that this would be a tremendous program even for those that can get the water quality on their own site. Bohm asked if there were other comments. Stiles mentioned that sooner or later land is going to run out and after some of these practices are going to need to be rehab-ed and KDHE probably wouldn't have a problem using some of the money on the rehabs. Stiles said that this not in the near future but this conversation may loop back. Bohm again asked for other comments, then thanked Moore and Stiles. Hillman asked when the final report will be ready, Moore said that she would have a draft in February. Bohm asked if Moore could have a draft of financials in February and then

Alan King could come to the meeting in March. Since there was not a quorum met there was not official adjournment.

## Stormwater Advisory Board

March 13, 2015

I. Welcome and Call to Order the regular meeting of the Stormwater Advisory Board. The meeting was called to order at 8:04 am on March 13th, 2015 in the W.A.T.E.R. Center by Chris Bohm (Chair).

### **Present**

#### **Board Members**

Greg Allison  
Rich Basore  
Chris Bohm  
Don Kirkland  
David Leyh  
Mitch Mitchell  
Gary Oborny  
Joseph Pajor  
Jim Weber

### **Absent**

#### **Board Members**

Hoyt Hillman

### **City of Wichita Staff**

Jim Hardesty  
Mark Hall  
Joe Hickle

### **City of Wichita Staff**

Dale Goter (CMO)  
Don Henry

### **Visitors**

Trisha Moore  
Matt Unruh  
Scott Lindebak  
Karma Mason  
Gary Mason  
Sandy McDonald  
John McDonald  
Daniel Schrant  
Tom Stiles  
Ron Graber

## **II. Approval of Minutes**

Bohm opened the meeting by welcoming everyone to the meeting and he stated that he would like to recognize Gary Mason, Deputy Secretary, who joined in to listen to the SWAB. Bohm also asked that everyone go around the room and introduce themselves. After introductions Bohm asked that the board to review the minutes for approval. Weber moved to approve the November minutes, unknown member seconded, board motioned and November minutes were approved. Bohm then moved to the January 9<sup>th</sup>, 2015 meeting minutes, unknown member forwarded a motion to approve the minutes and an unknown member seconded, board motioned and minutes were approved.

## **III. Public Comment Period**

Bohm asked if anyone from the public would like to speak. No public comment, item closed.

#### IV.K State Report

Moore started off by introducing Scott Schulte(?) a colleague of hers that helped work on the report with her. She started off by saying that she was going to go over tasks one and two briefly and then would move on to tasks three and four that were basically the nuts and bolts of the program. She said that as she stated before and in discussions her conclusion was that it would not be practical from the regulatory stand point to expand the already existing programs. These programs are already included in the city's stormwater permit documents. She went on to say that this kept them on track to look at other off site opportunities. They looked at urban vs rural and found that there were significant cost benefits with two to three orders of magnitude. Due to the cost benefits in the rural landscape they recommend working with WRAPS or a similar program. Tables are on 26-29 of the report. **See Moore's report.**

- Stream bank - \$3,485,199 at a 50 year program cost
- Cost per acre of development - \$116

Pajor asked if this was a one-time payment and Moore replied yes. The one-time payment is covering the life cycle of stream bank stabilization to offset it. The same thing can happen with a non-permanent BMP the outcome came out very similar. Moore said that the reason it came out very similar to the stream bank, is because it is non-permanent and they built in some assumptions. No till is a lot less. Typically the landowner is locked into a five year contract. The landowner typically chooses to stay no till and uses the money and buys the equipment to do a no till operation. To stay conservative, the report would say that maybe they will have to have enough money to replace 50% of the acres with other no till, that is why the off-site recurring costs are so high for no till. The report tried to make a non-permeant BMP into a permeant type of frame work for a program like this to try and insure that you have enough money to replace acres of no till if it is wanted.

- No Till - \$3,614,592
- Cost per acre of development - \$120

Moore said that given that the program costs are similar between stream bank and no till that it gives flexibility, that either could be done. Pajor said that while administrating the program there is a five year contract that is covered but he asked if there was an annual check for the remaining 45 years that the producer who is no longer under contract is still in the 50% that stays no till. Graber said no but they could. He said that typically they get to year 4-5 the only reason that they come out of no till is by landowner change. Graber said that if they wanted to build something into that to make sure that it stays that way they could. He went on to say that it is good to calculate this way that way they have to replace some but 70-80% will stay no till. Pajor said to clarify, is there 50 years of experience of operators doing no till? Graber said no. Pajor said that it would be nice to add for some sort of an annual visit with the producer or simple certification. Graber said that it was only about 20 years ago that the no till picked up any interest, so there is about 20 years' experience. Oborny asked if the trend is towards no till and Graber said yes. Basore added that past experiences say that most land transfers are within a family and usually farmers tend to do the same until they are shown something better. Pajor said that that is very encouraging but he still thinks there needs to be an adder to be able to have a paper trail. Graber said that he knows that no till is not the only answer so there are additional things that can be done and the reoccurring visits as they move through the time period would be to encourage those things as well, like intensive crop rotation so that there are crops on that ground as much time as possible to keep residue. Oborny said that there needs to be a tracking system on the acreage and always crediting and deduction back and forth. Moore said that it wouldn't matter if you were doing acres of no till or no till as long as you are coming out that your offsite sediment credit supply is greater than your onsite sediment impact. Moore asked if there were questions and Bohm asked if the ten year bank floats along over time or if it diminishes over time and Moore said that it depends. Moore went on to say that later in the discussion is seeing how to start the bank. She said

that you can keep it ahead and the spreadsheets are keeping the ten year float in front. Moore went on with examples in the tables in the report. **See Moore's report.** Moore said that the other important considering is to make sure that there is enough participation to fund the off-site BMP at the appropriate scale. If you only have 40 acres participating in a year, no one will be able to fund a 20 foot stream bank stabilization project. Table 4, page 9 has different practices. Pajor asked what the carrying time between making the expenditure and having cash flow coming in to go against the expenditure. Moore said that the cash flow would come in the same year that it would be implemented. The cash flow would immediately be disbursed to WRAPS for them to use as incentive payments. Pajor went on to ask if the program doesn't build ten years of BMPs, you build them as you need them? Moore said that the ten year program provided enough funding in year one to build ten years. From then on you take payments as they come and rebuilding your bank until you can complete the next large project. Bohm said that in the case of WRAPS, they can hold it for two years and then it gets thrown in with another WRAPS project and it wouldn't be a Wichita money alone, it would be a WRAPS project partially funded by Wichita. She went on to say that all of the costs help to get into more of the mechanics. The key one based on the costs would be how much a sediment credit cost, how much does it cost to participate in the program. There are other rules that need to be established in terms of off-site, who is eligible, any new or redevelopment project, what are the minimum on site requirements. Select the sediment credit ratio, the assumption is 2/1 but that is an item up for discussion. Allowable off-site BMPs, is it just stream banks do you allow some of the non-permanent BMPs a mixture of both and then the administrative framework, who is responsible for doing what. Moore said that she is going to start out with setting the credit payment rate. The recommendation would be to keep doing it the way that it has been done. Assuming a level of participation, assuming a typical BMP and using that to develop the payment rate. Looking at the table's people can understand how the rates were established and not feel like they were being cheated to encourage participation. Ideally the payment rate would be such that it provides financial incentives. There have been other programs that have not been participated in very well because they have been expensive and the goal is to be economically and environmentally efficient. The eligibility aspects are summarized on table eight on page 15 of the report, these will be up to the City to decide on how they want to proceed. The recommended program framework, as the report sees it has the City being responsible for collecting the funds and delivering those to WRAPS. WRAPS would be responsible for tracking the sediment credits and reporting back to the City and the City can report for their stormwater permitting requirements. There are already mechanisms in place so that the City's interactions with developers before development happens starts getting permits in line, use those formats in order to collect information for someone wanting to participate in the program. The report recommends going through WRAPS or some sort of similar program, WRAPS would be responsible for maintaining a sediment tracking database and each year WRAPS would deliver the tracking information and expenditures back to the City to make sure that everything is balanced and so the City can turn in this information for their permits.

Moore went on to the funding options in the report. Moore stated that the options listed are ones that are pretty common and accepted in other programs. There is a capital charge, this is a one-time fee to the developer at the time of development to offset the water quality. You can also target just the property owners and this would be in the way of a special assessment charge. Targeting all citizens you could do that through property or local sales tax or stormwater utility. You would need to show clearly the benefit to those targeted. Lenexa did something like that and they used a local sales tax but in return the citizens were getting large regional lakes and waking trails. Bohm mentioned to the group that this program should bring in \$72,000 a year that pays for everything. He said that if you participate in the program but you choose not to do anything for water quality but a detention pond you do not have to do any kind of annual or semiannual inspection reporting on the water quality, you would have

already taken care of that by participating in that program. Then the City would not have to track those properties. Discussion went on about regulatory issues that may be encountered. Allison went on and talked about Corp mitigation and wanted to know how that can be tied in. Bohm said that if this program gets kicked off and WRAPS is the vehicle that has the boots on the ground work, he didn't know why the Corps couldn't be introduced to WRAPS. Scott Schulte informed the board that in Kansas City and the Kansas City region are starting to play around with a regional mitigation plan to offset the regional transportation plan, they received a grant from the Federal Highway Administration and the EPA a few years ago which is similar to what is being looked at now. Discussion went on and then Bohm asked if on paper the program is written down and both the state and EPA are on board with it is there a grant to start the bank. Pajor said that with grant programs typically go looking for a grant but to take the approach that this is unsolicited application. Schulte then said that it is something to look into that with his contacts. Bohm said that the framework to this program could be easily used to any other community that could offer it. Bohm asked Moore what her thought is on who pays and what is the national thought. Moore said that in looking at other programs it is primarily put on the developer, she said that she doesn't think it needs to be on the developer but might be difficult to get the public support to say that the community should pay. Discussion went on and then Bohm asked if Tom or Gary wanted to say anything. Gary spoke and said that this is something that has been on his radar and totally supports it, he said that it is right in line with what he wants to accomplish. Bohm then said that the boards efforts need to be concentrated on getting a policy written and getting it to KDHE and funding can be a later discussion. Pajor asked what the turn around on the final report. Moore asked if there are specific things that the board wants to see from this discussion that they have highlighted or included. Bohm said that he would like to see the 2/1 ratio and that would be what they would recommend. Pajor said that the 2/1 would be a good start but he would like to hear the opinion of how much if that is a safety factor and how much is a true net environmental benefit. Hickle told Bohm that if anyone has a mark up to get those back to him by April 1st and he will get those to Moore. Bohm said that he would like to get the draft policy with the blank ratio back in front of the board and ask for KDHE & EPA to review and the board can talk about funding. Pajor said that would propose that the policy needs to acknowledge the need for funding mechanism. Bohm asked if a policy is submitted how long will it before it gets returned. Stiles said he would like to review it and then come and talk to the board and then the board and KDHE can talk to EPA together. Discussion ensued between board members and Bohm said that if a written policy is written and have him review it. Pajor said that it may have go to an internal review and it may go as far as the council but it will certainly have to have an internal review. Bohm said that in April the policy will need to be finished and delivered to Mr. King and the City of Wichita for review, when that is complete it can go to KDHE and run its route and the board can talk about funding. Bohm asked Moore if she had any more information and Moore said that was it and they would wrap the report up and get comments from the board. Bohm thanked Moore & Scott for the presentation and her efforts in the report.

#### **V. Review of the Cowskin & Local WRAPS Concerns**

Graber started off by saying that what he wanted to share with the board was the work that is being done in the Little Ark and how it could tie into this potential program. He said that he has not worked in the Cowskin but he thinks there is work there that they (WRAPS) could do. He said that he will talk about the Little Ark since there is a lot of work there and they have a foundation to hit the ground running, in the Cowskin it would be the establishing the new relationships and the jumping off point would not be quite as quick as the Little Ark. Graber went on to say that the nine element goals are being revamped right now, they are the first one in the state. **See Graber's handout.** Graber went on to show the board the tables. Graber gave examples of work that WRPAS has done and said that they have had a lot of other priorities. Graber went on to show the sediment work and the priority work, he

showed the tier 1 sediment HUC 12, they are Emma Creek, Running Turkey, and Lower Sand. Graber said that this may change a little as they go through the assessment process, they will be looking to see if they are in the right places, do they need to move a little. One of the things that they have done in their program is provide a little extra incentive in terms of dollars for highest priority areas, maybe 10% more dollars than they would if it were a tier 2 area. Tier 2 are Kissawa, Black Kettle, and Lower Blaze Fork for sediment. There are a lot of nutrient issues in Little Ark watershed if the sediment reduction goals are met, the phosphorus goals will be met as well. Reduction efficiencies associated with different practices the no till has about a 75% reduction efficiency, this is one that they try and get people switched to. Some other things are crop rotation or intensive crop rotation, keeping something on the field as much of the time as possible. They try and get them in no till and in an intensive crop rotation the reason for that is if they plant something like soy beans and take it off this fall it basically leaves no residue on the field all through the winter until next spring, lots of opportunity for erosion. If a cover crop is planted when the beans come off or wheat, now there is a growing crop through the winter additional protection to the soil. Graber said that they have enrolled almost 13,000 acres in 2013 and 2014 so 600 acres doesn't sound like much to get done even on a yearly basis. On the plan there is a 40 year goal to meet the sediment reduction and they are only three years in, he's not sure that 40 is long enough. He went on to say that there is a lot of work to be done in the watershed if someone tells him they are not interested than he can go to the next person and they will take the money, participation is not going to be an issue, especially if there is flexibility in what they can choose to do. The payout is over four years, 40% of the total payment is upfront then it is 20, 20, 20 and offering them incentives each year for four years. It helps them stay in contact and monitor or if there are problems or issues they are involved in the process. Switching to a no till gets worse to start with about year three it starts to get better and you start to see the benefits. Graber talked about the HUC 12's that were the highest contributors, now they are trying to find the fields within the HUC 12 that are the highest contributors, so cases it's because they are close to the stream, soil type, and those kinds of things. A rough average for the Little Ark is 1.8 or 1.9 tons of sediment erosion per acre per year, he knows there are fields that are 4/5 tons per acre, those are the ones that he wants to get into no till or a practice to reduce, he said it makes more sense. Graber went on to talk about ephemeral gullies, in the Little Ark he thinks that these types of gullies are a high contributor to sediment loading. The WRAPS received a grant about three to four years ago to study ephemeral gullies and it is about to wrap up. One thing they have discovered is our watersheds have more ephemeral gullies than any other watershed in the state. An ephemeral gully is channels that form in farmed or non-tilled fields. They can start from a wheel track and the water follows it some of them are from old intermittent streams and the water wants to go that direction. There are a number of factors that cause them to be there and how big they end up getting. Graber mentioned that once of the conclusions to his study is that these gullies can contribute to 90% of the sediment coming off of the fields. Lawrence is working on modeling to figure out where they may form and why they may be forming there. He recently went out into the fields and saw that there are a lot of gullies, the estimation of them are about 700. This helps to see what areas need work and finding out what BMPs WRAPS needs to be talking about. Another part of the study was nutrients, how much phosphorus is going out with these gullies or is it just sediment. A summarization of this study was that 50%/90% of phosphorus loss was coming from ephemeral gullies. It matches up with the previous study and there needs to be some efforts to address the ephemeral gullies within fields and keep them from forming. Graber said another study that they are just starting on is stream bank erosion, they have identified some parts on the Little Ark. Graber said that he has done a fair amount of stream bank on the Smokey and not a lot on the Little Ark. Graber said that this is all very useful information and it ties in very nicely with this project. He said that there is a fairly large need to do stream bank work. Graber went over photo examples in his presentation. He talked about the work that was done at the different sites. Graber said that there was a mention about the Corps being involved and he said that they have

been involved in the work that they are doing in the Lower Smokey and he said that they come to just about every WRAPS meeting that they have and help them. Bohm asked if there were any questions for Graber. No questions, Bohm thanked Graber.

**VI. Adjournment**

With no questions for Graber and an agenda set Bohm said that he would entertain a motion to adjourn, unknown member motioned and another unknown member seconded. Meeting ended at 10:00am.

**Stormwater Advisory Board**  
May 08, 2015

I. Welcome and Call to Order the regular meeting of the Stormwater Advisory Board. The meeting was called to order at 8:09 am on May 8th, 2015 in the W.A.T.E.R. Center by Chris Bohm (Chair).

**Present**

**Board Members**

Rich Basore  
Chris Bohm  
Hoyt Hillman  
Don Kirkland  
David Leyh  
Gary Oborny  
Joseph Pajor  
Jim Weber

**Absent**

**Board Members**

Greg Allison  
Mitch Mitchell

**City of Wichita Staff**

Jim Hardesty  
Mark Hall  
Joe Hickle  
Don Henry

**City of Wichita Staff**

Dale Goter (CMO)

**Visitors**

John Covey  
Ron Graber  
Tom Stiles  
Mike Tate  
Trisha Moore  
Katie Miller  
John McDonald  
Sandy McDonald  
Daniel Schrant  
Josh Golka

**II. Approval of Minutes**

Bohm opened the meeting by welcoming everyone to the meeting and he stated that he would like to go around the room and make introductions. Bohm advised the group that the official minutes were not available and those will be ready at the next meeting.

**III. Public Comment Period**

Bohm asked if anyone from the public would like to speak. No public comment, item closed.

**IV.K State Report**

Bohm began by saying that this is the most current version of the Off-Site BMP Program. He said that a couple of things have happened since the board has met last and that has been two months. He said

that he knows that city staff has been meeting with Alan King and how he would view the program and there were some questions that city staff had on those issues, Trisha should give the board some input in that regard today. Wichita reached out to KDHE & EPA, with the idea that if the City takes the program on and it shuts down and doesn't work is there a ramification for the city and the answer was No, they can go back to the standard practice with on-site BMPs. Operations and maintenance have been included, cash flows, program scalable for growth. With that Bohm turned over the floor over to Moore for her report. Moore took over by saying that she is going to go over the major revisions and some questions that the board had at the last meeting. Moore said that the major thing for revisions was the conversations with the city in concerns with the one-time fee it doesn't insure a sustainable cash flow and that's one of the criteria that the city needs from the program in order that they can be assured that there won't be a financial liability. The major change was an annual fee structure as opposed to a one time up front cost. The numbers were based on present value of maintenance cost and rather than doing that the cost were moved forward in time. Moore said that she and Hickie worked on many spreadsheets and through those spreadsheets they were able to come up with a nice scenario analysts to look at, you can change the variable participation rate and the fee doesn't really change. Looking at the fee structure from annual fee to a one-time fee, the reason for this is to ensure a continually revenue stream that meets the city's requirements that the program can continue to run. Moore went over her spreadsheet and showed the board different scenarios of the one-time fee structure and why it could pose problems for the city. Pajor asked conceptually if the developer ends up being the source of the funding, to the development community the question is, is there a workable mechanism if a developer chose to make a one-time payment the third party financial entity could convert that payment into a payment stream to meet the requirements of the city? Leyh answered by saying investors don't look 200 years out and the city doesn't look 200 years out if there was something used that is closer to a real life cycle or an investment life cycle that would be something that could be looked at but looking at this cycle it heavily weights a one-time payment for that right. Basore then asked Moore if she had forecast the urban BMP, Moore replied no but that there is the initial life cycle that looks over 50 years for those practices. She said that she thinks that the margin would continue to increase. This is to provide the city with assurance that this is a sustainable model. Moore went on with the spreadsheet. **(See Moore's report)** Bohm asked if the 3% escalation in cost included in this chart, Moore replied that no there is no inflation in the annual cost nor in the inspection cost. Bohm asked if this per acre fee or cost is it something that would be changed and subject to review on an annual basis. Moore replied yes, that one of the recommendations is that the city would need the flexibility to evaluate on a regular basis what needs to happen with the fee. If costs are inflating than you have to increase the fee and you can develop the bank pretty well. Hillman asked a question to Pajor asking if the city is banking the money what kind of interest rate can the city get on their money, two or three percent. Pajor replied that that is reasonable. Hickie said that the spreadsheet allows for scenarios. Oborny asked if the cost to run the city (administrative costs) built into this, Moore replied that the WRAPS costs are but the costs of the city will not be an additional administrative burden, the city will handle this with the staff it already has in place. Unknown audience member asked if it was on per acre basis, Moore said yes. Audience member asked if there was a difference on a tonnage basis vs what is being protected with an onsite residential pond, Moore said that yes the numbers are done on a sediment basis. She said that they have assumed that a residential property would produce about just over .3 tons of sediment a year and a no-till can

recoup about three tons per year. Oborny asked Moore if the magnitude was 100:1 where did the magnitude end up being on the rural vs urban, Moore said that it was 2:1. Moore said that they stayed equal but stayed 10 yrs. ahead. Bohm clarified by saying that if you saved one ton in Wichita than you are going out and getting two tons reduced in the agricultural community and Moore replied yes. Oborny said that early on the measurement was what was the trade off in measurement for the city to do it here vs the rural, he is trying to understand in the measurement side what is the trade off, Bohm then replied to Oborny to go to page ten of the report and tells him that is where the magnitude comes into play. Oborny then said that he is trying to understand where the base line came from, Moore said that the analysis was looking at a per acre basis but they scaled it to say that the agronomic practices are more cost effective and those went into developing the program life cycle costs. Moore went on to say that all of the costs are for one ton of sediment removed. Leyh asked what a projected real life replacement, Graber said 10/20% replacement would be the most if they would do, he said that if their no-till for 5 yrs. they will stay that way, same owner operator it's not going to change. Graber said that they are collecting fees each yr. and they are able to pay out but can go and find more acres to find. Moore said that those are the major changes in looking at the fee structure and the final recommendations of the report are:

Go with the annual fee – financial stability of the program

Use no-till for bench mark to get credit – Doesn't have to be no-till but this is a benchmark

Adapt a ratio - 2:1 – retaining more off-site

Review annual fee to ensure appropriate – flexibility to manage the program

Sediment tracking and reporting – Tracking sediment based on assumptions

Moore opened for discussion about report

Oborny asked what are the additional benefits might be gained by removing one ton in the rural vs urban area, Moore asked if he meant in terms of environmental benefits such as nutrient reduction, Oborny said yes. Moore said that there was a little verbiage added in the report and whether the sediment is coming from the rural or urban they get about 60% phosphorus or so and that is across the board. There tends to be more nutrients in the rural and that is why they see more potential of nitrogen, in the urban they are getting maybe ten times in town. Graber stepped in and said to think about the multiplier effect that was asked about and use that multiplier and they are getting that much more in the rural especially with a no-till. Hillman asked Pajor upstream on the Little Ark on the ASR, there are associated costs with pollutant reduction in the cleaning up in the process are there associated savings there may be some benefits there for the city. Pajor replied that that may be a regulatory question as to whether or not you can take benefits from one program and use them for another program. Oborny then said that he goes back to trying to drill down to the 2:1 ratio, the question is in the market and economics is that excessive? His thought is, is it a 1.10, 1.20 is it 10 or 20% return on something that is more in the range if feasibility. Pajor said that the number depends on the financial side with the risk of actually getting a return and some of the 2:1 is a safety factor. Oborny said that a

true analysis is needed on what the benefit is for urban vs rural, if there are additional things that are gained that needs to be part of analysis. Bohm asked if it is 2:1 no till replacement what is the bank, Moore replied that it is \$38,000 at 50% 2:1 at \$24 per acre per yr. Pajor said can you calculate a 1.1% trade and a 15% need to replace what is the calculation, \$7 and \$20,000 to start the bank. Oborny asked how do we get the fee, is it on the water bill, a special bill? Don Henry said we are not there yet, it's just a model. Bohm gave a figure and asked if that could be on the ERU, Pajor said that there would probably be an ERU tier system on the bill. It would be easiest for the customer and easiest for collection process. Bohm said that if they can agree on ratios then we would like to get this in front of KDHE, Bohm is Mr. King comfortable with this, Don Henry, yes they have been over the report and he agrees with it. Bohm asked tom stiles to come and talk about the ratios. Stiles said that it has to be 2:1, he said that it's not about who pays it's about overcoming uncertainty, what Trisha has put up its easy, to EPA it plays better to do 2:1. To start out in the pilot effort 2:1 is what it has to be maybe in the future it can be revisited, now is not the time to get to a favorable margin. Bohm asked if ICT gets this program down and other communities use it does it keep ICT from numeric standards. Stiles said yes, it's too chaotic to do that, it's the one reason that there not numbers on the permit. There is nothing like SWAB and KDHE hopes this will pick up. Stiles went on to say that he doesn't want to say that it will never happen but it would be EPA that does it. At best you are looking at a 20 yr. window, this is a strong initiative and we can make this work. Oborny said to remember that we have to sell this to the development community. Weber said that they city needs to start higher, it would be better than to start a fee of say \$12 then 5 yrs. later say that the fee was \$40, if we can get it down to 2:1 he agrees and he thinks that there is a need for a program that is equitable all the way around. Leyh, said that he appreciates the comments but his comment about the 15% earlier comes from Graber's experience, this is not a trial in coming up with that ratio it's not a new start for the farmers doing the no-till it's only being adopted for this use. Bohm posed a question to Oborny and Leyh and asked what's the number, what if its \$30 a year per acre and you do a five acre site, its \$150 a year is that a deal killer. You don't have to do anything, your engineer doesn't design water quality, you don't build anything extra. Hickle stepped in and said that the only thing contrary to that is on site that the city would require a snout to collect local trash. Stiles took the floor and talked about the uncertainty and the ratio. Henry stepped in and said that he wanted to get to a question that was asked of the city, is 15% something that the city is comfortable with the city is not married to that so if the board wants to try another number and come back to city this is something can be looked at. Weber said that his concern is not whether the numbers are right or not but that the only way to fund the bank is by this fee, so if you start too low and the expenses are too high you have to make an adjustment to the fee, the only way to ensure that you can keep the program going is to start out a fee that is high enough to do it. Bohm posed the question to the Oborny and Leyh if the board sent the numbers to the City Council, KDHE and EPA all agree and say start the program with \$40,000 in the bank and \$23 per acre per year maybe it could go on the ERU, could you sell this to the development community? Oborny replied it's a start of the conversation, they feel like they are only a small portion of the water quality issue in the Arkansas and they are helping solve an issue that even EPA hasn't been able to solve with agricultural because of the political scenario. The private community has been driving this issue for four years when it was instituted and the analysis that was done was paid for by them, so when they go back and talk they think that 2:1 is excessive. He said when they do their calculations they are losing 14 million a year in tax revenue there is already an

ERU fee in place that they pay into. Their thought process is that the cost benefit vs the benefit that the development community brings to the tax base should be off set. Bohm said that if this programs dies because a no one can agree on a ratio you are in the same boat. Oborny replied back that he can't say if he can answer if they will buy off. Bohm said that it doesn't really matter if they buy off because if city, KDHE & EPA don't sign off on this plan than no one will get to be involved. Bohm said that he is comfortable with 2:1, 50% and he thinks it is reasonable and that is where he is at as Chair and asked if someone wanted to make a motion but Graber asked to speak quickly and said that he would be comfortable with 50%. Hillman made motion to support the 50% and the 2:1 ratio approve and get the information back to Alan King. Bohm asked for motion and the motion carried 4 to 2 with Oborny and Leyh dissenting. Henry said that city staff will take the recommendation back to King, Bohm then asked if the recommendation can be sent forward with a review every two years for the rate adjustment. Henry said that there was some discussion and that an annual review is fair but how often and frequent it would be adjusted would be a separate conversation. Bohm also asked if while this was going through the approval process if the ERU fee could be a vehicle to assess the fee, Don replied yes they will have that conversation. Weber told Moore good work on her report.

#### **V. Other Business**

Weber talked about SMAB (Stormwater Management Advisory Board) and spoke about a draft report on a watershed study that they did on the Middle Branch of Chisholm Creek. There is a presentation from AMEC Foster Wheeler in Valley Center on May 19 at an open house. He went on to say that there is about 25 million dollars of improvements in Valley Center but there are segments that will benefit Wichita. The draft report will be on the Sedgwick County website. Bohm then asked about the agenda for the June 12th meeting.

- Approve minutes from last two meetings
- KDHE to provide feedback about program
- Funding of the bank

#### **VI. Adjournment**

With agenda set Bohm said that he would entertain a motion to adjourn, unknown members motioned and other members seconded. Meeting ended at 9:50am.

## Stormwater Advisory Board

June 12, 2015

I. Welcome and Call to Order the regular meeting of the Stormwater Advisory Board. The meeting was called to order at 8:02 am on June 12th, 2015 in the W.A.T.E.R. Center by Chris Bohm (Chair).

### **Present**

#### **Board Members**

Rich Basore  
Chris Bohm  
Hoyt Hillman  
David Leyh  
Mitch Mitchell  
Gary Oborny  
Joseph Pajor  
Jim Weber

### **Absent**

#### **Board Members**

Greg Allison  
Don Kirkland

### **City of Wichita Staff**

Jim Hardesty  
Mark Hall  
Joe Hickle

### **City of Wichita Staff**

Dale Goter (CMO)  
Don Henry

### **Visitors**

Ron Graber  
Daniel Schrant  
John Covey  
Tom Stiles  
Mike Tate  
Ted Francis  
Scott Lindebak

## **II. Approval of Minutes**

Bohm opened the meeting by welcoming everyone and stating that he was kicking off the meeting with the review of the March 13<sup>th</sup>, 2015 minutes. Hillman stated that there are about four places where the minutes say undecipherable and he wanted to take a minute to review those. Bohm asked Hillman to point those out. Hillman said the first one was on page 5, Graber said that it was Running Turkey Creek. Hillman made a suggestion that in the future if there are sections that are undecipherable to highlight those and send them out ahead of time. Pajor made a motion to approve the minutes pending corrections, board seconded. Motion approved.

## **III. Public Comment Period**

Bohm asked if anyone from the public would like to speak. No public comment, item closed.

## **IV. Off Site BMP Program**

Discussion began over the BMP Program, Bohm stated to the board that everyone should have received the report via email. He went on to say that the board could go over the changes or clarifications to the report. There were a few actions that needed to be reviewed.

**ACTION:**

1. Accept the KDHE required 2:1 ratio sediment credit ratio
2. Design the program with the ability to replace 100% of all no-till farm fields, if necessary, outside of the city in the Little Ark Watershed every 5 years.
3. For the Director of Public Works & Utilities to determine an annual fee per acre to participate in the program.
4. And for City staff to develop an implementation plan and formal policy statement for inclusion in the Stormwater Manual, for SWAB review, to move the program forward for City Council approval.

Bohm said that number three needs to have a caveat that it is reevaluated every X number of years. He said that he is not sure if the board needs to officially take action on these but they can go over that too. Bohm said that he was hoping that Tom could talk about KDHE's stance on what has been presented so far. Stiles took the floor and talked about the ratios. He said that the 2:1 ratio has to be at some level of certainty to the regulators whether it be KDHE or EPA that the net gain is going to be positive. He said they are pushing 2:1 initially because of the uncertainty. They would be open to revisiting after there is five years of experience with the next stormwater permit. He went on to say that he hesitates to call this a requirement but his strong recommendation that all three entities to have a unified front when going to EPA. 2:1 seems an appropriate way to get the foot in the door. Either way through WRAPS or through the stormwater program they should start seeing out puts; bank stabilization or expansion of no-till fields, gathering that information and in five years let's revisit establishing the ratio. Stiles went on to say that he strongly encourages the committee to endorse it and move forward because it is premature to argue over fine details, levels of sophistication are just not there to fight about ratios. Oborny asked what can be done to make sure they are monitoring correctly and are able to have the calculations. Stiles said that WRAPS has models assessment and ongoing monitoring at watershed levels to see what the rural practices are typically going to do. There is a fairly long level of baseline on subwatersheds, he said that there may be a lot of transfer of credits on paper that don't give a lot of data that tells what is coming out of the subwatershed and that is where the uncertainty lies. There is output tracking and that is good for KDHE and EPA. Oborny asked how to formalize this process with KDHE & EPA, is it an agreement so that there is seamless process. Bohm asked a question tagging on to Oborny's question, asking how is the money transferred to the bmp projects? Is there a slush fund? Stiles, no. Stiles said that there is a formal mechanism through the city's stormwater management program document that has annual reporting back to KDHE. KDHE will then summarize it present it to EPA. Mike Tate with KDHE then took the floor, he informed the board it was a good to write a letter to EPA about the plan, not asking permission but telling them what the plan is. Basically tell them not ask. Pajor than went back to the question on money. He said that the City of Wichita is the permit holder and through the program and the Stormwater manual that the alternative is auditable. The tracking should be not only be how many dollars go to what practices for modeling purposes but what projects would go where and when. Stiles said that signage is a good way to create transparency. Bohm asked if the 5 yr. guide is good. Stiles said that it's a good spot but wouldn't use that as a shot to look at the good done in the watershed. Hickie said the five yrs. comes from a typically contract with a farmer. Graber said that is correct and went on to explain the payment process to the farmers. Basore asked Graber to go over the WRAPS funding. Graber said that they are already tracking where the funding is going. The critical watershed is where they need to focus on, that should be on their watershed plan. With this program Graber said that Sand Creek would be the closest to Wichita and that is where the work would start. Bohm asked when the WRAPS program has to have their reports in, Graber replied by saying that he

does quarterly reports and then he has an annual report that is on a fiscal year cycle July 1<sup>st</sup> through June 30<sup>th</sup>, he asked when the MS4 permit is done. Hardesty replied calendar year. Bohm said that if the first reporting period July 1<sup>st</sup> of 2018 if the program could get off the ground the bank would have kicked in and in the WRAPS and then there would be two more years of money coming that would show up in the July 1<sup>st</sup> 2018 report, then the MS4 permit in December 2019 it would be part of that submittal. . Hardesty said that the annual report will include this yearly work. Bohm asked if it would be wise if the first evaluation of the program be in 2018 where it could be part of the July 2018 report. He said that would kick the five year cycle off and it would be six months before the MS4 permit. Pajor said that this is a good idea and said that he was glad that all of these were on the table because they all interact. In terms of reviewing the fee there is this question of 100% or something less than 100% for renewal for no-till. He said that it doesn't make any sense until the outcome is known for the first five year cycle to require a change of the participation fee. He went on to say that it doesn't seem productive that the director looking at changing fee when no one knows what really happened at the end of the first five years. He went on to say to require it to be done every five to seven years at a maximum pick a number in that range and then allow or recommend the director make adjustments sooner than that should the financial information is available to justify a change. Bohm said that he doesn't want to get lost in the context of the program, he said it would be nice to know when the first snapshots of the rates officially. If that is five years that is fine, he just thought that it would be nice that it correspond with an annual program. Weber said he didn't know why the board was trying to tie down a date, he said as a good business practice if the director sees the annual report and he sees he in trouble he will increase the rate and if everything is going well then the rate will lower. He said that putting it a five or seven year is putting a limitation on it and you want to keep things fluid. Oborny then took the floor and said that items two through four is something that additional meetings need to be on. He went on to say that action one could get done at the meeting but to get real agreement actions two through four need to have meetings with others involved. Bohm then asked Hickle to talk to the board about the 50% no-till vs 100% no-till cost. Discussion went on between Pajor and Oborny and Oborny said that there is still discussion in his industry about whether or not this is a city-public cost or is it something that the last man in continues to pay. Are we looking at water quality as a community issue or last man in pays in each time? He went on to say that there is an ERU plan and they want to make sure that that money is utilized for what it is intended to and his industry has a lot of questions. Bohm said that in his mind that the math from one and two make three, the board knows the cost. The 2:1 credit ratio was decided on last month and KDHE said that they are comfortable with that. 50% stays in no till, Bohm said that personally he doesn't like the 100% no-till and he thinks that there is enough historical data from WRAPS in even the worst case, he went on to say that he doesn't think there is a need to double up on the no-till. Hickle then took the floor. He went over his spreadsheet with the board and choose different cost scenarios for examples. Bohm asked if Mr. King was comfortable with the spreadsheet as it is right now, Pajor said that Mr. King has been engaged with Stormwater Staff and he is comfortable with it. The board went back over the action items hearing opinions from the members, Oborny gave his opinion and said that with the development community there are many people that have the opinion that they shouldn't be paying anything for this. He went on to say that bullet number five is missing and that is support by the constituent industry that is going to be paying for it for the most part. He said that he is trying to be transparent. He said that this something that is going to have workshops so that they understand it or they will go to the council about it. Pajor said that there are representatives on the board that represent industries and when it is said that items two through beyond need more work to make it productive, he is fine making a motion that two through four be put on the table for 60 days and next meeting in two months. Bohm said to hold the motion for a moment and for the SWAB members to figure out how to engage with CCIM, invite them all to Cowtown or something and discuss? Pajor said to plan on three meetings and if two is needed then that would be fine. Discussion went on

between the board members about topics for the meeting agenda for the constituents. Weber asked for the motion again that Pajor brought up earlier so the board could vote. Pajor gave the motion again, it was, recommendation that action item number one be incorporated into the stormwater program which is the 2:1 sediment ratio for the off-site alternative to the on-site water quality BMPs, put action items 2, 3, 4 table those items and reconvening on September 11<sup>th</sup> and have up to three meetings with interested industry participants. Bohm asked if there was any discussion about the motion and Leyh said that the 2:1 ratio needs to be reviewed in five years or so. Pajor amended his motion to include the 2:1 has to be documented and the ratio needs to be reviewed after five years for its effectiveness. After the amendment the motion passed by the board. The board went on to write down what they would like the agenda to look like for the additional meetings, the board worked out the agenda. The board also settled on the first date of Wednesday, July 29<sup>th</sup> from 3p-5pm, the location was not decided on at this meeting. The other two meetings dates were tentatively scheduled for August 12<sup>th</sup> & August 26<sup>th</sup>. Weber wanted to make clarification that there would be no meeting in July and Bohm said that there would be no formal meeting until September but Bohm said that he would like everyone at the July 29<sup>th</sup> meeting.

#### **V. Adjournment**

Bohm made a motion to adjourn after the date discussion and several members of the board seconded. Meeting ended at 9:44am.



Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

January 9, 2015

8:00am – 10:00am

**W.A.T.E.R Center**

### Agenda

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|-----------------|--------------------------------------------------------------------------|
| <b>8:00 am</b>  | <b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>               |
| <b>8:01 am</b>  | <b>Review Minutes from November 2014</b>                                 |
| <b>8:02 am</b>  | <b>Public Comment Period</b>                                             |
| <b>8:10 am</b>  | <b>K State Preliminary Report Review &amp; Discussion – Trisha Moore</b> |
| <b>9:10 am</b>  | <b>On Going Discussion on Finance &amp; Goals for 2015</b>               |
| <b>9:45 am</b>  | <b>Other Business/Review 2015 Meeting Dates</b>                          |
| <b>10:00 am</b> | <b>Adjournment</b>                                                       |
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Please direct questions, comments, and/or suggestions related to improving this meeting to:  
Alan King, Director of Public Works & Utilities at 316-268-4422 or by email at [aking@wichita.gov](mailto:aking@wichita.gov)



Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

March 13, 2015

8:00am – 10:00am

**W.A.T.E.R Center**

### Agenda

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|-----------------|-----------------------------------------------------------------------------|
| <b>8:00 am</b>  | <b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>                  |
| <b>8:01 am</b>  | <b>Review Minutes from November 2014 &amp; January 9<sup>th</sup>, 2015</b> |
| <b>8:02 am</b>  | <b>Public Comment Period</b>                                                |
| <b>8:10 am</b>  | <b>K State Report Review &amp; Discussion – Trisha Moore</b>                |
| <b>9:00 am</b>  | <b>Review of Cowskin &amp; Local WRAPS Concerns - Ron Graber</b>            |
| <b>9:45 am</b>  | <b>Other Business</b>                                                       |
| <b>10:00 am</b> | <b>Adjournment</b>                                                          |
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Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

May 8, 2015

8:00am – 10:00am

**W.A.T.E.R Center**

### Agenda

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<b>8:00 am</b>	<b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>
<b>8:01 am</b>	<b>Review Minutes from February 13, 2015</b>
<b>8:02 am</b>	<b>Public Comment Period</b>
<b>8:10 am</b>	<b>K State Report Review &amp; Discussion – Trisha Moore</b>
<b>9:45 am</b>	<b>Other Business</b>
<b>10:00 am</b>	<b>Adjournment</b>

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Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

June 12, 2015

8:00am – 10:00am

**W.A.T.E.R Center**

### Agenda

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|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>8:00 am</b>  | <b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>                                                                                                                                            |
| <b>8:01 am</b>  | <b>Review Minutes from March 13, 2015</b>                                                                                                                                                             |
| <b>8:02 am</b>  | <b>Public Comment Period</b>                                                                                                                                                                          |
| <b>8:10 am</b>  | <b>Offsite BMP Program</b>                                                                                                                                                                            |
|                 | <b><i>ACTION:</i> Accept the KSU technical report as presented.</b>                                                                                                                                   |
|                 | <b><i>ACTION:</i> 1 Accept the KDHE required 2/1 sediment ratio</b>                                                                                                                                   |
|                 | <b>2 Accept the program as designed with the ability to replace 100% of all no-till fields, if necessary, every five years</b>                                                                        |
|                 | <b>3 For the Director of Public Works &amp; Utilities to determine an annual fee per acre to participate in the program</b>                                                                           |
|                 | <b>4 For City staff to develop an implementation plan and formal policy statement for inclusion in the Stormwater Manual, for SWAB review, to move the program forward for City Council approval.</b> |
| <b>9:45 am</b>  | <b>Other Business</b>                                                                                                                                                                                 |
| <b>10:00 am</b> | <b>Adjournment</b>                                                                                                                                                                                    |
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Please direct questions, comments, and/or suggestions related to improving this meeting to:  
Alan King, Director of Public Works & Utilities at 316-268-4422 or by email at [aking@wichita.gov](mailto:aking@wichita.gov)



Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

September 11, 2015

8:00am – 10:00am

**W.A.T.E.R. Center**

### Agenda

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|----------------|----------------------------------------------------------------------------------------------|
| <b>8:00 am</b> | <b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>                                   |
| <b>8:01 am</b> | <b>Review Minutes from May 8th &amp; June 12th, 2015</b>                                     |
| <b>8:02 am</b> | <b>Public Comment Period</b>                                                                 |
| <b>8:10 am</b> | <b>Offsite BMP Program</b>                                                                   |
|                | <b><i>ACTION 1:</i> Review final summary of BMP Program (See Attached)</b>                   |
|                | <b><i>ACTION 2:</i> Approve recommendation to send program to Alan King for his approval</b> |
| <b>9:15 am</b> | <b>Other Business</b>                                                                        |
| <b>9:30 am</b> | <b>Adjournment</b>                                                                           |
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Please direct questions, comments, and/or suggestions related to improving this meeting to:  
Alan King, Director of Public Works & Utilities at 316-268-4422 or by email at [aking@wichita.gov](mailto:aking@wichita.gov)



Public Works & Utilities Department  
Stormwater Management Division

## Stormwater Advisory Board (SWAB)

### Special Meeting

September 30, 2015

8:00am – 10:00am

**W.A.T.E.R. Center**

#### Agenda

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|----------------|------------------------------------------------------------------------------------------------------------------------|
| <b>8:00 am</b> | <b>Welcome and Call to Order – Chris Bohm – SWAB Chair</b>                                                             |
| <b>8:01 am</b> | <b>Swearing in of SWAB Members</b>                                                                                     |
| <b>8:10 am</b> | <b>Review/Approve Recommendations of Offsite BMP Program Framework, and vote to move the item forward to Alan King</b> |

#### Adjournment

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**Project Title: Consultant Services for an Offsite BMP Evaluation Plan**

Final Report to the Wichita Stormwater Advisory Board  
June 11<sup>th</sup>, 2015

Report Prepared by Kansas State (Trisha Moore, Ron Graber, Kelsey McDonough, and Jacob Zortman) and Vireo (Scott Schulte and Patti Banks)

## Executive Summary

The purpose of this report is to document an implementation framework to establish an offsite BMP program. The goal of an offsite BMP program is to (1) maximize the economic efficiency by which the City of Wichita meets its National Pollutant Discharge Elimination System (NPDES) stormwater permitting requirements while (2) improving water quality in the Little Ark, Arkansas, and/or other priority streams for which total maximum daily loads (TMDLs) have been established. Sediment is the primary pollutant of concern in these watersheds, and therefore serves as the basis for the recommended structure and funding of an offsite program. Additional criteria posed by the City for this program include (1) *the program is self-sustaining and does not impose a cost-burden to the City* and (2) *the program satisfies all regulatory expectations and does not incur additional regulatory or financial liability*. The organization of this report follows the four primary tasks identified by the project team needed to provide the City with the desired program framework. Major findings associated with each of these tasks are highlighted in the following summary.

*Task 1: Identify alternative City practices with potential to serve as offsite stormwater BMPs.* The project team met with the City's stormwater program managers to discuss current stormwater management and to identify practices or programs that could be expanded to an offsite BMP program. While the City manages multiple programs to improve stormwater quality (e.g., street cleaning, storm sewer and regional outfall cleanout, and streambank stabilization projects) these programs are largely covered under the City's existing Municipal Separate Storm Sewer System (MS4) permit, and thus, are not likely to be recognized as alternative offsite practices from a regulatory standpoint.

*Task 2: Evaluate cost effectiveness of internal versus external managed program.* Whole life cycle costs of onsite and offsite water quality BMPs were evaluated to demonstrate the cost effectiveness of offsite (i.e., rural/agricultural) versus onsite (i.e., urban) BMPs from a sediment removal standpoint. The results of this analysis indicated that BMPs implemented in a rural setting are *extremely likely* to be more cost effective (we estimate by 2 to 3 orders of magnitude) for sediment removal than BMPs implemented within the City of Wichita. To capitalize on this cost benefit, the project team recommends an externally managed program by WRAPS (Watershed Restoration and Protection Strategy) or a similar watershed-based entity. The Little Arkansas WRAPS program is specifically recommended in order to leverage the social capital developed between the Little Ark WRAPS and rural landowners in the watershed as well as the program's existing infrastructure to prioritize, incentivize, and distribute payments for BMP implementation.

*Task 3: Develop framework and tools for implementation of an offsite BMP program.* Following the results of the economic analysis under Task 2, a framework for an offsite BMP program in which the City partners with WRAPS to administer the program is presented. Key program elements for which WRAPS would be responsible include: identifying and prioritizing BMP implantation sites, engaging potential offsite program participants, distributing payments to offsite program participants, tracking sediment credits supplied by offsite BMPs and replacing BMPs as needed to ensure continued supply of sediment credits. Other key programmatic elements of an offsite program for which recommendations were developed include (1) setting a common program "currency" (tons of sediment); (2) setting an offsite-to-onsite sediment credit ratio that is favorable from a regulatory standpoint of 2:1; (3) adopting a transparent method by which to set payment rates for participation in the offsite program based upon

whole life-cycle *program* costs for implementation of what is expected to be the most typical offsite BMP(s) implemented under the program (conversion to no-till); and (4) adopting an administrative structure that utilizes existing frameworks within the City to permit stormwater projects associated with new/redevelopment and within WRAPS for tracking offsite BMP implementation, maintenance, and expenditures. Based on discussion with members of the SWAB, a 10-year reserve of sediment credits is recommended to assure a sufficient supply of readily available sediment credits and to avoid interruption in development activities. To adequately front-load the program, a sediment credit “bank” would be established in Year 0 of the program with funds sufficient to finance a 10-year supply of sediment credits by Year 1 of the program. These funds would be transferred to WRAPS (or similar external entity), which would then be responsible for spending these funds on targeted water quality BMP projects as needed to accumulate the required 10-year supply of sediment credits prior to making the option for offsite BMP implementation available to new and redevelopments in Year 1. **To ensure that the program is financially sustainable, an annual fee structure is preferred. A spreadsheet tool has been developed and provided to the City of Wichita to determine appropriate annual fees for a specified set of program assumptions. The project team recommends that the City evaluate the fee structure on a regular basis and adjust as necessary.**

*Task 4: Develop program funding options.* As indicated in under Task 3, a source (or sources) of funding are needed both for the initial start-up of the program as well as ongoing funding to the program. A suite of potential funding mechanisms by which the life cycle costs associated with an offsite BMP implementation program could be financed are presented for consideration. These include funding mechanisms that specifically target developers (via a capital charge or impact fee), owners of the properties for which runoff quality is mitigated offsite (via a system development charge or special assessment fee), and/or all Wichita citizens (via the City’s stormwater utility fee, property taxes, or a dedicated local sales tax). Based on precedent set by other offsite water quality programs and assessment of the primary benefactors of the program, the most feasible of these mechanisms include the capital charge and system development charges or impact fees to the developer and/or property owner.

## Project objectives

The overall goal of this project is to document an implementation framework to establish an offsite BMP program by which to (1) maximize the economic efficiency by which the City of Wichita meets its NPDES stormwater permitting requirements while (2) improving water quality in the Little Ark and Arkansas Rivers. Since sediment is the primary pollutant of concern in the TMDL watersheds listed in the City's MS4 permit (KDHE, 2014), the program will be based on sediment removal. In addition to these criteria, the City of Wichita requires that the program is constructed and operated such that (1) it is permanent in nature and, related to this, (2) will not leave the City with future liabilities. The framework presented attempts to address each of these requirements by accounting for the true cost of offsite BMPs – including perpetual operations, maintenance and eventual replacement costs – in the life cycle analysis using best available estimates of future inflation to develop a funding framework that will ensure the financial permanence of the program. The program structure has been developed in concert with guidance from the Kansas Department of Environment and Health (KDHE) to address concerns of future liabilities and ensure that the program is indeed contributing to the greater watershed water quality goals. The following tasks were proposed to develop an offsite BMP program that is both environmentally and financially feasible:

- Task 1: Identify alternative City practices with potential to serve as offsite stormwater BMPs. The goal of this task is to inventory practices and programs within the City with the potential to impact stormwater quality and identify those that could be considered as offsite BMPs.
- Task 2: Evaluate cost effectiveness of internal versus external managed program. Under this task, costs associated with a program managed either internally by the City or externally by another entity will be quantified and compared. Sediment has been identified as the primary pollutant of interest; therefore, life cycle costs of various water quality BMPs will be normalized against potential sediment removal benefits.
- Task 3: Develop framework and tools for implementation of an offsite BMP program. An implementation framework will be developed for an offsite program administered either by the City or an external entity (i.e., WRAPS), depending upon which of these program management options is determined to be most economically effective through Task 2.
- Task 4: Develop program funding options. Results from life cycle cost analysis to be completed under Task 2 (and will include “cradle-to-grave” capital costs, expected maintenance, and replacement costs) will be used to establish funding requirements for offsite BMP projects. Drawing on expertise from project partners including Vireo, a suite of potential funding mechanisms by which these costs could be covered will be developed and presented to the City.

The following report is organized according to each of these proposed tasks, in which results and recommendations associated with each task are presented.

## Task 1: Identify alternative City practices with potential to serve as offsite stormwater BMPs.

Toward completing this task, members of the project team consulted with City of Wichita stormwater staff for a briefing of the City's stormwater program and to identify pertinent documents for review. The purpose of this review was to identify practices and programs within the City with the potential to impact

stormwater quality and identify those that could be considered as offsite BMPs. Key document reviewed included the City’s Municipal Separated Storm Sewer System (MS4) permit, approved in July 2014 by the Kansas Department of Health and Environment (KDHE) and the City’s Stormwater Management Plan, updated and approved as part of the MS4 permit requirements. This permit outlines practices and programs currently practiced by the City to meet stormwater discharge quality obligations. The City’s stormwater programs and practices, their implementation status with respect to the NPDES MS4 permit, and potential for expansion as an offsite program are summarized in Table 1.

**Table 1.** Summary of City of Wichita stormwater programs and practices and potential for expansion in offsite program.

Stormwater control measure	Description	Potential to serve as offsite program
Streambank stabilization projects	The City has stabilized numerous degrading stream reaches, most notably Gypsum Creek and Edgemore Park. “No mow” buffer ordinances have also been implemented to reduce streambank erosion	<b>Low:</b> while stream stabilization and/or restoration projects may reduce sediment loadings substantially, such efforts are counted under Section 1.E. (concerning control of TMDL Regulated Pollutants) in the MS4 permit.
Storm sewer pipe and catchbasin cleanout	As part of regular maintenance, the City removes sediment from the storm sewer system. A high powered “water saw” was recently purchased to facilitate pipe and culvert cleanout.	<b>Low:</b> permit requires <i>at least</i> 30,000 catchbasin cleanouts per year as part of six minimum control measures. Sediment removal via this program is documented and reported to KDHE.
Meridian Outfall	Recently constructed, this 8’ x 10’ outfall drains approx. 600 acres. Construction cost was \$600k-700k; frequency of cleaning to be determined. Life cycle costs and potential sediment removal estimates can be refined as the City gains operating experience.	<b>Low-Medium:</b> “Regional” outfalls such as this could be considered out side of required catchbasin cleaning; however, may be considered under section 1.E. of MS4 permit.
Street Sweeping	Also part of regular “housekeeping”, the City conducts street sweeping over 25,283 land miles to remove over 10,000 tons of sediment annually.	<b>Low:</b> Street sweeping is also identified as a required best practice under the City’s current MS4 permit.

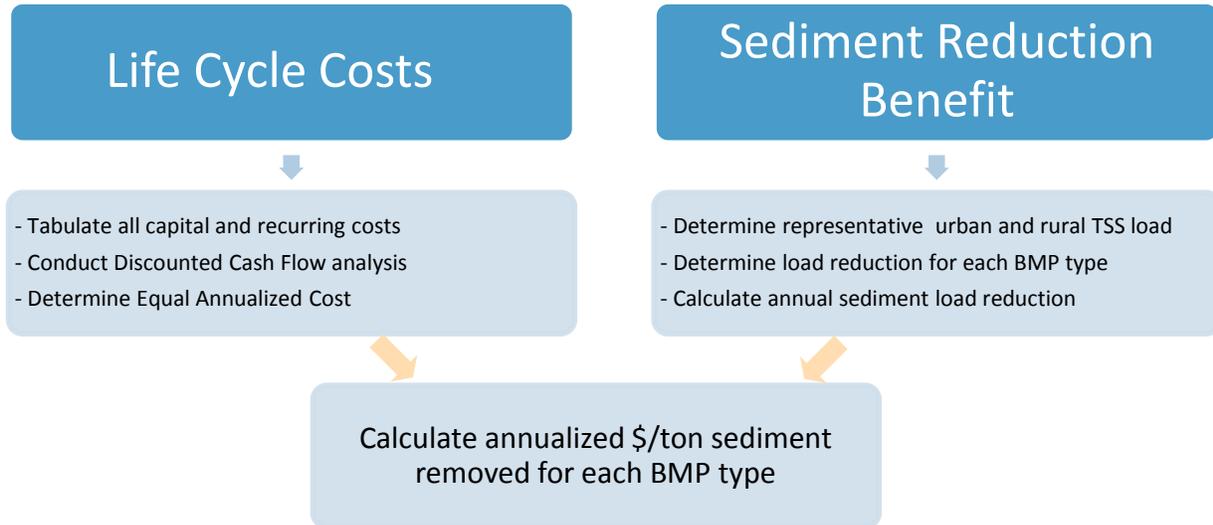
The goal of this task was to explore the possibility of building upon established stormwater programs that could be used in lieu of implementing BMPs at the site of new and redevelopment as required under section C.1. of the MS4 permit. Such a program could be considered a low hanging fruit; however, as

indicated by the status of each program reviewed in Table 1, these programs are considered to fall within the purview of the City's MS4 permit; that is, the City is expected to continue implementing these programs and would not receive additional credit for expanding these efforts (e.g., cleaning more than 30,000 catch basins per year). Therefore, based on discussions with the City of Wichita's stormwater staff and review of pertinent documents, it is unlikely that any of the City's existing water quality efforts could be expanded to as an offsite program under the language of the current MS4 NPDES permit.

## Task 2: Evaluate cost effectiveness of internal versus external managed program.

The primary objective of this task was to quantify costs associated with a program managed either internally by the City or externally by another entity. Established Watershed Restoration and Protection Strategy (WRAPS) programs were the primary entities considered for the external management option, with a specific focus on the Little Arkansas and River City WRAPS programs within which the City of Wichita lies. Rational for focusing on existing WRAPS programs for the management of the offsite BMP option included: (1) agricultural landscapes are a large source of the sediment and other pollutants contributing to the Little Ark, Cowskin Creek and Arkansas River TMDLs listed in the City's MS4 permit, (2) there exists large potential for more cost-effective BMP implementation relative to urban areas of the watershed (Roe et al., 2013), (3) WRAPS has an established process for working with landowners to implement and finance water quality BMPs and (4) analogous efforts to reduce atrazine transport from the rural landscape to the City of Wichita through WRAPS-facilitated implementation of agricultural BMPs have proven successful (Devlin et al., 2011).

Two sub-objectives were associated with this task (Figure 1). First, a cost-benefit analysis comparing onsite (representing a City-managed program with implementation of urban BMPs) and offsite (representing an externally managed WRAPS program and implementation of rural BMPs) BMPs was conducted. The cost-benefit analysis for both onsite and offsite BMPs considered the cost to construct, maintain, and replace BMPs. The specific types of BMPs for which life-cycle analyses were conducted are listed in Table 2. Second, estimates of sediment removal by each BMP type were obtained from the literature. Whenever possible, monitoring and or modeling data specific to Wichita and/or South Central Kansas was used. For each BMP type, annualized costs per ton sediment removed were calculated. Methods for calculating life cycle costs and annual sediment removal potential for each BMP type are summarized in the following sections. A more detailed account of relevant assumptions and line-item costs is provided in Appendices A and B for onsite and offsite BMPs, respectively.



**Figure 1.** General method applied to calculate life cycle cost-benefits of onsite (urban) and offsite (rural) BMPs

**Table 2.** Onsite and offsite BMPs to be considered for cost-benefit analysis.

<i>Onsite BMPs</i>	<i>Offsite BMPs</i>
Bioretention/raingarden	Streambank stabilization
Extended detention basins	Wetland restoration
Water quality swale	Permanent vegetation
Pervious pavement	Terrace-waterway system
Hydrodynamic separator	No-till cropping practice
Grass filter strips	Grass filter strips
Riparian setbacks	Riparian buffers

## 2.1 Life cycle costing models

**2.1.1 Life cycle cost estimates** associated with onsite BMPs (assumed to be located in urban areas) and offsite BMPs (assumed to be located in rural areas) were tabulated and compared on the basis of the net present value (NPV) of each BMP type over the BMPs life span (assumed equal 25 years). In essence, the NPV provides an estimate of the amount of money that would need to be spent in the present time to cover all expected future costs as they arise through the operation of a BMP. The NPV is a function of the capital expenditures, maintenance costs, administrative/overhead, discount rate, and design life. A description of each of these components and their application to the onsite versus offsite BMP cost analysis is provided in Table 3.

**Table 3.** Net Present Value components.

NPV component	Description
<b>Capital Expenditures</b>	Includes all one-time costs, such as engineering design and project management, permitting and construction inspection, and the cost of construction materials, equipment operation, and labor. Land opportunity costs are also considered.
<b>Maintenance costs</b>	Includes on-going costs associated with operations and maintenance of BMP facilities, and include the costs of materials and labor. Maintenance costs are assumed to be incurred on an annual basis.
<b>Program administrative costs</b>	Includes additional costs to administer an offsite program managed either internally by the City or externally by another entity. These costs would cover additional need for tracking, verifying and reporting BMP implementation. In either case, administrative costs are assumed equal to 30% of the total BMP implementation cost.
<b>Discount rate</b>	Interest rate used in discounted cash flow analysis to determine present value of future cash flows. Rate considers time value of money as well as uncertainty in future cash flows (greater uncertainty reflected by higher discount rate). A 5% discount rate was assumed for onsite BMPs (NCHRP, 2014), in line with the interest rate charged by the federal reserve on loans to institutions borrowing money from it, and assumed to be passed on to private developers. Per the standard practice in agricultural economics, the federal discount rate for water quality projects of 3.75% (USDA-NRCS, 2013) was assumed for offsite BMPs.
<b>Design life</b>	A 25-year period was assumed following the typical design life span assumed for stormwater BMPs.

Life cycle cost estimates for urban BMPs were developed based on construction, maintenance, and administrative costs compiled by the National Cooperative Highway Research Program (NCHRP, 2014), and are detailed in Appendix A. Similarly, cost estimates for the construction and maintenance of offsite BMPs were assembled based on documented costs of various water quality BMPs implemented in northeast and southcentral Kansas (Smith et al., 2011; Devlin et al., 2003; Roe et al., 2013). Details regarding cost assumptions for offsite BMPs are documented in Appendix B. For consistency among BMP comparisons, capital and recurring costs were calculated based on BMP design specifications as required to treat a 1-acre watershed, assumed 100% impervious for onsite (urban) BMPs and 100% cropland for offsite (rural) BMPs. Design specifications for onsite BMPs were taken from the APWA-MARC BMP design manual (2012) while NRCS design specifications were referenced for offsite water quality BMPs.

As noted in Table 3, land opportunity costs were taken into consideration to account for revenue forgone by dedicating land to water quality BMPs. This foregone opportunity may be manifested as a loss of

development profit in urban areas, or to loss of rental or production revenue in rural areas. Though they vary widely across time and space, land opportunity costs are an important consideration as they may substantially increase life cycle costs of water quality BMPs implemented in both urban (e.g., Wossink and Hunt, 2003) and rural (e.g., Smith, 2011) settings. Opportunity costs were estimated separately for onsite (assumed to be located in urban areas) and offsite (assumed to be located in rural areas) based on their respective land values. Urban land values were separated into both commercial and residential land uses. The opportunity costs associated with these land uses was estimated as \$30,000 and \$95,000 per acre, respectively (J. Hickle, personal communication). The opportunity cost associated with allocating rural lands for water quality BMPs is typically equated with land rental rates. As a proxy, county-level rental rates for non-irrigated cropland were obtained from the Kansas State Economics Department (Taylor and Dhuyvetter, 2014) for counties within the Little Arkansas River watershed: McPherson (\$91.80 per acre), Harvey (\$90.50 per acre), and Sedgewick (\$76.10 per acre).

**2.1.2 Sediment reduction benefits** associated with each of the BMPs listed in Table 2 were estimated using available literature estimates for the Little Arkansas River physiographic region. Influent sediment concentrations delivered to onsite (urban) BMPs were assumed equal to the sediment concentration typical of roadways and parking lots (140 mg/L) as based on an extensive review of stormwater quality data contained within the International Stormwater BMP Database conducted by NCHRP (2014). This concentration is believed to be appropriate for conditions in Wichita based on additional analysis of the City's wet weather sampling data, the average concentration of which was 149 mg/L across 12 sampling stations. A water quality BMP performance tool developed by the NCHRP was used to predict the average sediment load associated with a median runoff concentration of 140 mg/L based on historical precipitation data recorded at the Wichita Mid-Continent Airport. The average annual precipitation depth at this station was 30.2 inches. Assuming a runoff coefficient of 0.9 from an impervious watershed, an annual sediment load of 850 lbs sediment per acre per year was calculated (equivalent to 0.4 tons/acre/year). For offsite BMPs, an annual sediment load from cropland in the region was estimated as 4.5 tons per acre per year based on monitoring and modeling data (Mankin et al., 2007; Douglas-Mankin et al., 2013). Sediment removal potential by each BMP was estimated using the BMP water quality performance tool developed by NCHRP for Wichita precipitation data for onsite BMPs and through literature values (documented in Appendix B) for offsite BMPs.

## **2.2 Results: Cost effectiveness of sediment removal for onsite and offsite BMPs**

Life cycle costs associated with each BMP were annualized based on the assumptions stated in the previous section. These costs were then normalized according to annual sediment reduction potential of the BMP. Resulting cost effectiveness per ton sediment removed for onsite and offsite BMPs are summarized in Table 4. As indicated by the results of the life-cycle cost benefit analysis, runoff sediment reductions are likely to be significantly more cost effective via BMPs implemented in offsite, rural areas than via BMPs implemented onsite in new and re-urban developments. There are multiple reasons for this cost differential, but perhaps the most outstanding is the stark difference in sediment loads delivered from urban (median runoff concentration assumed equal to 130 mg/l) versus rural (median runoff concentration assumed equal to 4,500 mg/l) landscapes. Land opportunity costs are also likely to be higher in urban settings. Costs associated with project management and engineering design also tended to be higher for onsite BMPs.

**Table 4.** Comparison of annualized life cycle costs associated with onsite and offsite BMPs, expressed per ton sediment removed per acre watershed area.

<b>\$ / ton sediment removed / (impervious) acre treated / year</b>		
<b><i>Onsite BMPs</i></b>	Residential	Commercial
Bioretention/raingarden	\$7,240	\$9,160
Extended detention basin	\$18,080	\$18,600
Water quality swale	\$8,660	\$9,060
Pervious pavement	\$22,800	\$22,800
Hydrodynamic separator	\$16,060	\$16,060
Grass filter strips	\$3,020	\$9,060
Riparian setbacks	\$4,800	\$10,760
<b><i>Offsite BMPs</i></b>	Rural (Cropland)	
Grass filter strips	\$4.83	
Streambank stabilization	\$2.58	
Permanent vegetation	\$35.29	
Wetland restoration	\$11.93	
Terrace-waterway system	\$8.97	
Riparian buffers (forested)	\$14.61	
No-till cropping practice	\$8.99	

It should be noted that the costs associated with urban BMPs are likely conservative (high) since all design and construction activities were calculated as though the BMPs were stand-alone features rather than part of a larger development. In actuality some activities would be performed and costs incurred by the development regardless of BBMP requirements, including mobilization, clearing and grubbing, mass grading and excavation, and basic landscape establishment. Other costs such as fine grading would be required for the BMPs and are not included in the estimate. In addition, estimating the costs of single, stand-alone urban BMPs discounts the capital and operations and maintenance economies of scale that may be realized on larger development projects where multiple BMPs would be constructed and maintained. However, many smaller commercial, industrial or even residential projects could conceivably require small, stand-alone BMPs, so the standard of comparison is valid, although again somewhat conservative. The City is currently conducting a survey of developers who have been required to implement onsite water quality BMPs as part of the City's MS4 program. Among the objectives of this survey is to quantify the costs of onsite stormwater quality treatment incurred by developers. When completed, the results of this survey could be used to better quantify the net buy-up associated with installing water quality BMPs onsite versus developing the land for other uses.

### 2.3 Application of unit life cycle costs to assess program feasibility

Life cycle costs presented in Table 2 represent the unit sediment removal cost per impervious acre runoff treated. While convenient for comparing sediment removal costs in common terms, further consideration of the scale at which these BMPs are typically implemented is necessary to gain greater insight to the feasibility of an offsite BMP program. For instance, minimum acceptable project sizes may determine the feasibility to implement offsite BMPs such as streambank stabilization or conversion to no-till.

Conversely, on-site development may meet water quality requirements with relatively little additional cost, particularly in the case of large developments for which stormwater peak rate control is required.

Equally important to assessing program feasibility is a consideration of the demand and supply of credits for sediment load reductions. Issues of scale and supply-demand are addressed in the following sections.

**2.3.1 Demand for sediment credits.** To assess the potential demand for offsite water quality BMPs, it is useful to frame the analysis in terms of an annual sediment budget. On average, the City of Wichita expects to develop or redevelop 600 acres per year, half of which can be assumed to be dedicated to commercial land uses while the other half for residential.<sup>1</sup> Assuming a typical event mean sediment concentration of 140 mg/l, which is equivalent to about 0.6 tons per million gallons (MG), annual sediment load associated with projected new and redevelopment can be estimated as 190 tons (Table 6). Assuming a credit ratio between 2 and 3 were adopted, new and redevelopment in Wichita would create demand for up to 380 to 570 tons of sediment removal in the watershed per year.

**Table 5.** Estimated sediment load, as estimated by total suspended sediment (TSS) concentrations in runoff, generated by new and re-development projects within the City of Wichita.

Land use	Impervious area (%)	Annual runoff (MG/ac/yr) <sup>a</sup>	Median TSS conc. (tons/MG)	Total sediment load (tons/ac/yr)
Commercial	85	0.72	0.6 <sup>b</sup>	0.43
Residential	35	0.37	0.6 <sup>b</sup>	0.22
<b>Average onsite sediment generation.....</b>				<b>0.32 tons/ac/yr</b>

<sup>a</sup>Calculated assuming a runoff coefficient of C = 0.88 for commercial land uses and C = 45 for residential land uses, corresponding to assumed impervious surface cover and Type B soils.

<sup>b</sup>Median sediment concentration estimated from NCHRP (2014) and City of Wichita stormwater monitoring program data.

The calculations presented in Table 5 assume that all new and re-development projects would be interested in participating in the offsite BMP implementation program. However, this may not be the case, particularly for large developments in which the incremental costs to meet water quality requirements is not that much greater than the cost to provide required hydraulic control – requisite even if the development participates in the offsite program. In Wichita, the most common method of meeting both stormwater detention and quality requirements onsite is through wet detention basins, particularly for

<sup>1</sup> Projected development rate of 600 acres per year recommended by Wichita Stormwater Advisory Board members, Jan. 9<sup>th</sup>, 2015.

larger residential developments. Incremental costs associated with meeting hydraulic and water quality requirements are presented in the following section and detailed are within Appendix A.

**2.3.2 Supply of offsite sediment credits.** Along with the supply of sediment credits that could be provided by offsite BMPs, it is also important to consider the scale at which offsite BMPs are typically implemented. Such a consideration is needed to better understand which BMPs are most feasible given the expected demand for sediment credits generated by new and re-development in the City of Wichita and the cost to supply required sediment credits for BMPs implemented at realistic scales. Typical implementation areas for a single offsite BMP installation are presented in Table 6, along with the net present value (NPV) of all present and future costs and annual sediment reductions supplied by the BMP throughout its lifetime. The ratio of sediment reduction credits supplied by each offsite BMP to the expected demand from the City (584 tons/year assuming a 2:1 credit ratio) is presented in the final column of the table. For those BMP types with ratios less than 1 (e.g., riparian buffers), either multiple projects of this BMP type would likely be required each year and/or this BMP would be part of a suite of other water quality BMPs with ratios greater than 1. If BMPs with ratios greater than 1 are the primary type of BMP implemented as part of an offsite program, then offsite projects may not necessarily be implemented every year but, rather, on a schedule as needed to maintain an acceptable balance of sediment reduction credits to supply future demand from new and re-development. Examples of the cash flows needed to balance sediment supply and demand for no-till and streambank stabilization are provided in Table 9 under Task 3 as well as Tables D.1-D.3 in Appendix D.

**Table 6.** Net present value of life-cycle (25-yr) costs for potential offsite BMPs. If incorporated in an offsite BMP implementation program, the NPV provides an estimate of the required payment up front to cover both present capital and future recurring costs. The typical scale of BMPs implemented in the Little Ark was determined from experience in the Little Ark WRAPS program (Schlender and Graber, personal communication). Line-item capital and maintenance costs associated with each BMP type are documented in Appendix B.

BMP type	NPV (\$/ac treated)	Sediment capture (t/ac/yr)	Typical scale (ac)	Total cost	Total sed. removed (t/yr)	Ratio: onsite sed to offsite removal <sup>a</sup>
No-till cropping practice	\$635	3.2	430	\$273,050	1,376	3.6
Grass filter strips (contour)	\$2,547	32	35	\$89,145	1,120	3.2
Terrace-waterway system	\$2,660	18	400	\$1,064,000	7,200	18.8
Permanent vegetation <sup>b</sup>	\$2,443	4.2	100	\$244,300	420	1
Riparian buffers (forested)	\$2649	11	10	\$26,490	110	.28
Streambank stabilization	\$56,119	590	3	\$168,357	1,770	4.6

<sup>a</sup>Assumes 384 tons sediment is generated from onsite new and re-development in Wichita per year. See Table 5 for calculation.

<sup>b</sup>Note that “permanent vegetation” is assumed implemented on a contract basis (the most favorable among landowners in the surrounding area) rather than a permanent easement.

<sup>c</sup>costs estimated from experience with Lenexa’s Rain to Recreation program.

## 2.4 Potential for additional environmental benefits

While sediment is the primary water quality concern in TMDL watersheds within and surrounding the City of Wichita and will serve as the basis for fees to participate in the offsite BMP program, the offsite BMPs considered in Table 6 are likely to provide environmental benefits in addition to sediment retention (Table 7). Some of these additional benefits, particularly hydrologic regulation, may even be synergistic with sediment reduction. For instance, practices that enhance infiltration or otherwise attenuate hydrologic discharges entering streams can also contribute to reduced streambank erosion (Tomer et al, 2011). Land management practices such as no-till adoption, cover crops, and vegetative filter strips and buffers are known to enhance nutrient retention and cycling, carbon sequestration, and provide wildlife habitat. Approaches such as streambank stabilization are likely to reduce sediment and associated phosphorus, but is less likely to provide a greater suite of environmental benefits.

**Table 7. Environmental benefits associated with offsite BMPs. Green plus sign indicates benefit is enhanced by the BMP, red O indicates the benefit is likely neutral.**

Environmental Benefit	No-till	Cover crop/rotation	Terrace-waterway	Grass filter strips	Permanent vegetation	Riparian buffer	Stream bank stabilization
Sediment retention	+	+	+	+	+	+	+
Nutrient retention	+	+	+	+	+	+	+/O
Soil health	+	+	O	+	+	+	O
Carbon sequestration	+	+	O	+	+	+	O
Habitat provision	O	O	O	+	+	+	O
Hydrologic regulation	+	+	+	+	+	+	O

From a regulatory standpoint, offsite BMPs that contribute to the broader ecosystem health of the watershed are preferred over those that address sediment only. **KDHE has specifically expressed its favor for land management BMPs such as no-till farming, cover crops and crop rotation.** As indicated in Tables 4 and 7, these BMPs are expected to give the most “bang for the buck.” Inclusion of non-structural or otherwise non-permanent BMPs such as no-till can still be compatible with the City’s criteria of “perpetual” offsite water quality assurance by structuring program fees to cover replacement costs for non-structural BMPs. Doing so can ensure a constant supply of offsite credits that exceed sediment generation from onsite properties while maintaining a financially sustainable program. Approaches for ensuring the permanence of sediment credits generated by non-permanent offsite BMPs are discussed in Section 3.2.5.

## 2.5 Summary of onsite versus offsite BMP cost analysis & program framework implications

Under Task 2, life cycle costs associated with offsite and onsite BMPs were compared. Major conclusions from this analysis include:

1. Offsite BMPs implemented in a rural setting are highly likely to be more cost effective for sediment removal than BMPs implemented within the City of Wichita, by 2 to 3 orders of magnitude as estimated here. Thus, we recommend an offsite program implemented through cooperation with an established, local entity to gain access to offsite BMP implementation sites outside of the City and optimize program costs. Although administrative costs were assumed equal for the BMP life cycle analysis above, in reality, partnering with an established entity such as WRAPS that has existing mechanisms by which to identify, prioritize, and implement BMPs will minimize administrative start-up costs.
2. Given the potential supply of sediment credits provided by offsite BMPs (Table 6) relative to demand (Table 5), it is highly unlikely that the demand for sediment credits generated by an offsite BMP implementation program would outpace the supply. Thus, from a supply-demand standpoint, such a program is feasible.

Life-cycle costs of the individual offsite BMPs examined here will be used to project the costs associated with an offsite program. Program costs will ultimately be used to set a payment rate associated with a single sediment credit, and must account for the life-cycle costs of offsite BMPs implemented throughout the duration of the program. Other programmatic aspects, such as an offsite sediment credit ratio, must also be considered when developing program cost estimates. It is these programmatic aspects that are the focus of Task 3.

### Task 3. Develop framework and tools for implementation of an offsite BMP program

The goal of Task 3 is to deliver an implementation framework for an offsite program. Given that an externally managed program was found to be the most economically (and environmentally) efficient (Task 2), the implementation framework presented herein assumes the program is administered by WRAPS or a comparable external entity. As an introduction, this report on Task 3 begins with a review of programs in which water quality needs of a City have been met offsite through partnership with rural landholders. The purpose of this review is to extract relevant guidance and lessons learned from existing programs. Next, specific program elements for an offsite BMP implementation program that meet the requirements of the City's existing stormwater manual and MS4 permit are outlined along with the tools needed to implement the program. Finally, suggested responsibilities and expectations of all parties involved in the offsite BMP program are outlined. **Each of these activities is intended to support the development of a program framework that satisfies the City of Wichita's top priorities for the program, namely:**

1. *The program is self-sustaining and does not impose a cost-burden to the City and*
2. *The program satisfies all regulatory expectations and does not incur additional regulatory or financial liability*

#### 3.1 Review of existing offsite water quality programs

The program proposed by the City of Wichita is unique and, to the knowledge of the project team, has not been implemented or publicly documented elsewhere. However, there are existing offsite water quality programs of which particular elements are relevant to Wichita. These have been reviewed by the project

team and are summarized in Table 8. Multiple MS4s throughout the US have developed and/or considered offsite BMPs as an alternative means of meeting post-construction stormwater water quality regulations (CWP, 2012). The majority of these programs have been developed such that the offsite practice is implemented within the city limits (such as Lenexa’s “Rain to Recreation” program), either (1) by the City on public property or on private property secured through easements or (2) through a mitigation banking system in which an offsite party implements a BMP on their property, credits for which are certified by the bank and then made available for purchase by onsite parties interested in purchasing credits in-lieu of implementing their own BMPs onsite. The payment rate associated with these programs ranged from \$14,300 (Lenexa’s “Rain to Recreation” program) to \$90,000 (Charlotte, NC) per impervious acre developed (Appendix D). The exception was a program implemented within the Neuse River watershed in North Carolina in which the offsite program was structured to support implementation of offsite agricultural BMPs (as opposed to offsite urban BMPs) for new and redevelopment projects that are unable to meet onsite stormwater nutrient reduction requirements. Payment rates for developer participation in this program range from approximately \$250 to \$450 per impervious acre (CWP, 2012). This review of administrative structures for existing offsite market-based programs further reinforces the idea that economic efficiency can be increased by meeting water quality requirements through offsite BMPs in rural areas.

**Table 8.** Summary programs in which municipalities have utilized offsite BMP programs to meet water quality targets in which offsite BMPs are implemented in rural areas.

Municipality	Need for offsite program	Provider of offsite treatment	Indicators of success	Funding Sources	\$/impervious acre for offsite pollutant
Cities within North Carolina	Nutrient pollution in critical watersheds	NC Ecosystem Enhancement Program, via riparian buffers	Significant riparian buffer restoration, ahead of development	Developer (in-lieu fee)	Nitrogen: \$252-\$462 Phosphorus: \$362
Cities within Chesapeake Bay, Virginia	Excess phosphorus pollution	Farmers/developers through a credit trading program	In Progress	Developer (in-lieu fee)	Runoff Volume: \$87,750
Lenexa, KS "Rain to Recreation"	To provide stormwater quantity and quality control more economically	City of Lenexa, via utilization of public land and private land acquisition	Community support, cost savings to city, numerous national awards	Developer (Capital charge), 1/8% sales tax, stormwater utility	Runoff volume: \$14,300
Cheney Lake Watershed, Kansas	Taste & odor problems in drinking water from blue-green algae blooms/high phosphorus	Agricultural landowners/operators in Cheney Lake Watershed implement BMPs	Stabilization in number and frequency of algae blooms in Cheney Lake	City of Wichita, KDHE, NRCS, government funds secured by non-profit CWLI	Not given
New York City, NY	Decline in drinking water quality	Farmers in the Catskill/Delaware Watershed implement BMPs, purchase of land for conservation by the city	EPA granted a filtration avoidance determination in 2007 to the city	New York City	\$1.4 billion (compared to \$6 billion for a facility + \$250 million in annual operating costs)
Munich, Germany	250% increase in nitrogen concentration in water from 1974 to 1992	Farmers in surrounding watersheds switch to organic farming	Nitrogen levels return to levels seen in 1974, over 80% of farmers under contract	City of Munich	Increase cost of water by 0.005€/m <sup>3</sup> (instead of 0.23€/m <sup>3</sup> for a treatment facility)
Pierce County, Washington	Nonpoint source pollution degrading shellfish, TMDL violations	Stakeholders in Pierce County	At least 50% of action items in watershed plan have been implemented	State Clean Water revolving funds	Not given

### 3.2 Program elements

Based on the preceding review, common factors that have served to enable or constrain the success of offsite water quality programs can be identified. In general, collaborative programs between municipalities, developers, and/or private landowners can be successful if stakeholders believe that the partnership benefits outweigh the associated transaction costs (Borisova et al., 2012). Three key characteristics for successful collaborative processes are sustained participation, information sharing, and collective documentation (Biddle & Koontz, 2014). Some of the other most salient features of successful programs are:

- *Flexible.* Allowing some flexibility in the types of offsite BMPs that are allowed under the program can increase participation of offsite sediment credit providers while potentially decreasing transaction costs for onsite program participants (Grolleau and McCann, 2012).
- *Prioritized.* Programs in which BMPs are implemented in a targeted fashion with priority implementation on those sites known to contribute to water quality impairments are the most likely to achieve measureable improvements in water quality, thus *maximizing economic efficiency* (Douglas-Mankin et al., 2013; L. French, personal communication).
- *Transparent.* The procedure for setting sediment credit ratios and payment rates should be clear and made available to onsite program participants. A means for representing offsite landowners in the program framework has also provides a measure of transparency, and has proven successful for recruiting offsite participants to the program (L. French, personal communication).
- *Maintain minimum site control measures.* Minimum stormwater control requirements should be in place to avoid making local onsite water quality conditions worse unintentionally.
- *Economically attractive.* In the words of Becerra (2010): Ownership, responsibility, stewardship, and environmentalism have all been found to be motivators for participation in water quality programs. However, these all place second to financial considerations. Therefore, to achieve the sustained participation needed to ensure program success, an offsite program must provide an economic incentive to involved parties. Such incentive can come through economies of scale achieved through larger watershed projects (e.g., as through Lenexa's Rain to Recreation program) and/or implementation of more economic offsite practices (such as riparian buffer restoration through North Carolina's Ecosystem Enhancement Program).

Each of these aspects is addressed within the Program Elements outlined in Table 9 and described with greater detail in the following section. Examples of approaches taken by other cities with offsite stormwater options regarding each of these program elements are summarized in Appendix D.

**Table 9.** Program elements for offsite BMP implementation program and relationship to existing regulatory frameworks: the City’s MS4 General Permit (MS4) and Stormwater Management Program (SMP).

Program Elements	Description and relationship to stormwater permit provisions
Eligibility	Program is open to any party responsible for new- or redevelopment projects in the City of Wichita. Per the MS4 permit and SMP, any such project disturbing one-acre or more has the option of implementing post-construction water quality BMPs onsite or participating in an offsite program to offset water quality impacts.
Minimum site control measures	Per the SMP and MS4 permit, any new or redevelopment must comply with construction site water quality measures for any activity that disturbs more than one acre. Post-construction quantity control must be provided such that peak discharge associated with the 2-, 5-, 10-, 25-, and 100-year return frequency is no greater than predevelopment rates <sup>a</sup> . Additional water quality treatment is not required if the developer opts for offsite implementation.
Currency of offsite mitigation	Sediment, valued in terms of \$/ton sediment retained. The focus on sediment is driven by sediment-based TMDLs developed for several stream systems within the City of Wichita (Big Slough, Cowskin, Chisholm, Gypsum, Little Arkansas, and Arkansas) as listed in the City’s MS4 permit.
Sediment payment rate	The sediment payment rate is the cost onsite parties would pay to participate in the offsite program in lieu of implementing onsite water quality BMPs. The payment rate should be developed based on the costs of to support a program in which the most typical offsite BMP(s) is (are) implemented. Some flexibility to re-examine this rate and modify as necessary after initial establishment of the program should be allowed.
Offsite sediment credit ratios	Credit ratios are intended act as a factor of safety against uncertainties in BMP removal rates. Typically, onsite participants are required to purchase offsite water quality credits at a rate greater than 1:1. Credit ratios established for offsite programs administered by other MS4s range from 1.5:1 to 2:1.
Spatial bounds	For regulatory purposes, most offsite water quality programs require offsite BMPs be implemented in the same watershed, though the scale of the watershed (e.g., HUC 12 versus HUC 8) may depend on local water quality goals.
Allowable offsite practices and prioritization	Not limited, but estimated sediment load reductions of any offsite BMP must be documented to ensure development demand is met. Offsite implementation should also follow a <i>targeted framework</i> , such as that established by the LAR WRAPS to prioritize top sediment-producing fields.
Program administration	An administrative structure that enables proper tracking and record keeping will be required for an off-site BMP program. Systems for collecting payments for sediment credits, allocating funds to priority offsite BMPs, and tracking and reporting offsite BMP implementation and maintenance are discussed.

<sup>a</sup> City of Wichita Stormwater Policy, Vol. 1 Ch. 3, page 3-9.

**3.2.1. Eligibility.** By opening participation to new and redevelopment city-wide, economic efficiency and increased program participation is promoted. In addition to new and redevelopment, the City could also consider existing properties to buy into the program. Existing water quality BMPs on these properties would remain in place, but the City would no longer require bi-annual inspection documentation.

**3.2.2 Minimum onsite control measures.** The offsite BMP implementation program is intended to meet the requirements for post-construction water quality BMPs stipulated in the City's MS4 permit. However, new and redevelopments would still be required to meet peak discharge control and downstream stabilization standards when applicable as outlined in the City's existing Stormwater Policy. Onsite management of gross solids (trash) is also expected for offsite program participants. These minimum onsite control measures are summarized here:

1. **Peak discharge control** is required for any new or redevelopment disturbing over 1 acre. Per this requirement, the calculated peak discharge from each of the site's outfalls for the 2-, 5-, 10-, 25-, and 100-year return interval storm shall not exceed that of predevelopment conditions.
2. **Downstream stabilization** standards apply to any new or redevelopment that will add five or more acres of impervious surface cover and that are located in areas designated by the City and/or county as a Downstream Stabilization Protection Volume Watershed or Stream. This standard requires detention of the 1-year, 24-hour storm volume for at least two days to four days.
3. **Gross solids** (i.e., urban trash) must be managed onsite for all new and redevelopment properties. The City considers snouts as an acceptable trash BMP. Based on conversations with City of Wichita stormwater staff, snouts receiving runoff from new and redevelopments can be positioned along the street such that the City will provide periodic cleaning as part of their regularly scheduled stormdrain cleaning route.

By maintaining these minimum onsite peak flow/detention and trash management practices, new and redevelopment properties buying into the offsite program would *not* be required to meet the existing onsite water quality requirements specified in the City's MS4 permit, namely (1) to construction of onsite water quality BMPs (e.g., bioretention, extended detention ponds/ wetlands, hydrodynamic separators) or (2) to report of maintenance of water quality BMPs. New and redevelopment properties are not required to participate in the offsite program. For these properties, onsite water quality BMPs and biannual maintenance reporting will still be required.

**3.2.3 Allowable offsite practices and prioritization.** As demonstrated in the preceding discussion of sediment credit payment rates, an offsite BMP implementation program can be created with the intent of allowing permanent BMPs, nonpermanent BMPs, or a mixture of both types. We recommend the latter, as allowing a mixture of both permanent and nonpermanent BMPs will maximize program flexibility and efficiency. Regardless of the types of BMPs the City chooses to allow, we believe the following aspects are essential:

1. The sediment credit payment rate should be established to provide sufficient funds for both the initial implementation *and* expected recurring maintenance costs throughout the foreseeable duration of the program. Preliminary figures for costs based on life cycle program costs for what are anticipated to be the most typical/favorable BMPs in rural watersheds surrounding Wichita (no-till and streambank stabilization) were presented in Table 4 and are discussed in further detail in [Section 3.3](#).
2. Offsite BMPs should follow a defined prioritization scheme to maximize the environmental effectiveness of the program (L. French, personal communication; CWP, 2012). Following the recommendation that WRAPS or similar entity be utilized for identifying and facilitating BMP implementation, the responsibility for BMP prioritization would be the responsibility of the WRAPS group. Such a requirement falls in direct alignment with existing WRAPS activities; for instance, the Little Ark WRAPS program has identified priority areas for sediment contributions as part of their regular planning process and has a procedure in place by which to enroll operators within high priority areas in water quality practices (KSRE, 2011).
3. Offsite BMPs must produce sediment credits at a rate that is less than the cost to implement the BMPs onsite. The economic analysis conducted under Task 2 demonstrates that this condition is met for any of the BMPs examined.
4. When possible, offsite BMPs that provide a greater suite of ecosystem benefits (e.g., nutrient retention, soil health improvement, habitat quality, carbon sequestration) should be favored. For instance, in many cases, conversion to no-till is likely to provide a greater environmental good through enhanced nutrient retention, runoff regulation, and soil carbon accumulation than possible through streambank stabilization projects. **The potential to improve other ecosystem services in addition to sediment retention through select offsite BMPs such as no-till through this program is viewed *very* favorably by KDHE.**

**3.2.4 Spatial bounds.** Most offsite water quality programs require that the offsite mitigation occurs within the same watershed. To meet regulatory expectations, we offer a similar recommendation. If the offsite program were to be administered by an external program such as WRAPS, implementation of offsite BMPs could be targeted upstream in the Little Arkansas Watershed, with prioritization to operators of erosion-prone sites nearest the watershed outlet (that is, where the sediment TMDL is monitored). Targeting offsite BMP implementation in such a spatially strategic manner is more likely to result in measurable improvements in water quality over time – a benefit that would be documented in the City’s MS4 permit and which is in line with efforts of the regulatory community. As indicated in the preceding discussion of credit ratios, we recommend that land management BMPs such as filter strips and no-till be targeted to critical sediment producing areas near to the watershed outlet. Likewise, in-stream BMPs such as streambank stabilization should be targeted on banks experiencing accelerated erosion nearest the outlet of TMDL streams such as the Little Ark. There is ample opportunity for such stabilization projects in the Little Ark watershed; for instance, Hermes (2012) reports a combined sediment loading of 18,000 tons per year from eroding streambanks between Sedgwick, KS and Valley Center, which is well beyond the projected demand of 380 to 570 tons per year that could be created by the offsite implementation program. Likewise, the potential supply of sediment credits from non-permanent BMPs within the recommended spatial bounds would be adequate to meet projected sediment credit demands (Schlender and Graber, personal communication).

**3.2.5 Currency of the offsite program.** The currency of the offsite program refers to the stormwater constituent for which offsite mitigation is sought. This constituent is usually selected based on some water quality management target, and it is the cost of providing offsite treatment for this commodity that program costs are typically based. Other offsite stormwater programs have been developed based upon stormwater volume or nutrient load as the currency (Appendix D). In the case of the City of Wichita’s program, sediment has been selected as the program currency in recognition of goals to reduce sediment loads delivered to several stream systems within the City of Wichita (e.g., Big Slough, Cowskin, Chisholm, Gypsum, Little Arkansas, and Arkansas) for which sediment-based TMDLs have been developed as listed in the City’s MS4 permit. More specifically, this currency can be conceptualized as sediment credits. By implementing BMPs to reduce sediment loads, sediment-borne pollutants such as phosphorus and bacteria can also be reduced. A sediment-based program currency provides a convenient framework by which to estimate program costs in terms of sediment credits generated by offsite BMPs, in dollars per ton sediment retained, and provides a uniform commodity upon which payments into the offsite program can be based.

**3.2.6 Offsite sediment credit ratios.** Nearly all offsite water quality programs require the application of what is known as a credit ratio. A credit ratio refers to the amount of pollutant reduction required at the offsite location relative to that which would otherwise be required onsite. The need for such a measure arises due to uncertainties in the ratio of sediment (or other pollutant) delivery versus retention from the offsite location to the common water body of interest between the onsite and offsite locations (e.g., a TMDL stream). Sediment delivery from a site is controlled by slope, soil type, and, especially, the hydraulic connectivity and distance to the receiving stream (Nejadhashemi et al., 2011); therefore, the sediment reductions used in the life cycle cost-benefit analysis correspond to those likely at the edge of the field or development site, but may not be representative of the sediment load ultimately delivered from a site to a TMDL stream. Additional uncertainty in the exact performance of the offsite BMP can also be accounted for in the credit ratio. **A properly selected credit ratio balances both environmental and economic interests; the ratio should be high enough to promote environmental effectiveness to the satisfaction of regulatory interests while low enough to remain economically attractive to encourage participation by onsite properties.** In other offsite and/or trading programs, a credit ratio greater than 1:1 is typically adopted. In the context of an offsite program in the City of Wichita, a credit ratio greater than 1:1 is intended to ensure that an offsite BMP (e.g., implementation of grass filter strips by an upstream producer) achieves a comparable water quality benefit to an onsite BMP (e.g., a bioretention facility as part of a new development within the City of Wichita). Examples of credit ratios from established water quality trading programs include 2:1 for phosphorus reduction credits in Virginia's Chesapeake Bay program (Baxter, 2015), to 1.5:1 to 2:1 for offsite compliance with West Virginia's stormwater volume capture regulations (CWP, 2012). Other offsite programs have set different offsite credits for new versus redevelopment projects. For example, the City of Fredericksburg, VA was considering a credit ratio of 1.5:1 for new development and 1.25:1 for redevelopment to meet stormwater volume reduction standards offsite (CWP, 2012). **Based on consultation with KDHE, we recommend a credit ratio of 2:1 for a sediment-based offsite BMP program in the City of Wichita** (Figure 2). Assuming that offsite BMP implementation is prioritized to areas with a high potential for sediment erosion (Section 3.2.4), we have used a credit ratio of 2:1 for developing an estimate of sediment credit payment rates discussed in the following section (Section 3.2.7).

**3.2.7 Sediment credit payment rate.** Setting a proper payment rate for offsite sediment reductions is crucial and, to be done successfully at the program planning stage, requires an understanding of the true costs of the BMPs that will comprise the offsite BMP portfolio (CWP, 2012). The net present value of life cycle costs determined under Task 2 provide planning-scale estimates of the true costs of both urban and agricultural BMPs and can serve as the basis of an equitable fee structure that will ensure sufficient funding for both implementation and maintenance of offsite BMPs throughout the duration of an offsite program. Several approaches have been proposed for establishing payment-in-lieu type fees for offsite stormwater mitigation (CWP, 2012). The most straightforward of these is to base the payment on a “typical” BMP, that is, the BMP type that is anticipated to be most-widely used for offsite sediment reductions. With this approach, typical costs associated with the implementation of the typical BMP are used to set the sediment payment rate as a proxy for implementing a variety of offsite sediment reduction projects. Though the costs of other BMPs may be higher or lower, it is assumed that setting the fee on the selected typical BMP will split the difference, yielding a fair and equitable fee structure. The payment rate is effectively set to cover the costs to construct, maintain, and, when appropriate, replace a BMP such that the sediment reduction credits associated with that BMP can be considered perpetual.

To demonstrate how this method could be applied to the City’s offsite BMP implementation program, a typical permanent and non-permanent offsite BMP will be considered here. Within the context of an offsite BMP program, a permanent BMP is defined as one for which the continued existence in the same location is fairly certain. Permanent practices could include larger structural practices such as streambank stabilization projects or permanent vegetation within a conservation easement. Non-permanent BMPs include both structural and nonstructural BMPs for which the option to remove or discontinue exists. While the credit for sediment reduction associated with nonpermanent BMPs can be considered perpetual as long as discontinued BMPs are replaced, the replacement BMP may be at a different location. Agricultural practices typically executed on a term contract (e.g., conversion to no-till, filter strips, permanent grass without an easement) represent non-permanent practices for which the landowner has the option of discontinuing at the conclusion of the contract period. In the case of the Little Arkansas WRAPS program, the most popular BMP among land-owners is conversion to no-till with intensive crop rotation (Schlender and Graber, personal communication). Although no-till is considered a non-permanent BMP, provisions can be built into an offsite BMP program such that this practice is essentially permanent within the program structure. For instance, the cost to enroll a new landowner in no-till at the end of the typical 5-year contract period can be included as a recurring cost within the life-cycle of a sediment credit supplied through conversion to no-till, and can be accounted for in the life-cycle cost calculations used to establish program payment rates. Based on experience in the Little Arkansas watershed, most landowners who enroll their land in no-till decide to continue with this practice after their contract period (5-years as currently implemented by the Little Ark WRAPS program) has expired. This is particularly true for those landowners who have used incentive funds to purchase no-till equipment. However, if the land changes ownership and/or operators, it is possible that the next operator may decide to revert the land back to conventional tillage, thus discontinuing the supply of sediment credits previously provided at that location. In cases such as this, program funds would need to be available to enroll a new operator(s) to replace the sediment credits at a different location. To build in an aspect of permanency to sediment credits generated by no-till adoption, we computed life cycle program costs for an offsite program based on no-till under the assumption that 50% of the acreage in no-till would need to be replaced every 5 years (assuming that the WRAPS program’s 5-year contract period would

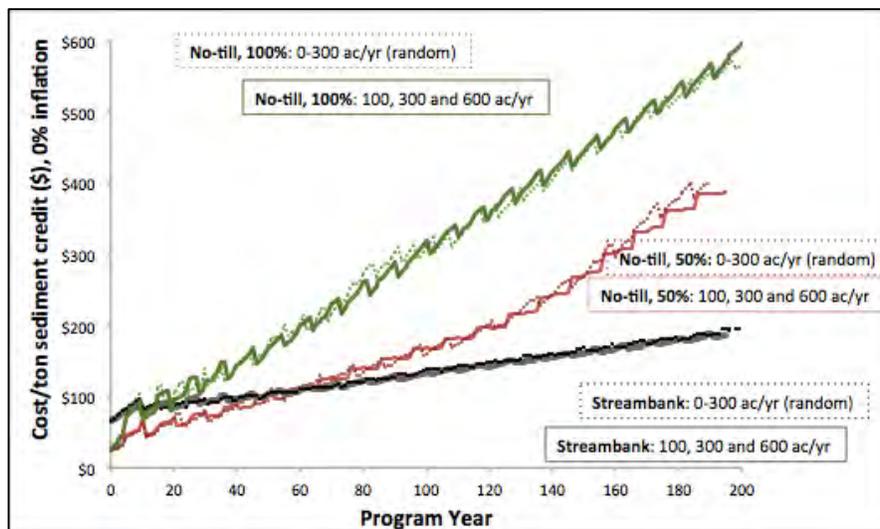
continue to be followed). Following further discussion with the City, we also considered costs for 100% replacement of no-till acres every 5 years to include analysis of a worst-case scenario. **By building ongoing replacement costs into the cost per sediment credit, the program provides a mechanism by which to ensure the permanence of the sediment credits provided by an otherwise non-permanent BMP.** Based on previous experience with no-till adoption by producers in the watershed, the project team considers a replacement rate of 50% as a conservative estimate of no-till sediment credit replacement costs, and thus provides a mechanism by which to ensure permanence of an otherwise non-permanent BMP. Both first-time and replacement no-till costs were based on custom no-till planting rates reported for the state of Kansas (Dhuyvetter, 2014) as is standard practice. Future costs were adjusted for assumed inflation (3% annual). Details of no-till cost analysis are documented in Appendix B.

Streambank stabilization projects were selected as a typical permanent type of BMP. Although stream stabilization projects have not been implemented in a widespread manner throughout surrounding watersheds, the potential to reduce sediment loads to TMDL streams such as the Little Arkansas through stabilization projects is strong (Hermes, 2012). Furthermore, cooperating landowners are more likely to favor streambank stabilization over other permanent types of BMPs that would require placing their land in a perpetual easement (Schlender and Graber, personal communication). In developing a sediment payment rate for a permanent BMP, it is still important to ensure that the rate is set high enough to cover future maintenance, including routine management and major repairs. For planning purposes, it was assumed that major repairs (equivalent to 30% of the original construction cost plus inflation) would be required at years 25 and 50 of the stabilization projects lifetime. True lifetime costs are uncertain as there are few streambank stabilization projects that have been in place for more than 20 years. However, based on experience with existing stabilization projects in the state, it is believed that this maintenance schedule provides a conservative estimate of actual maintenance expenditures needed to maintain effectiveness throughout the lifetime of a streambank stabilization project.

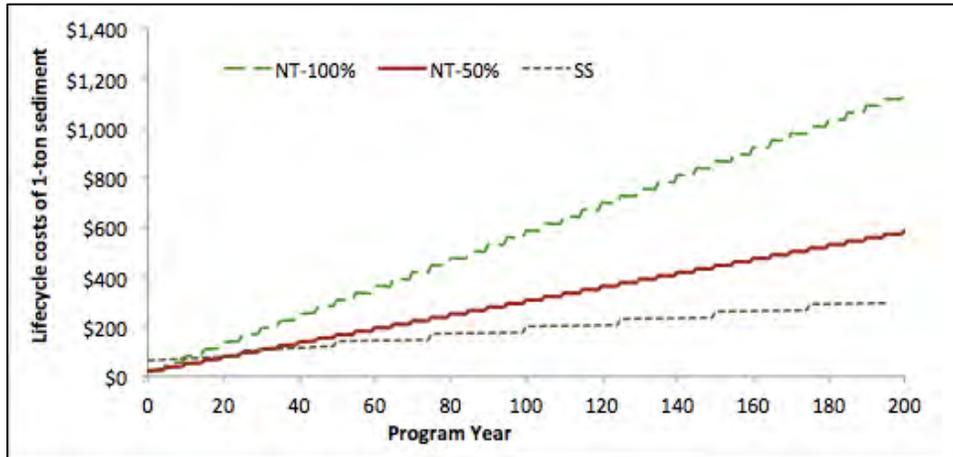
Costs to generate offsite sediment credits through streambank stabilization, no-till with 50% replacement every 5 years, and no-till with 100% replacement are presented in Figures 2 and 3. Figure 2 demonstrates the scalable nature of total program costs as a function of the acreage of onsite properties participating in the program through calculation of costs for 4 participation scenarios: 600 acres/year, 300 acres/yr, 100 acres/yr, and random participation ranging from 0 to 300 acres per year. Figure 3 illustrates the cost to maintain a single ton of sediment credit, purchased in Year 1 of the program, as a function of time. Program cost analyses presented in both Figures 2 and 3 include costs incurred through the life cycle of the offsite program, and include offsite BMP construction, maintenance and/or replacement, and program administrative costs. For simplicity, inflation is not included in the data presented in Figures 2 and 3 under the assumption that the sediment credit payment rate derived from program costs would also be inflated at a similar rate as actual program costs through time. A detailed cost analysis differentiating between BMP capital, maintenance/replacement, and administrative costs with each year of the program is provided in Appendix D. Key observations from the data presented in Figures 2 and 3 include:

1. Whether based on no-till or streambank stabilization, **program costs scale with the demand for sediment credits and, thus, the cost to maintain associated sediment credits is essentially independent of the number of acres participating in the program from year to year.**

2. Sediment credits can be maintained more cost effectively via streambank stabilization over long (greater than 50 years) planning periods. *However*, the cost per sediment credit is higher for years 0 through 40, with the initial start-up cost being approximately 2.5 times higher than no-till. In addition, streambank stabilization is not expected to provide the same diverse suite of environmental benefits as land management practices such as no-till and cover crop adoption (Table 7). Therefore, to maximize the economic efficiency of the program in the foreseeable future, we recommend utilizing no-till to generate needed sediment credits.
3. Planning to collect fees sufficient to replace 100% of no-till acres is substantially more costly than planning for 50%. **It is understood between the City, WRAPS, and KDHE that the program will be administrated with every attempt to replace non-permanent BMPs, such as no-till, that fall out of use.** Therefore, it may be appropriate to plan for a very conservative 100% replacement rate and re-evaluate this assumption (and associated sediment credit payment fees) based on the actual need for replacement acres after the program is established.
4. The cost to maintain a sediment credit generated by an offsite BMP is dependent on the program life cycle period of analysis (e.g., 50 versus 200 years). For example, a 50-year program lifetime results in sediment credit rate costs of \$142, \$168, and \$307 per ton sediment for streambank stabilization, no-till with 50% replacement, and no-till with 100% replacement, respectively. Extending the analysis to 200 years results in credit costs of \$320, \$587, and \$1,146 per ton sediment retained.



**Figure 2.** Cost per ton sediment credit is relatively similar regardless of onsite program participation rate. Shown here are participation scenarios of 600, 300, and 100 acres annually. Independence from participation rate persists even when annual participation is randomized, for example, between 0 and 300 acres (dashed line). In consideration of economic efficiency over the foreseeable future (< 50 years), basing program costs on no-till with a 50% replacement rate provides the greatest advantage, followed by no-till with a 100% replacement rate and then streambank stabilization.



**Figure 3.** Cost to maintain 1 ton of sediment credits purchased in Year 1 of the program over 200 years for program costs based on offsite streambank stabilization (SS), no-till adoption with a 50% replacement rate (NT-50%), and no-till adoption with a 100% replacement rate (NT-100%). The dependence of the \$/sediment credit with time creates some uncertainty in selecting a one-time fee to ensure “permanence” of that credit.

While program costs and associated credit payment rates calculated from these are relatively independent of the number of acres participating in the program from year to year, costs are dependent on the time-scale over which the sediment credit purchased is maintained. To illustrate, if a property in the City purchases 1 ton of sediment credits to offset onsite sediment generation in Year 1 of the program, that credit must be maintained “in perpetuity” to ensure the City’s water quality obligations will continue to be met into the future. Therefore, the price paid by that property for 1 ton of sediment reduction offsite should cover the cost to maintain and/or replace the offsite BMP that is responsible for supplying that sediment credit. Due to the need to maintain and/or replace offsite BMPs through time, the price per sediment credit increases substantially as the period of analysis increases, with or without inflation. Of course, it is difficult to predict with any certainty program conditions in 50 years, let alone 200; however, the issue does create some challenge in establishing sediment credit fees as a one-time cost while at the same time ensuring the program does not become a financial liability to the City. As illustrated in Figure 4, setting a one-time fee that will both ensure continued maintenance of sediment credits for perpetuity while remaining at a level that is economically advantageous to onsite program participants is difficult.

**Alternative options for structuring the sediment credit fee – namely as a recurring fee – are discussed further in Section 3.3.**



**Figure 4.** The predicament of the one-time fee: over what time period should sediment credits be maintained to ensure financial sustainability of the program? Taking the example of a no-till based program with 50% replacement rate, setting the fee for a 50-year period without inflation (**left graph**; \$168/ton sediment or \$107/acre development) results in depletion of funds to continue maintaining associated sediment credits after year 50. A similar situation arises if the one-time fee is set according to 100-year costs (\$307/ton sediment or \$196/ac) or 200-year costs (\$587/ton sediment or \$375/ac). Accounting for inflation (**right graph**) results in more extreme deficits beyond the base planning year.

**3.2.8 Program Administration.** Agricultural BMPs were shown to be the least cost solution, both in terms of life cycle costs of individual BMPs (Table 4) and as implemented throughout the life of an offsite program (see discussion under Section 3.2.4). To take advantage of this economic efficiency, we recommend a program model in which the City partners with an external entity that has (1) an established program in place by which to prioritize sites for BMP implementation, (2) the ability to gain cooperation from rural landowners in priority sites and (3) a system for handling financial payments to cooperating landowners. We have suggested existing WRAPS programs, such as the Little Ark WRAPS, to serve as this external entity as they have an established framework in place that meets these criteria. The City would be responsible for tracking new and re-development and collecting appropriate payments for sediment credits. These funds would be transferred to WRAPS or a comparable entity, which would be responsible for *targeted* enrollment of landowners and ensuring implementation and maintenance of offsite BMPs. **This enrollment model ensures landowners are given flexibility to select BMPs that complement their operation, but strategically targets funds to the most effective BMPs, and thus increases the economic efficiency of the program.** In addition, this model has been successfully implemented by the Little Ark WRAPS program to increase the number of soil conservation practices in the watershed (Douglas-Mankin et al., 2013). Proposed roles of involved parties are summarized in Table 10 and detailed further in the following section.

**Table 10. Responsibilities associated with recommended program administration**

**Onsite Property (Developer and/or Owner)**

- Notify City of intent to participate in offsite program
- Provide documentation of expected sediment load generated by new or re-development using approved models
- Provide appropriate payment to City based on program credit ratio and sediment payment rate

**City of Wichita**

- Review onsite sediment generation submitted by developer for new or re-development project
- Document onsite sediment generation and offsite compliance requirement
- Collect payment for offsite compliance from onsite party(ies) according to sediment payment rate
- Transfer sediment payments to WRAPS on recurring schedule (e.g., bi-annually) to fund offsite BMP implementation projects

**WRAPS or similar watershed entity**

- Identify and enroll prioritized landowners in combination of perpetual and/or non-perpetual sediment reducing BMPs to achieve annual sediment reduction *no less than* annual expected sediment reduction demand from new and re-development projects in Wichita. It is expected that the cumulative supply of sediment credits generated offsite remains ahead of onsite demand.
- Conduct annual field checks of enrolled BMPs to ensure sediment credits maintained; enroll replacement BMPs as necessary.
- Maintain sediment credit database documenting BMPs implemented in each program year, offsite BMP types and acreage, predicted sediment reduction achieved, dates of inspection and program funds utilized. The continuation of offsite BMPs implemented through this program should be confirmed by site visits at the time of annual recurring payments to landowner as per the existing WRAPS protocol (Appendix E)
- Deliver database documentation annually to the City of Wichita to satisfy City’s MS4 permit reporting requirements
- Provide City with 1-page summary to annually to communicate to onsite program participants work achieved offsite with sediment credit fee payment

To the extent possible, existing administrative structures can be utilized to minimize administrative program start-up costs. Given the success of the current WRAPS framework for prioritizing, implementing, and monitoring BMPs, we recommend that an offsite BMP program for the City of Wichita be administered similarly. In terms of *offsite BMP prioritization*, priority areas for BMP implementation within each WRAPS watershed have already been identified through the WRAPS 9 Element Plan, which is a document outlining specific strategies to meet water quality targets within the watershed (e.g., KSRE 2011; River City, 2013). Using this enrollment approach, the Little Arkansas WRAPS program was able to enroll approximately 5,080 acres in water quality BMPs (predominately conversion from conventional to no-till tillage practices) over a 3-year period. Assuming sediment reductions typical of no-till, this 5,080 acres equates to about 16,000 tons of sediment, or enough to

supply roughly 80% of the sediment reduction credits demanded by new and redevelopment in Wichita over a 50-year period assuming an average growth rate of 600 acres per year. This demonstrates the capacity of the WRAPS framework to supply a large credit demand over a short time frame by effectively implementing BMPs.

As related to the sediment-based program of interest here, the Little Arkansas WRAPS has established a process for identifying target areas for sediment reduction (Douglass-Mankin et al., 2013). With respect to the process for *offsite BMP implementation*, the existing WRAPS process could also be utilized. After a property is identified as a priority area for BMP implementation, WRAPS staff members meet personally with associated landowners and/or operators to discuss BMP options, available incentive payments, and maintenance contracts. Landowners typically opt to enroll in one or more BMP options, such as no-till with intensive crop rotation or grass filter strips, during this visit. Under their current model, WRAPS staff utilize a field sign-up worksheet (included in Appendix E) to communicate eligible BMPs and the incentive payment associated with each to program participants. Incentive payments are based on the sediment retention rate expected for each BMP type such that more efficient BMPs are eligible for greater incentive payments. A similar field sign-up approach could be utilized by the City's offsite program and follow a similar incentive payment structure based on the sediment payment rate established for the program (see Sections 3.2.4 and 3.3 for discussion) to include only those BMPs which the City grants eligibility (see Sections 3.2.3). *Offsite BMP sediment credit tracking* would also be the responsibility of the external entity. Under the existing WRAPS system, incentive payments are made on an annual basis, typically over a 5 to 10 year contract period, and are delivered following a visit by a WRAPS agent, thus providing a mechanism to monitor for the continued existence of contracted BMPs. This approach could be adapted to an offsite stormwater BMP program by adding a process for the continued monitoring of BMPs (or, really, the sediment credits they generate) beyond the short-term contract period. As discussed in Section 3.2.4, most landowners opt to continue with contracted BMPs, particularly for conversion to no-till. Continued monitoring of such practices is included in the recurring administrative costs accounted for in developing programmatic cost estimates associated with both permanent and nonpermanent; thus, payments into the program for sediment credits provide funding to WRAPS personnel for continued monitoring and accounting of offsite BMPs implemented through the program.

The external entity would also be responsible for reporting to the City annual expenditures of program funds, BMPs implemented and the sediment reduction credits generated. These accounting requirements are not significantly different from the reporting expectations existing WRAPS programs have to government agencies that fund WRAPS activities (e.g., KDHE). A protocol for documenting long-term persistence of sediment credits (the permanence of which could be accomplished through continued maintenance of a BMP at the same spatial location or through replacement of BMPs at different locations within the same watershed) would need to be developed. A spatial database could be developed relatively easily using GIS tools to facilitate sediment credit and offsite BPM tracking.

With responsibilities of offsite BMP prioritization, implementation, monitoring and reporting resting on the external entity, administrative responsibilities of the City relate primarily to collecting sediment credit payments from program funding sources (discussed under Task 4) and then transferring these funds to the external entity on a recurring time interval (e.g., monthly or annually). The City would also be responsible for certifying the magnitude of sediment credit payments. To the extent possible, certification

mechanisms can be built into existing processes. For example, the option to participate in an offsite stormwater program could be added to existing stormwater permit paperwork already required by the City for new and redevelopment projects. Developers/property owners who opt to participate in the program would indicate so, and then provide additional information (e.g., impervious surface acreage) that could be used to develop a simplified estimate of post-development runoff sediment generation from the project site. For example, the City could adopt an estimate of 0.32 tons per acre new or redevelopment (equivalent to about 0.5 tons per impervious acre) as based on national stormwater runoff data and local precipitation characteristics (NCHRP, 2014) and as assumed in the analyses herein. Depending on the funding sources identified for this program, the City would then be responsible for notifying relevant onsite parties of their contribution to purchase sediment credits generated by offsite BMPs. Given suggested reporting responsibilities of the external entity to the City, the City would be able to ensure that the supply of sediment credits produced by offsite BMPs already implemented through the offsite entity is greater than total sediment credits paid into the program by onsite parties.

### 3.3 Program Fee Structure and cash flow: annual versus one-time

Based on discussion with members of the SWAB, a 10-year reserve of sediment credits is desired to assure a sufficient supply of readily available sediment credits and avoid interruption in development activities. To adequately front-load the program, a sediment credit “bank” would be established in Year 0 of the program with funds sufficient to finance a 10-year supply of sediment credits by Year 1 of the program. These funds would be transferred to WRAPS, which would then be responsible for spending these funds on targeted water quality BMP projects as needed to accumulate the required 10-year supply of sediment credits prior to making the option for offsite BMP implementation available to new and redevelopments in Year 1. Following this initial infusion of capital, fees will be paid into the bank by program participants. As development occurs, the initial sediment credit bank will be allowed to draw down but a “cushion” should be maintained to ensure the bank of available sediment credits remains ahead of onsite sediment production. As discussed in [Section 3.2.7](#) structuring sediment credit payments solely as a one-time fee introduces uncertainty that the program can remain financially sustainable over any time span. **Based on discussions with the City of Wichita, a recurring fee is more highly favored to ameliorate concerns of adequate cash flow throughout the duration of the program.** Owing to its foundation in sediment credits, it should be noted that regardless of the number of onsite acres participating from year to year, the annual fee to participate in the program remains fairly consistent as the number of offsite acres scales accordingly with the number of onsite acres.

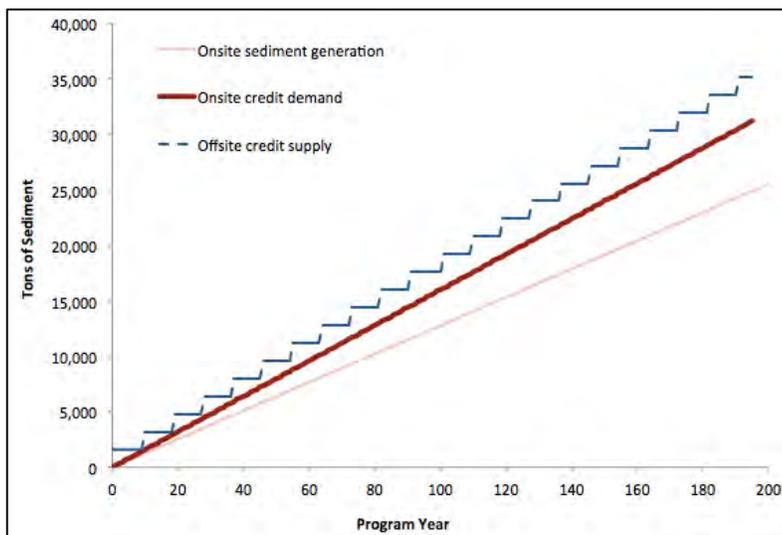
A spreadsheet tool has been developed to calculate program costs and cash flow as a function of user inputs, which include assumptions regarding the quantity of sediment produced onsite, the required Offsite sediment to Onsite sediment credit ratio, an implementation ratio which affects the pace at which offsite BMPs are implemented (i.e., the “cushion” to ensure the offsite credit supply remains ahead of onsite demand for credits), the percentage of BMPs replaced, annual inflation, City growth rate and associated number of onsite acres participating in the program, and the sediment credit payment rate (Figure 5). Based on the computed cash flows and program variables, the user can adjust the sediment credit payment rate to ensure that the program generates sufficient funds to transfer to WRAPS for required offsite BMP implementation and maintenance. **The spreadsheet can be a tool used by the City of Wichita to determine program costs and an annual fee to be charged to developers who participate in the program.** In setting an annual fee, the goal is to set the fee such that the bank does not go into debt and the initial start-up funds can be repaid in a timely manner if necessary. **To ensure the**

financial sustainability of the program, it is important that the City has the flexibility to adaptively manage program fee structures. It is recommended that the City review program fee structure periodically and adjust as necessary.

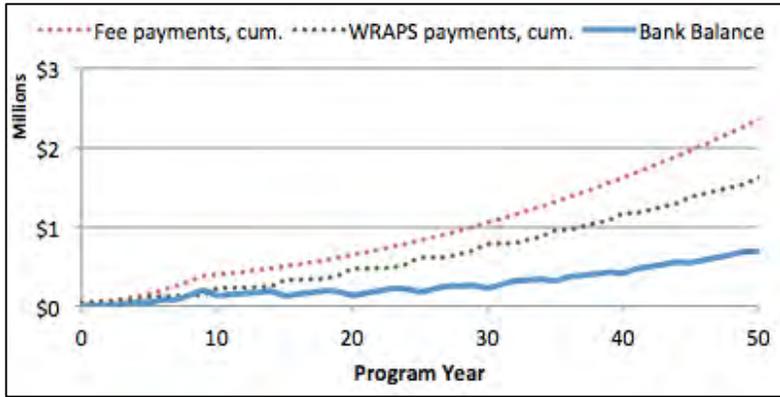
To illustrate this tool’s use, the following example is given. An average of 200 acres of properties within the City elect to participate in the program each year. An annual fee of \$47 per ton of sediment (\$37.60 per participating onsite acre) is charged each year, with a fee decrease to \$9 per ton sediment (\$7.20 per participating onsite acre) in Year 8. Other program inputs are displayed in Figure 5, with the resulting cash flows paid into the program’s sediment credit bank through annual fees paid and out of this bank to WRAPS to fund required offsite BMP implementation and maintenance presented in Figure 7 in Table 11. The resulting balance between onsite sediment produced and offsite sediment credits supplied is illustrated in Figure 6.

PROGRAM ASSUMPTIONS of sediment removal by offsite BMPs					
Sediment credit No-Till	3.2 tons/ac/yr				
Sediment credit streambank stabilization	589.9 tons/ac/yr		1.7 tons/linear ft/yr		
<b>USER INPUTS</b>					
Onsite Sediment produced	0.4 tons/ac/yr				
Offsite:onsite credit ratio	2 :1				
% no-till fields replaced	100% every 5 years				
No-till sediment credit "cushion"	1.1 (affects pace at which no-till implemented to remain ahead of onsite sediment production)				
Starting fee all acres to date, \$/ton sed.	\$ 47.00		\$ 37.60	Annual Cost/acre under initial fee	
Inflation rate, annual program costs	0.00%				
Inflation rate, annual fee	0% per year				
City growth rate, year 1	200 acre	Avg annual growth, ac/yr	200	City participation rate	100%
Interest rate on start-up funds	0% annual	# compounded/yr	12	payback period (yrs)	10

**Figure 5.** User inputs to spreadsheet tool developed to allow the City to determine program costs and appropriate fees to be charged to developers who participate in the program.



**Figure 6** For the case of 200 acres of onsite properties enrolling in the offsite program each year, the associated onsite sediment production, onsite sediment demand assuming 2:1 sediment credit ratio, and sediment credits supplied offsite via offsite BMPs. In addition to starting the sediment credit bank with a 10-year supply, an additional implementation “cushion” may be specified in the spreadsheet tool to ensure offsite BMPs and associated sediment credits are implemented ahead of onsite demand. In the case illustrated here, a value of 1.1 was specified.



**Figure 7.** Sediment credit bank balance (solid blue line) for the program inputs given in Figure 4. The bank balance reflects the difference of funds paid to the program via an annual fee charged to properties participating in the program (dotted red line) and payments to WRAPS (or similar external entity) for BMP implementation (dotted brown line).

**Table 11** (following page). Cash Flows to and from “sediment credit bank” as computed via spreadsheet tool for a scenario in which 200 acres of properties within the City opt in to the offsite program each year. Table columns are labeled as **A.** the program year, **B.** the number of new acres joining the program, **C.** the demand for offsite sediment credits from participating onsite acres each year (onsite sediment production x 2), **D.** Sediment credits supplied offsite via offsite BMPs; **E.** Cash flow from onsite acres to the Sediment Credit “Bank” via annual fee structure, **F.** Cash flow to WRAPS (or comparable offsite entity) to install and maintain BMPs to supply sediment credits indicated in C., **G.** The Sediment Credit Bank balance (columns E. minus F.), **H.** Repayment amount of start-up funds.

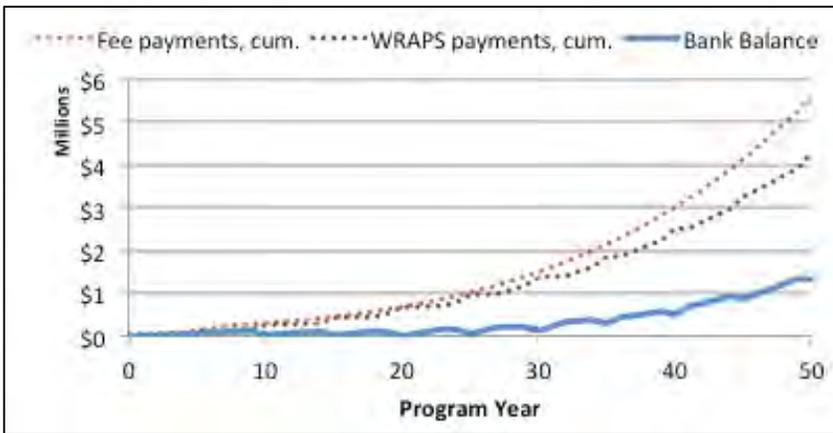
A. Year	B. New Acres participating per year	C. Onsite sediment production x 2:1 credit ratio, tons/yr	D. Offsite sediment credit supply (tons)	E. Cash flow to Sediment Credit "Bank"	F. Cash flow to WRAPS/offsite entity	G. Sediment Credit Bank balance	H. Start-up Repayment amount
0	0	0	1600	\$41,830 <sup>a</sup>	\$41,830.40	\$-	
1	200	160	1600	\$7,520	\$7,430.40	\$90	\$-
2	200	320	1600	\$15,040	\$7,430.40	\$7,699	\$-
3	200	480	1600	\$22,560	\$7,430.40	\$22,829	\$-
4	200	640	1600	\$30,080	\$7,430.40	\$45,478	\$-
5	200	800	1600	\$37,600	\$41,830.40	\$41,248	\$-
6	200	960	1600	\$45,120	\$7,430.40	\$78,938	\$-
7	200	1120	1600	\$52,640	\$7,430.40	\$124,147	\$41,830
8	200	1280	1600	\$60,160	\$7,430.40	\$176,877	\$-
9	200	1440	1600	\$67,680	\$7,430.40	\$237,126	\$-
10	200	1600	3200	\$75,200	\$76,230.40	\$194,266	\$-
11	200	1760	3200	\$82,720	\$7,430.40	\$269,555	\$-
12	200	1920	3200	\$90,240	\$7,430.40	\$352,365	\$-
13	200	2080	3200	\$97,760	\$7,430.40	\$442,694	\$-
14	200	2240	3200	\$105,280	\$7,430.40	\$540,544	\$-
15	200	2400	3200	\$112,800	\$76,230.40	\$577,114	\$-
16	200	2560	3200	\$120,320	\$7,430.40	\$690,003	\$-
17	200	2720	3200	\$127,840	\$7,430.40	\$810,413	\$-
18	200	2880	3200	\$135,360	\$7,430.40	\$938,342	\$-
19	200	3040	4800	\$142,880	\$41,830.40	\$1,039,392	\$-
20	200	3200	4800	\$150,400	\$76,230.40	\$1,113,562	\$-
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
190	200	30400	35200	\$1,428,800	\$223,600	\$117,347,530	\$-
191	200	30560	35200	\$1,436,320	\$223,600	\$118,560,250	\$-
192	200	30720	35200	\$1,443,840	\$178,880	\$119,825,210	\$-
193	200	30880	35200	\$1,451,360	\$178,880	\$121,097,690	\$-
194	200	31040	35200	\$1,458,880	\$178,880	\$122,377,690	\$-
195	200	31200	35200	\$1,466,400	\$223,600	\$123,620,490	\$-
196	200	31360	35200	\$1,473,920	\$223,600	\$124,870,810	\$-
196	200	31520	35200	\$1,481,440	\$178,880	\$126,173,370	\$-
198	200	31680	35200	\$1,488,960	\$178,880	\$127,483,450	\$-
199	200	31840	35200	\$1,496,480	\$178,880	\$128,801,050	\$-
200	200	32000	35200	\$1,504,000	\$223,600	\$130,081,450	\$-

<sup>a</sup> Assumed start-up funds supplied by the City and/or other external source (see Section 4.3) provides initial cash infusion to program. Spreadsheet tool provides options for repayment of start-up funds.

The same analysis can be applied to demonstrate the effect of inflation. We assume a 3% annual rate of inflation, and that the sediment credit payment rate would be inflated at a comparable pace. User inputs to the spreadsheet are presented in Figure 8, and resulting cost analysis in Figure 9.

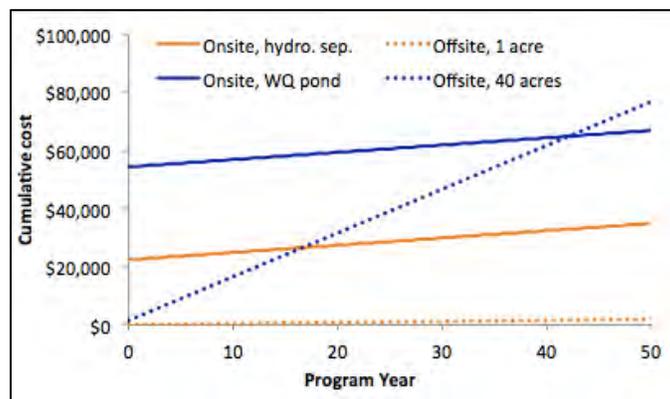
PROGRAM ASSUMPTIONS of sediment removal by offsite BMPs					
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<b>USER INPUTS</b>					
Onsite Sediment produced		0.4 tons/ac/yr			
Offsite:onsite credit ratio		2 :1			
% no-till fields replaced		100% every 5 years			
No-till sediment credit "cushion"		1.1 (affects pace at which no-till implemented to remain ahead of onsite sediment production)			
Starting fee all acres to date, \$/ton sed.	\$	47.00		\$ 37.60	Annual Cost/acre under initial fee
Inflation rate, annual program costs		3.00%			
Inflation rate, annual fee		3% per year			
City growth rate, year 1		200 acre	Avg annual growth, ac/yr	200	City participation rate 100%
Interest rate on start-up funds		0% annual	# compounded/yr	12	payback period (yrs) 10

**Figure 8.** User inputs for case in which 200 acres per year participate in the offsite program. Program costs are assumed to inflate 3% per year. The “Starting fee all acres to date” and “Reduced fee for all subsequent years” are set by the user to ensure that the bank balance (Figure 9) remains positive in all program years.



**Figure 9.** Sediment credit bank balance (solid blue line) over a 50-year program for inputs specified in Figure 8. The bank balance reflects the difference of cumulative payments into the bank through annual fees (initially \$37.60 per acre per year) and cumulative payments from the bank to WRAPS to fund water quality BMP implementation and maintenance.

The economic incentive to developers and/or property owners for participating in an offsite water quality BMP program is illustrated in Figure 10. Here, we compare the costs to a small-scale commercial property (1-acre) and a larger-scale residential development (40-acres) development to meet post-construction water quality requirements onsite versus offsite. For both cases, only the incremental costs to provide water quality beyond the minimum onsite requirements (i.e., hydraulic and trash control; see Section 3.2.2) are considered. For the 1-acre commercial property, we assume a hydrodynamic separator would be used to meet onsite water quality requirements as these devices are typical of such developments in the City. At a minimum, capital costs associated with onsite treatment are projected to be \$22,500 for the purchase and installation of the device (Appendix A). For the larger residential development, we estimated the incremental costs of a wet detention basin with a water quality volume of 1.6 acre-ft. The additional volume and specialized outlet structure required to gain water quality function are assumed to cost \$54,464 more than a basin for peak rate control only (Appendix A). For both properties, the biannual inspection required by the City is assumed to cost \$500. Participation in the offsite program will cost \$37.60/ac/year based on minimum initial acreage charges for a no-till based program with 100% replacement. In this case, there is a clear advantage to the small development, and 40-years of cost savings to the larger residential development.



**Figure 10.** Comparison of costs to meet water quality requirements onsite versus offsite for a hypothetical 1-acre commercial development and 40-acre residential development. Onsite water quality requirements for the commercial development are assumed to be met with a hydrodynamic separator (Onsite, hydro. sep.); a wet pond with 1.6-acre water quality volume is assumed for the residential site (Onsite, WQ pond). Cost for offsite alternative (\$37.60/ac/yr) are shown by the dotted lines.

The sediment credit fee will influence participation in the program. If the program budget were developed to cover replacement of 50% of no-till acres enrolled in the program (a scenario also considered to be conservative based on the project team’s experience working with land owners in the watershed), then the annual fee could be set to \$28/ton sediment per year (\$22.40 per acre per year). This may induce greater participation of larger-scale developments. Regardless of the annual fee amount, we expect the program to provide a substantial economic advantage to smaller properties while larger scale developments will need to evaluate cost-benefits on a case-by-case basis.

## Task 4. Develop program funding options

The goal of this task was to develop a suite of potential funding mechanisms by which the life cycle costs associated with offsite BMP implementation can be financed *in perpetuity*. As indicated in 8, sources of funding to offsite water quality programs may vary widely, from the developer only, to the City only, to a mixture of both private and public sources. Whatever the funding source(s) may be, the goals of the funding portfolio are similar, and include:

1. ensuring that parties that benefit from the program contribute to funding it. In the case that public funds are utilized, public benefit must be demonstrated.
2. ensuring the process by which parties pay into the program is transparent
3. ensuring that the funding source is sustainable such that the program can continue to function

With these goals in mind, the parties that could be responsible for paying program sediment credit rates developed under Tasks 2 and 3 are discussed in the following sections.

### 4.1 Current funding structure for onsite BMPs

Before considering potential funding sources for an offsite BMP program, it is instructive to consider the mechanisms that are currently in place to fund BMP implementation and maintenance. Such consideration allows identification of current funding sources as well as the parties that could directly benefit from participation in an offsite BMP program. Currently, the developer of a new or redevelopment project is responsible for all costs associated with implementing water quality BMPs onsite, such as the design, permitting, construction, surety bonds, and related administrative costs. Following BMP implementation, maintenance responsibilities are typically shifted to the property owner or a related party (e.g., Home Owner's Association). As part of their MS4 permit requirements, the City requires documentation of proper BMP maintenance every two years. To obtain this documentation, the City notifies the property owner and provides appropriate forms to report maintenance activities. Maintenance documentation is typically provided by an external BMP maintenance provider that has been contracted by the owner.

Based on onsite water quality BMP financial responsibilities, the parties that could directly benefit from an offsite program include developers, assuming that the cost to participate in the offsite program is less than the cost associated with onsite BMP implementation, and future property owners, assuming their cost to participate is less than the cost to assure maintenance obligations are met.

### 4.2 Potential funding sources for offsite program

At their October 2014 monthly meeting, the Wichita Stormwater Advisory Board (SWAB) brainstormed advantages and disadvantages associated with funding the program solely with public funds or solely with private (developer) funds (Table 12). As indicated by the discussion generated among SWAB members, there are potential advantages and disadvantages associated with either public or private funding sources. Among the primary disadvantages of a completely City-funded program is the difficulty in clearly defining direct benefits to all tax-paying citizens. Of the offsite water quality programs that were reviewed under Section 3.1, two were fully funded by City government. Both of these programs were related to public drinking water supplies, for which the overall public benefit is clear. The Lenexa "Rain to Recreation" stormwater program included a public element through both a sales tax and stormwater

utility fee along with a developer use charge. In Lenexa’s program, offsite BMPs consisted of regional retention (lakes) throughout the city that were accessible for public recreation and were thus considered as an amenity by the general public. In the case of an offsite BMP program in which BMPs are located in upstream agricultural areas on private lands, the public benefit – which, albeit, would include improved downstream water quality within the City’s rivers – is more difficult to communicate to the general public. Nonetheless, both public and/or private funding sources are likely to be appropriate for an offsite BMP program in Wichita. Both types are summarized in Table 13, and are explained in further detail in the following sections. **The City has expressed preference for an annual fee structure;** however, one-time payment options are also presented for the sake of completeness.

**Table 12. Advantages and disadvantages of City (Public) versus Developer (Private) funded offsite BMP program.** Developed from brainstorming by Stormwater Advisory Board members, October 2014.

**City-Funded**

*Advantages*

- Creates developer friendly environment
- Potentially more efficient and effective (i.e., not dependent upon pace of development)
- Enables long-term planning
- Higher density/use of land
- Increased flexibility of funding options and/or use of other credit sources

*Disadvantages*

- User fees are typically preferential to government funding
- Must develop policies for those grandfathered in to program
- Transitional challenges
- New budget item
- Difficult to “sell” program to taxpayers

**Developer-Funded**

*Advantages*

- Maintains current practices
- Enables use of “user only fee”
- Fees not managed by City
- Do not have to try to “sell” to taxpayers
- Conforms to current EPA/KDHE model

*Disadvantages*

- Viewed as punitive to new development/redevelopment
- Up-front costs of program must be addressed to implement offsite BMPs ahead of onsite development activities
- Must ensure recurring program costs covered in fee to developers, which is likely to be a one-time fee

**Table 13. List of potential funding mechanisms and the source of funding (developers versus citizens) targeted.**

<b>Funding mechanism</b>	<b>Type of charge</b>	<b>Targeted party</b>
Capital charge (Impact fee)	One-time	Developers of new and redevelopments who opt in to offsite BMP program
System Development Charge	One-time	Citizen; targeted to owners/residents of new and redevelopment properties participating in offsite BMP program
Special Assessment	Recurring	Citizen; targeted to owners/residents of new and redevelopment properties participating in offsite BMP program
Stormwater Utility	Recurring	Citizens; can be targeted to participants in offsite program applied across all citizenry
Property Tax	Recurring	Citizens; can be targeted to participants in offsite program applied across all citizenry
Local Sales Tax	Recurring	Citizens, applied across all citizenry

**4.2.1 Capital Charge (Impact Fee).** A capital charge, or impact fee, could be assessed to new and redevelop in the same fashion that the City currently charges for other types of infrastructure needed to accommodate growth. Without the option of an offsite program, all developers are required to install water quality BMPs to treat stormwater from new and redevelopment projects. With the proposed capital charge, developers would pay a capital charge when they apply for a building permit in order to opt in to the offsite BMP program. This charge would be based on the projected sediment load a new or redevelopment project may deliver.

This funding mechanism would be similar to the in-lieu fee charged to developers who opt to meet water quantity or quality obligations off site in other offsite programs administered by MS4s (Appendix D), and thus, there are models in place for the administration of this type of charge. This funding mechanism also provides a means by which the development community can contribute to the financial support of an offsite BMP program if they stand to benefit from participation. Capital charge fees are assessed only once. For this reason, it is important to base the magnitude of this fee on the net present value of the lifecycle costs associated with implementing and maintaining sediment reduction credits. Mechanistically, capital charge fees are feasible; however, for this funding source to be successful, the capital charge should not increase the costs of development.

**4.2.2. System Development Charge.** Traditionally, system development charges (SDC) refer to the on-time fee commonly charged to new stormwater customers being connected to the existing stormwater infrastructure to *buy in* to the infrastructure already built for them and/or necessary to expansions to accommodate them. As such, an SDC is a citizen-based charge that is somewhat analogous to the capital charge that could be assessed to developers. The magnitude of an SDC is typically determined based on the amount of stormwater (or pollutant load) a property will generate, and is typically tied to the impervious surface area of the property (EPA, 2008). An advantage of this funding mechanism is that it can be targeted to only those programs directly involved in the offsite BMP program. As with the developer-based capital charge, an SDC is a one-time fee and thus needs to account for the net present value of the lifecycle costs associated with implementing and maintaining sediment reduction credits.

**4.2.3. Special Assessment.** A special assessment refers to a charge that is assessed only to those properties that benefit from a particular construction project or program. For example, residents of new developments are often subject to special assessments for new roads and/or water and sewer infrastructure extended by the City. This type of charge could be adapted for an offsite BMP program to target only those properties that have opted in to the offsite program (and thus, do not bear financial responsibility for onsite water quality BMP maintenance). The targeted nature of a special assessment fee is a potential advantage of this funding mechanism for an offsite BMP program. Most special assessments eventually sunset; thus, the time period over which a special assessment-based funding source would be collected would need to be negotiated.

**4.2.4. Stormwater utility.** The City of Wichita established a Stormwater Utility, approved by the City Council, to fund construction and maintenance of City-provided stormwater infrastructure. To fund installation and upkeep of this infrastructure, all residential properties in the City pay \$2 on top of their monthly water bill, while commercial properties pay \$2 per equivalent residential unit (ERU, where one ERU is equal to 2,139 ft<sup>2</sup> impervious surface area on the property). One advantage of a stormwater utility as a funding mechanism is that they provide an equitable fee structure in which parties are charged based on their potential to generate stormwater runoff and associated pollutant load as based on impervious surface cover rather than property value or other equity measure. The fee structure could be adjusted to target only those properties participating in the offsite BMP program. A stormwater utility also provides a dedicated funding source.

If the City's existing stormwater utility program were to be used to provide a funding stream to the offsite BMP program, it is likely that the fee structure would require revision to increase fees for either all rate payers or only those directly associated with new and redevelopment properties utilizing the offsite BMP program. A rate increase is likely to be necessary since the City's commitment to provide and maintain drainage infrastructure to new developments and across the City is not likely to change, and thus, will continue to require the dedicated funding source provided by the existing stormwater utility. A change in stormwater utility rates would require action from the City Council with opportunity for public comment. If reallocation of existing stormwater utility fees were desirable, preliminary economic analysis by members of the project team have indicated that substantial cost savings could be achieved through establishing no-mow zones along streams and drainage ditches (e.g., River City, 2012). The establishment of no-mow zones also aligns with the City's MS4 permit as establishment of (native) grasses is also believed to contribute to water quality and improve soil stability. Whether potential cost-savings could be reallocated to fund a portion of the offsite BMP program would require additional study.

**4.2.5. Property Tax (General Funds).** General funds are raised through taxes assessed based on the value of a given property, and represent the majority of the dollars available to the City to fund public services such as maintenance of roads, parks, schools, and other municipal programs. In addition to the fierce competition for general funds, there are other aspects of a property tax-based funding mechanism that may not provide the best fit to an offsite BMP program. First, the quantity of stormwater and its associated pollutant load that a property generates is not necessarily related to the value of that property; thus, the fee structure of a property tax is not the most equitable for determining payments to an offsite stormwater program. Second, tax-exempt properties such as schools and governmental properties are often large stormwater contributors, but a property tax would not provide a mechanism to for these properties to contribute financially to an offsite stormwater program. For these reasons, a property tax is probably not the most feasible means by which to obtain program funding.

**4.2.6. Sales Tax.** Some offsite water quality programs have been successful in securing funding through a dedicated local sales tax. As an example, the citizens within the City of Lenexa, KS, approved a 1/8% sales tax measure to support the City’s “Rain to Recreation” program in which onsite green infrastructure and riparian setbacks and offsite regional retention were utilized as a more economically efficient means of providing stormwater quality and quantity control within the City. The sales tax measure was approved for 5 years, and then reapproved for an additional 5 years by the citizen voters. As a direct benefit of funding this measure, voters received the benefit of access to recreational trail and lake access created by regional retention basins. A similar dedicated sales tax was recommended to the Sedgwick County Public Works Department establish dedicated funding for stormwater management projects (PBA et al., 2010).

An advantage of a sales tax funding mechanism is that it is a dedicated funding source that will be sustained over a set time period. It is, however, a non-targeted funding mechanism, which may be a disadvantage in the case of an offsite BMP program in which the public benefit to all citizens is not as clear. Any sales tax measure would need to be balloted and approved by public voters. As demonstrated by the recent November 2014 vote, in which citizens did not approve a local sales tax to support drinking water infrastructure, public support for sales tax measures is likely not to be high. Thus, a sales tax may not be the most feasible funding mechanism.

**4.2.7. Recommendations regarding potential funding sources.** The SWAB asked the consulting team to provide an opinion about which party or parties should pay for the program. Because the program is designed specifically to meet Clean Water Act requirements for post-construction water quality protection, the project developer should fund at least the portion of the in-lieu fee covering the capital costs of water quality improvements. A case can be made that the property owner pay for the longer-term operations and maintenance costs, whether a commercial, industrial or office development, or a homeowners association (HOA). In addition, during the March 13 SWAB meeting it was asked whether ratepayers generally should fund the program. The ratepayers will not directly benefit from the program; and while protected water quality is an indirect benefit, the program is designed to mitigate the direct impacts of new development and redevelopment to protect existing water quality, rather than provide a general improvement in water quality. Furthermore, it was noted in the meeting that stormwater management needs exceed current revenues, and adding the cost of water quality credits would further reduce funding for long-term needs. However, the question of whether the City should fund this cost as a *development incentive* is a policy decision that is beyond the scope of this study.

### 4.3 Program Establishment: securing startup funding

To meet the expectation that implementation of offsite BMPs, and thus the supply of sediment credits available to offset onsite sediment production *ahead of* development, an initial source of funding must be secured. The SWAB has expressed its desire that the initial funding pool would provide a 10-year reserve of sediment credits to assure a sufficient supply of readily available sediment credits and avoid interruption in development activities. Only a portion of the funding sources identified above provide a mechanism by which to accumulate an adequate reserve of program funds ahead of development, and these would necessarily be applied across all citizens: stormwater utility, property tax, and sales tax. Given that the intent is to jumpstart the “bank” from which offsite BMPs can be funded, but not necessarily to maintain program funding, this funding source could be temporal in nature.

Through some combination of existing funds, the City has expressed that it would be amenable to providing day one funding to the bank (J. Hardetsy, personal communication). If this initial 10-year bank of sediment credits were bonded, the calculations to pay back the bond with interest in a specified timeframe is built into the spreadsheet tool provided to the City to ensure that fees paid into the program are sufficient to fund offsite BMP implementation, maintenance, and interest payments.

External funding sources may be available to match funds put forth by the City for program start-up. Project partner Vireo posed a general inquiry regarding the possibility to obtain assistance from the Urban Watershed Federal Partnership (UWFP). The UWFP includes over a dozen federal agencies and multiple non-governmental organizations, and aims to stimulate regional and local economies, create local jobs, improve quality of life, and protect Americans' health by revitalizing urban waterways in under-served communities across the country. Partners target and coordinate their technical, organizational and limited financial resources to support innovative urban watershed protection efforts. While federal partnership projects in other regions (including Kansas City and St. Louis, Missouri) are site-based, the UWFP is generally interested in innovative projects and programs. One important benefit is the ability to receive headquarters-level approval and support for innovative or unusual proposals and approaches. The City should formally inquire with the UWFP after it proposes the program to EPA Region 7.

Based on a similar general inquiry, it appears that the EPA Region 7 Water program is increasingly supportive of innovative water quality protection programs, particularly those that support or enhance Total Maximum Daily Load (TMDL) compliance efforts. The consulting team can help the City approach key contacts at Region 7 to build support for the proposed offsite program. For example, EPA’s UWFP Ambassador for the St. Louis project previously worked in the TMDL section and might be helpful both at the regional and headquarters level.

Once program start-up funds are secured, fees paid into the program by developers and/or property owners are intended to secure the program’s operation and maintenance. An additional surcharge for longer-term program operations and maintenance could be added to the initial credit price and placed in an escrow account. Accrued investment earnings would be used to fund long-term program needs. Finally, the assumptions documented in the report are based on assumed conditions over the proposed program lifetime, and represent average conditions over that timeframe. However, a significant opportunity exists if initial efforts are “front-loaded”. The cost and environmental benefit of implementing rural, off-site BMPs will be significantly lower at project inception and will only increase over time.

## Summary

This report documents a framework for establishing an offsite water quality BMP program. Key considerations in developing this implementation framework are summarized in the following:

*External versus internal program management.* In considering an internally managed program, the project team first considered the question of whether water quality credits could be generated from City investments in water quality improvements on urban projects. As the study documents, the City has previously committed to a number of water quality improvements under its Municipal Separate Storm Sewer System (MS4) permit. In order to claim water quality credits from its improvement or operations and maintenance programs, the City would have to document that the improvements or programs were in addition to those required by the MS4 permit. In addition, the improvements or programs should have a clear water quality purpose with estimated results that can be quantified or tied back to empirical research or data. For example, the City could add water quality stages to a detention basin project, or could create new incentives or new regulations and enforcement programs for activities that degrade water quality and are not currently covered by the MS4 permit. However, as documented in Section 2.2, the relative cost to retain sediment in the urban landscape versus the rural is substantially higher. Therefore, the project team recommends administering the program through an external entity with connections to producers in the surrounding agricultural lands. We specifically recommend the Little Arkansas WRAPS program as the external program manager since this program (1) has an established record working with landowners to implement water quality BMPs, (2) has mechanisms in place to prioritize BMP implementation to lands most susceptible to erosion, thus increasing the economic and environmental efficiency of the program, and (3) has the infrastructure in place to receive payments from the City and distribute to landowners.

*Eligible offsite practices.* Successful water quality market programs have documented gains in the economic efficiency of programs in which offsite participants are given flexibility to select water quality BMPs of their choice. Therefore, we recommend structuring the program such that landowners may select from a suite of BMPs and will then receive incentive payments based on the expected sediment reduction (and, thereby, the supply of sediment credits) achieved by a given practice. We recommend basing the value of sediment credits on the cost to implement no-till given (1) the relative popularity of this practice among landowners and thus, the likelihood that it will be implemented and (2) the preference of regulatory agencies for land management practices such as no-till that provide multiple environmental benefits in addition to sediment reduction. To meet the City's criteria for perpetual function of the program, the project team built in the assumption that a specified fraction of no-till acres will be replaced every five years following the typical contract period under which WRAPS currently disperses incentive payments. Based on the team's experience with long-term no-till adoption in the Little Ark watershed, we believe 50% provides a conservative estimate of the needed replacement rate. However, this variable in the overall cost of the program can be selected by the City to provide their desired level of risk. A spreadsheet tool was developed and provided to the City to allow the City to test the effect of the percentage of no-till acres replaced and/or other program assumptions on total program costs and associated fee requirements.

*Sediment credit fee structure.* Although it would be most efficient for the initial project developer to pay the entire credit cost rather than to obtain and track recurring payments from two or more entities, an

annual fee structure is recommended to meet the City's criteria that the program remain financial sustainable in perpetuity. It should be noted that the annual fee structure will add to the administrative burden to the City; however, since the City currently tracks all properties to administer the biannual water quality BMP inspection notice, the administrative responsibilities associated with the offsite program should not add excessively to that which is already undertaken. A spreadsheet tool has been provided to the City of Wichita to determine program costs and an annual fee to be charged to developers who participate in the program. Based on the cost to maintain sediment credits provided by offsite BMPs in perpetuity, we anticipate an annual cost of \$30 to \$40 per acre per year to participate in the offsite program. **To ensure the financial sustainability of the program, it is important that the City has the flexibility to adaptively manage program fee structures. It is recommended that the City review program fee structure periodically and adjust as necessary.**

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## Appendix A

# Design Assumptions and Associated Costs for Onsite (Urban) BMPs

**Pages 2-3.** Grass filter strip

**Pages 4-5.** Water quality swale

**Pages 6-7.** Extended detention

**Pages 8-9.** Bioretention

**Pages 10-11.** Permeable pavement

**Pages 12.** Hydrodynamic separator

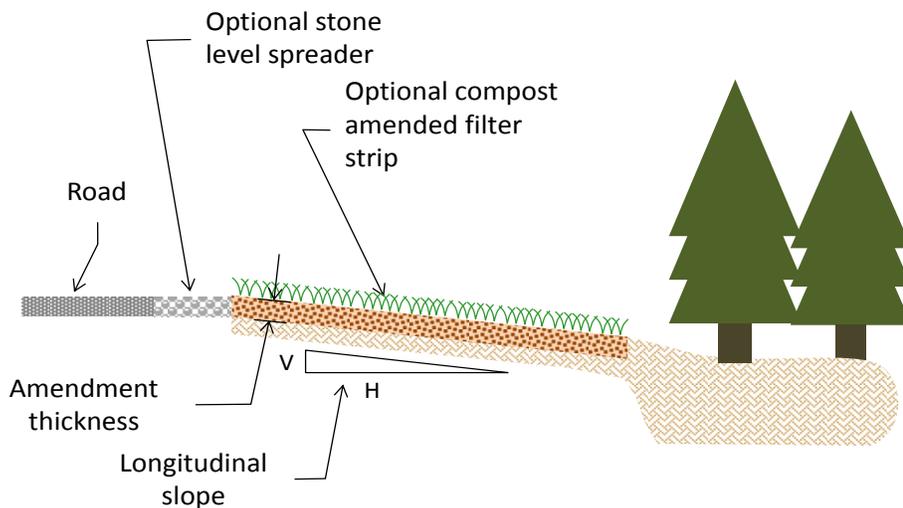
**Pages 13.** Riparian buffer setback

**Pages 14-15.** Consideration of large-scale development and incremental costs associated with onsite peak rate *and* stormwater quality management

**Filter Strip Design Parameters**

**Design Guidance and Justification**

<b>Water Quality Flow (cfs)</b>	0.50	The flow over the filter strip desired to meet the water quality design requirements.
<b>Length (ft)</b>	670	The length of the filter strip perpendicular to the flow; calculated based on filter strip length required to treat 1-ac impervious area (APWA-MARC, 2012)
<b>Underlying Soil Design Infiltration Rate (in/hr)</b>	0.5	Assumed based on predominant soil type in Wichita area.
<b>Effective Amended Soil Depth (inches)</b>	0	Depth of amended surface soil actively available for soil soaking and drying. Here, assumed no soil amendment added but that in-situ soils provide sufficient hydraulic conductivity.
<b>Overland Flow Width (ft)</b>	45	The width of the filter strip in the direction of the flow
<b>Longitudinal Slope (ft/ft)</b>	0.03	The average slope in the direction of flow, assumed based on typical slopes in area.
<b>Manning's friction coefficient (n)</b>	0.4	Describes hydraulic roughness of vegetation within filter strip
Water Quality Flow Depth (in)	0.21	Calculated based on water quality design flow and filter strip dimensions. Maintain value < 2/3 filter strip vegetation height to ensure sediment trapping efficiency.
Hydraulic Residence Time (min)	17.4	Calculated based on the water quality flow and the filter strip dimensions. Maintain value > 9 min.
Calculated Pervious Area (ft <sup>2</sup> )	30,150	Estimated footprint area of vegetated filter strip.
Ratio of Pervious Area to Impervious Area	0.69	Calculated based on user inputs; fundamental indicator of volume reduction performance.



**User-Entered Engineer's Estimate Costs**    **Unit**    **Cost**    **Quantity**    **Cost**

Mobilization	LS	\$558	0	\$0
Clearing & Grubbing	SY	\$1	3,350	\$3,201
Excavation/Grading	CY	\$18	0	\$0
Haul/Dispose of Excavated Material	CY	\$10	0	\$0
Hydroseed (SF):	SF	\$0	30,150	\$2,379
Traffic Control	LF	\$12	0	\$0

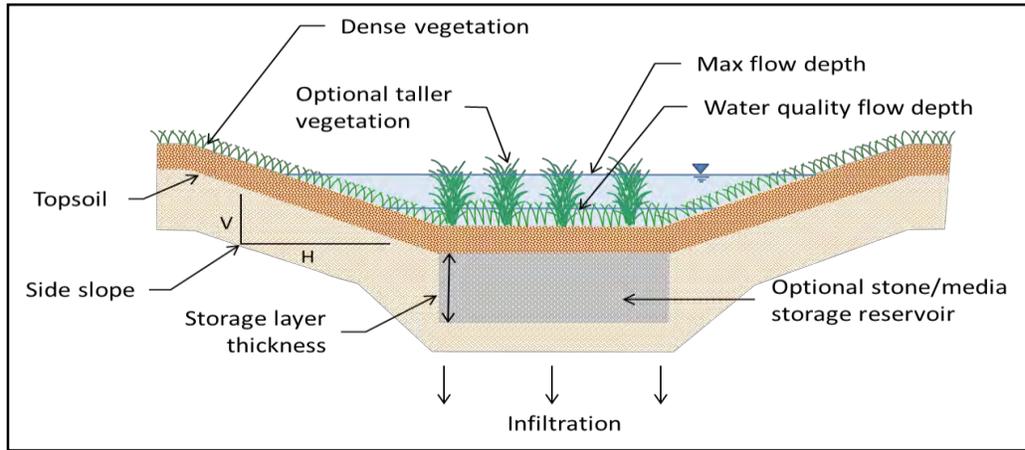
**Associated Capital Costs**    **Unit Cost**    **Quantity**    **Cost**

Project Management	\$554	1	\$554
Engineering: Preliminary	\$558	1	\$558
Engineering: Final Design	\$279	1	\$279
Topographic Survey	\$4,025	1	\$4,025
Geotechnical	\$2,350	1	\$2,350
Landscape Design	\$112	1	\$112
Land Acquisition (site, easements, etc.)	\$0	1	\$0
Utility Relocation	\$0	1	\$0
Legal Services	\$56	1	\$56
Permitting & Construction Inspection	\$56	1	\$56
Sales Tax	\$399	1	\$399
Contingency (e.g., 20%)	\$1,116	1	\$1,116
<b>Total Associated Capital Costs</b>		<b>\$8,950</b>	
<b>Total Facility Cost</b>		<b>\$14,530</b>	

**Life cycle results:**

Estimated Capital Cost, \$ (2013)	\$14,530
Estimated NPV of Design Life Maintenance Costs, \$ (2013)	\$16,466
Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)	\$30,996
Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)	\$1,240
Annual TSS Load reduction (tons/yr; % removed)	0.41 tons/yr, 96% annual reduction
Whole Lifecycle cost per ton TSS removed	\$3020

## Vegetated Swale: Design and Cost Assumptions



### Primary Swale Design Parameters

### Guidance

<u>Primary Swale Design Parameters</u>		<u>Guidance</u>
<b>Water Quality Design Flow (cfs)</b>	0.45	The flow through the swale required to achieve the desired water quality performance
<b>Bottom Length (ft)</b>	100	Minimum acceptable length from APWA-MARC (2012) guidance selected
<b>Effective Amended Soil Depth (inches)</b>	6	As water quality swale, assumed 6-inch gravel storage layer.
<b>Underlying Soil Design Infiltration Rate (in/hr)</b>	0.5	Assumed based on predominant soil type in Wichita area.
<b>Longitudinal Slope (ft/ft)</b>	0.03	The average slope in the direction of flow. Assumed based on slopes typical in area.
<b>Time of concentration (min)</b>	5	Time of concentration from 1-acre impervious watershed
<b>Manning's friction coefficient (n)</b>	0.4	Describes hydraulic roughness of vegetation within swale
<b>Horizontal/vertical side slope ratio (H:1V)</b>	3	3 to 1 side slopes assumed as specified in APWA-MARC (2012)
<b>Water Quality Flow Depth (in)</b>	4	Maximum water quality design depth specified in APWA-MARC (2012)
<b>Maximum Depth (ft)</b>	2	Depth from the bottom of the swale up to the freeboard
<b>Freeboard Depth (ft)</b>	1	Neglected when estimating treatment volumes because overflow/bypass is assumed to begin when the water quality storage volume has been exhausted. However, it is included in cost calculations and volume loss calculations.
<b>Bottom Width (ft)</b>	3.99	Between recommended 2 to 8 ft (APWA-MARC, 2012)
<b>Calculated Pervious Area (ft<sup>2</sup>)</b>	599	Estimate footprint area for volume reduction calculations.
<b>Ratio of Pervious Area to Impervious Area</b>	0.01	Calculated based on user inputs; fundamental indicator of volume reduction performance.
<b>Wetted Area (ft<sup>2</sup>)</b>	1.66	Calculated based on previous inputs for water quality estimation only
<b>Wetted Perimeter (ft)</b>	6.1	
<b>Hydraulic Radius (ft)</b>	0.27	
<b>Calculated Design Intensity (in/hr)</b>	0.50	
<b>Hydraulic Residence Time (min)</b>	6	Calculated based on the water quality flow and the swale bottom length

<u>Engineer's Estimate Costs</u>	<u>Unit</u>	<u>Unit cost</u>	<u>Quantity</u>	<u>Cost</u>
Clearing & Grubbing	SY	\$1	244	\$244
Excavation/Grading	CY	\$69	137	\$9,450
Haul/Dispose of Excavated Material	CY	\$10	41	\$423
Overflow Structure (concrete or rock riprap)	CY	\$125	7	\$875
Hydroseed / Erosion Control:	SF	\$0.1	244	\$19
<b>Total Facility Base Cost</b>				<b>\$11,088</b>

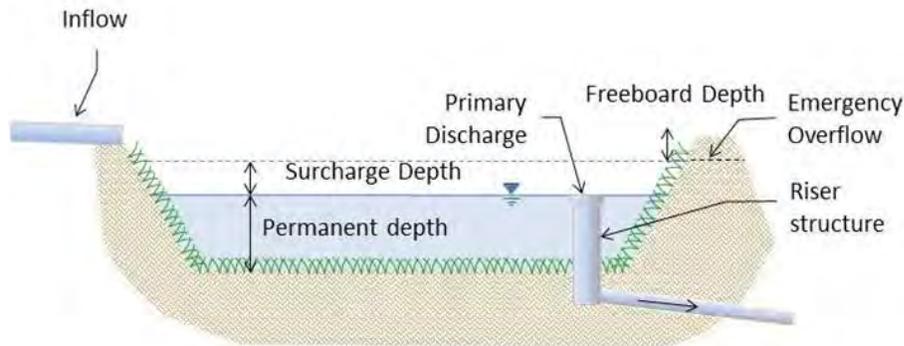
<u>Associated Capital Costs</u>	<u>Unit cost</u>	<u>Quantity</u>	<u>Cost</u>
Project Management	\$554	1	\$554
Engineering: Preliminary	\$1,109	1	\$1,109
Engineering: Final Design	\$554	1	\$554
Topographic Survey	\$4,025	1	\$4,025
Geotechnical	\$2,350	1	\$2,350
Landscape Design	\$222	1	\$222
Land Acquisition (site, easements, etc.) \$/acre	\$0	0.02	\$0
Utility Relocation	\$0	1	\$0
Legal Services	\$111	1	\$111
Permitting & Construction Inspection	\$111	1	\$111
Sales Tax	\$793	1	\$793
Contingency (e.g., 20%)	\$2,218	1	\$2,218
<b>Total Associated Capital Costs</b>			<b>\$12,047</b>
<b>Total Facility Cost</b>			<b>\$23,135</b>

**Life cycle results:**

Estimated Capital Cost, \$ (2013)	\$25,358
Estimated NPV of Design Life Maintenance Costs, \$ (2013)	\$16,466
Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)	\$41,825
Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)	\$1,673
Annual TSS Load reduction (tons/yr; % removed)	0.185 tons/yr, 43% annual reduction
Whole Lifecycle cost per ton TSS removed	\$8660

## Extended Detention: Design and Cost Assumptions

Ext. Detention Design Parameters	Value	Guidance
Total Storage Volume (cu-ft)	4,000	Water quality storage volume from 1-ac impervious watershed
Surcharge Depth (ft)	1.00	Assumed depth from the permanent pool elevation up to the overflow elevation.
Permanent Pool Depth (ft)	4.00	Assumed height of outlet offset from the bottom of the pond.
Surcharge Volume Drawdown Time (hr)	12	Follows recommended drawdown time from APWA-MARC (2012)
Minimum Residence Time in the Permanent Pool (hours)	12	Follows recommended drawdown time from APWA-MARC (2012)
BMP Length/width ratio (L:1W)	2	The length-to-width ratio at mid-water quality design depth; dimension assumed.
Freeboard depth (ft)	1	The storage depth above the water quality volume; included in cost calculations
Horizontal/vertical side slope ratio (H:1V)	3	3:1 side slopes assumed
Calculated Surcharge Volume (ft <sup>3</sup> )	1,700	The extended detention portion of the water quality volume. Does not include freeboard above the spillway.
Calculated Permanent Pool Volume (ft <sup>3</sup> )	2,300	The wet pool portion of the water quality volume.
Permanent Pool Water Quality Flow (cfs)	0.053	The calculated water quality flow rate based on the target minimum residence time.
Approximate Total Footprint to Top of Freeboard (ft <sup>2</sup> )	2,520	This footprint accounts for freeboard above ponding, assuming a rectangular shape; actual dimensions may vary.
Approximate Surcharge Surface Area (ft <sup>2</sup> )	1,928	This footprint represents the surface area of the basin at the surcharge depth; assumes a rectangular shape.
Approximate Permanent Pool Surface Area (ft <sup>2</sup> )	1,405	This footprint represents the surface area of the basin at the permanent pool depth; assumes a rectangular shape.
Permanent Pool Exchange Rate (hr)	48.00	The time required to completely exchange the permanent pool volume.
Complete Capture Settling (hr)	4.00	Estimated time required to settle a 20 micron particle in the permanent pool, following Stoke's Law.



Engineer's Estimate Costs	Unit	Cost/Unit	Quantity	Cost
Clearing & Grubbing	SY	\$1	280	\$280

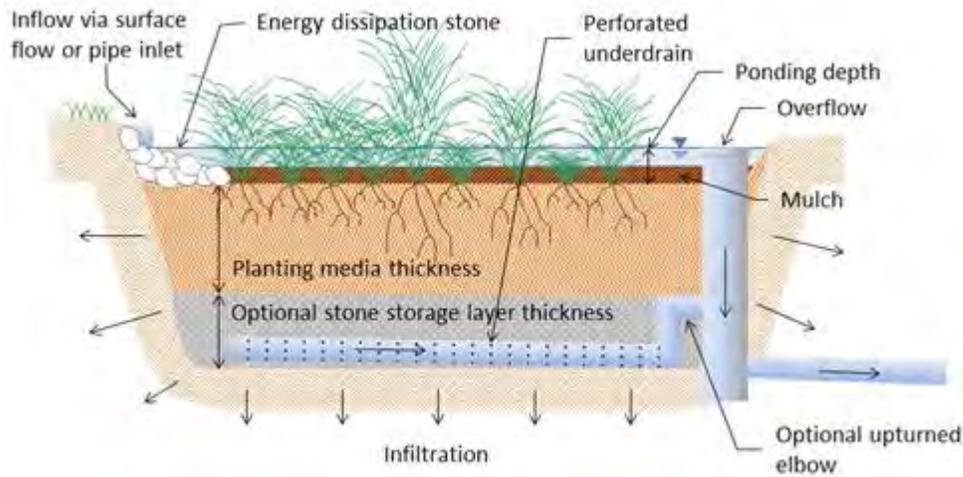
Excavation/Grading	BCY	\$18	185	\$3,358
Haul/Dispose of Excavated Material	CY	\$10	90	\$900
Inflow Structure(s)	LS	\$2,200	1	\$2,200
Energy Dissipation Apron	CY	\$191	4	\$707
Outflow Structure	LS	\$2,200	1	\$2,200
Overflow Structure (concrete or rock riprap)	CY	\$125	7	\$926
Impermeable Liner	SF	\$2	1000	\$2,200
Water's Edge Vegetation	EA	\$25	45	\$1,125
Wetlands Vegetation	EA	\$100	0	\$0
Site Landscaping (e.g., trees)	EA	\$345	0	\$0
Maintenance Access Ramp/Pad	CY	\$191	4	\$707
Hydroseed / Erosion Control:	SY	\$1	76	\$54
<b>Total Facility Base Cost</b>				<b>\$14,345</b>

<u>Associated Capital Costs</u>	<u>Cost/unit</u>	<u>Quantity</u>	<u>Total Cost</u>
Project Management	\$758	1	\$758
Engineering: Preliminary	\$1,516	1	\$1,516
Engineering: Final Design	\$758	1	\$758
Topographic Survey	\$4,025	1	\$4,025
Geotechnical	\$2,350	1	\$2,350
Landscape Design	\$303	1	\$303
Land Acquisition (site, easements, etc.)	\$0	1	\$0
Utility Relocation	\$0	1	\$0
Legal Services	\$152	1	\$152
Permitting & Construction Inspection	\$152	1	\$152
Sales Tax	\$1,084	1	\$1,084
Contingency (e.g., 20%)	\$3,032	1	\$3,032
<b>Total Associated Capital Costs</b>			<b>\$14,130</b>
<b>Total Facility Cost</b>			<b>\$29,291</b>

#### Life-Cycle Cost Analysis Results

Estimated Capital Cost, \$ (2013)	\$28,058
Estimated NPV of Design Life Maintenance Costs, \$ (2013)	\$131,249
Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)	\$159,307
Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)	\$6,372.27
Annual TSS Load reduction (tons/yr; % removed)	0.3525 tons/yr, 82% annual reduction
Whole Lifecycle cost per ton TSS removed	\$18,080

## Bioretention: Design and Cost Assumptions



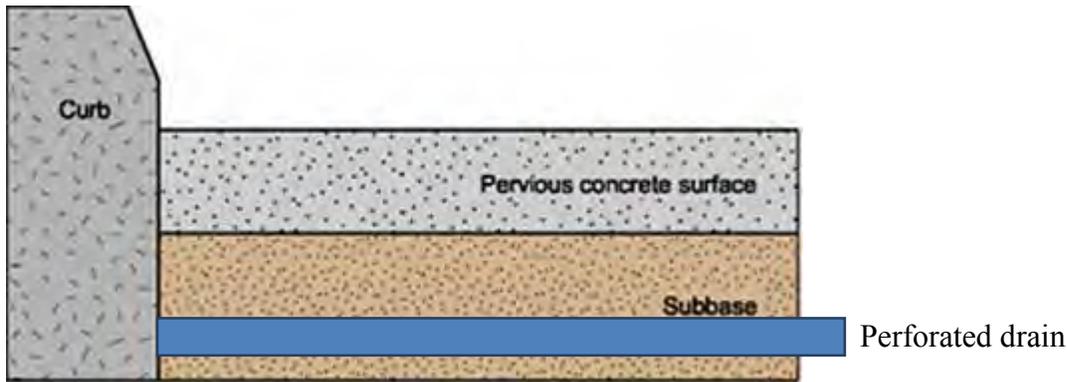
Primary Bioretention Design Parameters	Value	Guidance
Storage Volume (cu-ft)	3,600	Total storage volume provided by the bioretention as required to capture water quality volume from 1-ac impervious watershed
Underlying Soil Design Infiltration Rate (in/hr)	0.8	Assumed based on soils characteristic of the area
Underdrain Present?	no	Underlying soil infiltration rate assumed adequate
Ponding Depth (ft)	1	Maximum ponding depth recommended over the surface of the planting media (APWA-MARC, 2012)
Planting Media Thickness (ft)	2.5	Minimum planting media thickness (APWA-MARC, 2012)
Stone Reservoir Thickness (ft)	1	Typical stone reservoir thickness (APWA-MARC, 2012)
Planting Media Filtration Rate (in/hr)	2	Assumed long-term (and desirable) infiltration rate
Soil Freely Drained Storage (in/in)	0.2	Porosity typical of sandy soil planting media
Crop coefficient of Vegetation	1.25	Crop coefficient of native prairie grasses during peak growth; used in ET calculations
Stone Freely Drained Storage (in/in)	0.4	Typical porosity of gravel layer
BMP Length/width ratio (L:1W)	2	For example: For BMP that is 60 feet long by 20 feet wide, enter 3
Mulch depth above Planting Media Layer (ft)	0.25	Assumed 3 inch mulch thickness, typical of bioretention
Mulch porosity (in/in)	0.5	Included in water quality volume calculations
Freeboard depth (ft)	0.5	Assumed value; depth included in cost calculations.
Horizontal/vertical side slope ratio (H:1V)	4	4:1 is maximum slope specified in APWA-MARC (2012)
Approximate Total Footprint to Top of Freeboard, sq-ft	1,890	This footprint accounts for freeboard above ponding, assuming a rectangular shape; actual dimensions may vary.
Calculated Drawdown Time of Surface Ponding, hours	15	For Reference Purposes Only: For bioretention, a target of 3 to 24 hours is typically recommended.

Clearing & Grubbing	SY	\$1	209	\$200
Planting Media	CY	\$43	139	\$5,975
Gravel	CY	\$27	60	\$1,620
Mulch	CY	\$71	15	\$1,072
Slotted PVC Underdrain Pipe	LF	\$8	0	\$0
Excavation/Grading	CY	\$18	332	\$6,019
Haul/Dispose of Excavated Material	CY	\$10	133	\$1,370
Finish Grading (SY):	SY	\$2	209	\$415
Bioretention Vegetation (SF)	SF	\$2	1,620	\$3,667
Hydroseed (SF):	SF	\$0	1,620	\$128
Inflow Structure(s)	LS	\$2,200	1	\$2,200
Overflow Structure (concrete or rock riprap)	CY	\$125	7	\$875
<b>Total Facility Base Cost</b>				<b>\$23,542</b>

Project Management	\$1,136	1	\$1,177
Engineering: Preliminary	\$2,273	1	\$2,354
Engineering: Final Design	\$1,136	1	\$1,177
Topographic Survey	\$568	1	\$589
Geotechnical	\$0	1	\$0
Landscape Design	\$455	1	\$471
Land Acquisition (site, easements, etc.), \$/ac	\$0	0.04	\$0
Utility Relocation	\$0	1	\$0
Legal Services	\$227	1	\$235
Permitting & Construction Inspection	\$227	1	\$235
Sales Tax	\$1,625	1	\$1,683
Contingency (e.g., 20%)	\$4,546	1	\$4,708
<b>Total Associated Capital Costs</b>			<b>\$12,630</b>
<b>Total Facility Cost</b>			<b>\$34,921</b>

Estimated Capital Cost, \$ (2013)	\$36,162
Estimated NPV of Design Life Maintenance Costs, \$ (2013)	\$23,177
Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)	\$59,349
Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)	\$2,373.95
Annual TSS Load reduction (tons/yr; % removed)	0.3225 tons/yr, 77% annual reduction
Whole Lifecycle cost per ton TSS removed	\$7240

**Permeable Pavement: Design and Cost Assumptions**



<b>Permeable Pavement Design Parameters</b>	<b>Value</b>	<b>Guidance</b>
<b>Storage Volume (cu-ft)</b>	9,475	Storage volume provided by 12-in aggregate base layer and 6-in thick porous concrete across a 0.5-acre pervious pavement system. Depths follow APWA-MARC (2012)
<b>Underlying Soil Design Infiltration Rate (in/hr)</b>	0.8	Based on assumed infiltration of native soils underlying permeable pavement system.
<b>Underdrain Present?</b>	yes	Assume 4-in perforated pipe on 10-ft centers
<b>Pervious pavement thickness (ft)</b>	0.5	Minimum thickness suggested for pervious pavement (APWA-MARC, 2012)
<b>Gravel base thickness (ft)</b>	1	Minimum thickness suggested for subbase to provide adequate structural support (APWA-MARC, 2012)
<b>Underdrain Discharge Elev. from bottom of stone reservoir (ft)</b>	0.25	Follows minimum cover between perforated underdrain and bottom of pavement system (APWA-MARC, 2012)
<b>Pervious pavement filtration rate (in/hr)</b>	2	Reflect minimum long-term conditions expected for maintained pervious pavement systems
<b>Permeable pavement porosity (in/in)</b>	0.15	Reflects minimum recommended porosity
<b>Pavement system Suction Storage (in/in)</b>	0.05	Relatively little water is held in tension after free drainage by system of permeable pavement/gravel
<b>Equivalent crop coefficient</b>	0.7	Water demand by evaporation only, no transpiration and therefore crop coefficient < 1
<b>Gravel base porosity (in/in)</b>	0.36	Assumed porosity of gravel sub –layer (APWA-MARC, 2012)
<b>BMP Length/width ratio (L:1W)</b>	1	Assumes square orientation
<b>Freeboard depth (ft)</b>	0.5	Assumed equal to curb height
<b>Approximate Total Footprint to Top of Freeboard, sq-ft</b>	9,475	This footprint accounts for freeboard above ponding, assuming a rectangular shape; actual dimensions may vary.
<b>Calculated Drawdown Time of Surface Ponding, hours</b>	3	For Reference Purposes Only: For bioretention, a target of 3 to 24 hours is typically recommended.

Clearing & Grubbing	SY	\$1	2240	\$2,141
Pervious concrete	SF	\$3	21780	\$65,340
Gravel	CY	\$27	806	\$21,762
Slotted PVC Underdrain Pipe	LF	\$4	1032	\$4,128
Excavation/Grading	CY	\$18	1210	\$21,962
Haul/Dispose of Excavated Material	CY	\$10	600	\$6,180
Inflow Structure(s)	LS	\$2,200	1	\$2,200
Overflow Structure (concrete or rock riprap)	CY	\$125	7	\$875
<b>Total Facility Base Cost</b>				<b>\$191,505</b>

Project Management	\$6,232	1	\$6,232
Engineering: Preliminary	\$12,464	1	\$12,464
Engineering: Final Design	\$6,232	1	\$6,232
Topographic Survey	\$3,116	1	\$3,116
Geotechnical	\$0	1	\$0
Landscape Design	\$2,493	0	\$0
Land Acquisition (site, easements, etc.), \$/ac	\$0	0.5	\$0
Utility Relocation	\$0	1	\$0
Legal Services	\$1,246	1	\$1,246
Permitting & Construction Inspection	\$1,246	1	\$1,246
Sales Tax	\$8,912	1	\$8,912
Contingency (e.g., 20%)	\$24,698	1	\$24,698
<b>Total Associated Capital Costs</b>			<b>\$64,375</b>
<b>Total Facility Cost</b>			<b>\$189,012</b>

**Life Cycle Cost analysis results:**

Estimated Capital Cost, \$ (2013)	\$189,012
Estimated NPV of Design Life Maintenance Costs, \$ (2013)	\$25,835
Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)	\$214,847
Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)	\$8,593.88
Annual TSS Load reduction (tons/yr; % removed)	0.376 tons/yr, 88% annual reduction
Whole Lifecycle cost per ton TSS removed	\$22800

**Hydrodynamic separator: Design and Cost Assumptions**

The design of hydrodynamic separators is typically specified by the manufacture. For the purposes of this analysis, costs representative of a proprietary hydrodynamic separation device with a 1-acre impervious watershed were derived from costs compiled in the International Stormwater BMP database (bmpdatabase.org). Capital and recurring costs are summarized in the following table.

<b>Hydrodynamic separator materials</b>	EA	\$15,000	1	\$15,000
<b>Excavation</b>	CY	\$18	5	\$90
<b>Installation (Labor)</b>	LS	\$7,500	1	\$7,500
<b>Engineering and Overhead</b>	LS	\$3,375	1	\$3,375
<b>Total Capital Costs</b>				\$25,965
<b>Recurring Maintenance Costs</b>				
<b>Inspection, quarterly</b>	EA	\$250	4	\$1,000
<b>Sediment disposal</b>	YR	\$1,500	1	\$1,500
<b>Annual Maintenance Costs</b>				\$2,500

**Life Cycle Cost analysis results:**

<b>Estimated Capital Cost, \$ (2013)</b>	<b>\$25,965</b>
<b>Estimated NPV of Design Life Maintenance Costs, \$ (2013)</b>	<b>\$53,456</b>
<b>Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)</b>	<b>\$79,421</b>
<b>Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)</b>	<b>\$1,588</b>
<b>Annual TSS Load reduction (tons/yr; % removed)*</b>	<b>0.32 tons/yr; 50% removal</b>
<b>Whole Lifecycle cost per ton TSS remove</b>	<b>\$9,928</b>

\*Assumed sediment removal efficiency of 75% (BMP database, 2014; Wilson et al., 2009).

### **Riparian setback**

As reviewed by Mankin et al. (2007), the majority of sediment removal within vegetative buffers tends to occur within the first 30-45 ft. Therefore, for the purposes of this assessment, a 45-foot buffer width on either side of the stream was assumed. A mean effluent concentration of 15 mg/l total suspended sediments was assumed following experimental data collected in North East Kansas (Mankin et al., 2007). Riparian buffers should also reduce in-stream channel erosion, but this contribution is yet to be quantified well and is therefore not included in this analysis. As a non-structural BMP, engineering and construction costs associated with riparian setbacks are assumed equal to \$0. However, opportunity costs in terms of land (\$30,000 and \$90,000 per acre residential and commercial, respectively) and nominal maintenance costs (assumed \$1,000 per acre per year) are considered. Resulting life cycle cost-benefit analysis results are summarized in the following table.

### **Life Cycle Cost analysis results per one acre stream buffer**

<b>Estimated Capital Cost, \$ (2013)</b>	<b>\$0</b>	<b>\$30,000</b>	<b>\$90,000</b>
<b>Estimated NPV of Design Life Maintenance Costs, \$ (2013)</b>	<b>\$18,985</b>	<b>\$18,985</b>	<b>\$18,985</b>
<b>Estimated NPV of Design Life Whole Life Cycle Cost, \$ (2013)</b>	<b>\$18,985</b>	<b>\$48,985</b>	<b>\$108,985</b>
<b>Estimated Annualized Whole Life Cycle Cost, \$/yr (2013)</b>	<b>\$759</b>	<b>\$1,959</b>	<b>\$4,359</b>
<b>Annual TSS Load reduction (tons/yr; % removed)*</b>	<b>0.405 tons/yr; 95% removal</b>		
<b>Whole Lifecycle cost per ton TSS removed</b>	<b>\$1860</b>	<b>\$4800</b>	<b>\$10760</b>

## Consideration of large-scale development and incremental costs associated with onsite peak rate + stormwater quality management

The incremental costs associated with constructing and maintaining stormwater water retention basins for rate control only versus rate *and* water quality control were compared to provide insight to the financial incentive (or lack thereof) to developers of large properties to participate in an offsite BMP implementation program rather than make the necessary design adjustments to manage both stormwater rate and quality on site. Three of the most common options for meeting both stormwater quantity and quality requirements in Wichita are assessed. These options are discussed below, and estimated costs associated with each are summarized in Table A.2.

The first option is to design an extended wet detention basin in which the water quality volume is detained above the permanent pond pool along with required flood control volume. This water quality volume is discharged over 40 hours (APWA-MARC, 2012). This water quality volume can be calculated using the so-called Simple Method proposed by Claytor and Schueler (1996):

$$WQ_v = P(R_v)$$

where  $WQ_v$  is the water quality volume (in inches),  $P$  is the water quality rainfall event (in inches) and  $R_v$  is the volumetric runoff coefficient equal to  $0.05 + 0.009 \times (\% \text{ impervious area})$ . Assuming impervious surface coverage of 40% (typical of medium density residential) that is predominantly directly connected and a water quality rainfall event of 1.2 inches (the standard for the City of Wichita), the  $WQ_v$  to be captured and discharged over 40 hours is 0.49 inches. Assuming a 40-acre development, the volume of runoff to be captured for water quality treatment is 1.6 acre feet. For the purposes of rate control requirements, Table A.1 below provides an example of pre- and post-development conditions for the same 40-acre, 40% impervious development.

**Table A.1.** Pre and post development hydrologic design calculations.

			Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
Design Storm	Precip Depth (in)	Area (ac)	Rational coeff C <sup>a</sup>		intensity (in/hr) <sup>b</sup>		Peak discharge <sup>c</sup> (cfs)		Volume <sup>d</sup> (ac-ft)	
2-yr, 24-hr	3.3	40	0.2	0.6	2.48	4.3	20	103	0.0	4.2
5-yr, 24-hr	4.5	40	0.2	0.6	3	5.17	24	124	0.3	6.3
10-yr, 24-hr	5.2	40	0.2	0.6	3.42	5.88	27	141	0.8	8.3
25-yr, 24-hr	6.1	40	0.22	0.66	4	6.84	35	181	1.8	11.3
100-yr, 24-hr	7.8	40	0.25	0.75	4.85	8.28	49	248	4.1	16.7

<sup>a</sup>Rational coefficient  $C$  selected based on assumption of pasture in good condition for predevelopment conditions and medium intensity residential/commercial post-development conditions.

<sup>b</sup>precipitation intensity determined based on time of concentration assumed for predevelopment (30 min) and post-development (10 min) conditions.

<sup>c</sup>Peak discharge calculated by rational equation ( $Q_p = CiA$ )

<sup>d</sup>Runoff volume calculated using SCS curve number method, assuming a curve number of 40 for predevelopment and 75 for post-development.

Per the City's requirement to maintain the peak flow associated with the 2-year through 100-year design storm, an initial estimate of the required pond volume above the permanent pool can be taken as the difference in the pre and post-development runoff volume for the 100-year event (12.6 ac-ft). This volume substantially exceeds the calculated water quality volume for the same development area (1.6 ac-ft), indicating that the water quality volume will be accounted for in the volume required to provide peak rate control. The extended detention requirement associated with the water quality volume should be accommodated through an outlet control structure with staged orifices. The cost of such a structure is

nominal relative to the total cost of an extended wet detention basin; thus, there is little financial incentive driving participation in an offsite program for developers who prefer to use extended wet detention for peak rate control, through which water quality could be met onsite for nominal additional cost.

A second option is to design a dry detention basin for peak rate control and insert a hydrodynamic separator into the detention basin outlet to receive credit for stormwater quality control. Based on the preceding cost analysis, hydrodynamic separators cost approximately \$16,000 per ton sediment removed assuming urban sediment loads, which is significantly more than total costs projected for participation in an offsite program (Table 9). Therefore, those developers who prefer to meet both rate and quality control requirements through retention and hydrodynamic separators are likely to save money by participating in an offsite program.

A third option would be to design a dry extended detention basin to meet peak rate requirements and participate in an offsite program rather than constructing an extended wet retention basin to achieve both peak rate and water quality requirements on site. For the example of a 40-acre development, the marginal cost between a detention basin for peak control only and an extended wet detention basin is about \$100,000. Projected costs to participate in an offsite program are likely to be substantially less than \$100,000; given the sediment credit payment rates projected in Section 3.2.4, we expect a 40-acre development would incur a use fee of about \$5,200 to participate in an offsite program. Thus, there is likely to be a financial incentive to participate in an offsite BMP program for developers who choose to manage peak flows onsite with (dry) detention.

**Table A.2.** Estimated costs for peak rate and water quality management for various offsite and/or onsite stormwater BMPs.

<b>Option</b>	<b>Net present value life cycle costs</b>	<b>Annualized cost per ton sediment removed</b>
#1: extended wet retention for rate control <i>and</i> water quality	<b>\$738,648</b>	\$5,170
#2: detention for rate control with hydrodynamic separator for water quality	<b>\$656,903</b> (\$605,869 basin + \$51,034 hydrodynamic separator)	\$6,900
#3: detention for rate control and participation in offsite program	<b>\$611,069</b> (\$605,869 basin + \$5,200 <sup>a</sup> offsite BMP use charge <sup>a</sup> )	\$940 <sup>b</sup>

<sup>a</sup>Assumes use charge of \$130 per acre developed to participate in offsite BMP program.

<sup>b</sup>Includes cost of onsite rate control and offsite sediment retention. For offsite sediment retention, no-till is assumed as offsite BMP at a 2:1 credit ratio. The offsite BMP use charge purchases 26 tons of sediment reduction credits per year.

## **Appendix B**

# **Design Assumptions and Associated Costs for Offsite (Rural) BMPs**

**Pages 17-18.** Vegetative filter strip

**Pages 19-20.** Streambank stabilization

**Pages 21-22.** Permanent vegetation

**Pages 23-24.** Wetland restoration

**Pages 25-26.** Terrace-waterway system

**Pages 27-28.** Riparian buffer (forested)

**Pages 29-31.** No-till tillage practice

**General Data For Vegetative Filter Strip**

Discount Rate	<b>3.50%</b>	
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	per acre / year
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$6.67</b>	per acre / year
Inflation Rate of Annual Costs	<b>4.00%</b>	

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

<b>COSTS</b>		<b>PAYMENTS RECEIVED</b>	
Total one-time	<b>\$205.44</b>	Total one-time	<b>\$0.00</b>
Total annual	<b>\$6.67</b>	Total annual	<b>\$0.00</b>

**Net Present Value Table: Vegetative Filter Strip (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$205.44	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$6.67	\$0.00	\$0.00	\$0.00
2	\$0.00	\$6.94	\$0.00	\$0.00	\$0.00
3	\$0.00	\$7.21	\$0.00	\$0.00	\$0.00
4	\$0.00	\$7.50	\$0.00	\$0.00	\$0.00
5	\$0.00	\$7.80	\$0.00	\$0.00	\$0.00
6	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00
7	\$0.00	\$8.44	\$0.00	\$0.00	\$0.00
8	\$0.00	\$8.78	\$0.00	\$0.00	\$0.00
9	\$0.00	\$9.13	\$0.00	\$0.00	\$0.00
10	\$0.00	\$9.49	\$0.00	\$0.00	\$0.00
11	\$0.00	\$9.87	\$0.00	\$0.00	\$0.00
12	\$0.00	\$10.27	\$0.00	\$0.00	\$0.00
13	\$0.00	\$10.68	\$0.00	\$0.00	\$0.00
14	\$0.00	\$11.11	\$0.00	\$0.00	\$0.00
15	\$0.00	\$11.55	\$0.00	\$0.00	\$0.00
16	\$0.00	\$12.01	\$0.00	\$0.00	\$0.00
17	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89
16	\$141.00
17	\$145.23

18	\$0.00	\$12.99	\$0.00	\$0.00	\$0.00
19	\$0.00	\$13.51	\$0.00	\$0.00	\$0.00
20	\$0.00	\$14.05	\$0.00	\$0.00	\$0.00
21	\$0.00	\$14.61	\$0.00	\$0.00	\$0.00
22	\$0.00	\$15.20	\$0.00	\$0.00	\$0.00
23	\$0.00	\$15.81	\$0.00	\$0.00	\$0.00
24	\$0.00	\$16.44	\$0.00	\$0.00	\$0.00
25	\$0.00	\$17.10	\$0.00	\$0.00	\$0.00
Sum totals	\$205.44	\$277.78	\$0.00	\$0.00	\$0.00
Present Value	\$205.44	\$170.81	\$0.00	\$0.00	\$0.00
<b>Net Present Value Annualized Value</b>	<b>\$483.22</b>				
	<b>\$29.32</b>				

18	\$149.58
19	\$154.07
20	\$158.69
21	\$163.45
22	\$168.36
23	\$173.41
24	\$178.61
25	\$183.97
Sum totals	\$3,299.56
Present Value	\$2,063.84
<b>Net Present Value Annualized Value</b>	<b>\$2,063.84</b>
	<b>\$125.22</b>

Total cost equals annualized cost of filter strip plus annualized rent foregone: **\$154.54 per acre**

Assumed every 1 acre of filter strip treats 10 acres cropland (Smith and Williams, 2008). Assume median cropland runoff concentrations is 4,400 mg/l (Mankin et al., 2007), resulting in annual load of 4.5 tons sediment per acre per year, or 112 tons per 25 acres cropland . Documented sediment removal efficiencies of agricultural filter strips range from 70 to 95%. Assuming average performance of 72% (Smith, 2011), annual sediment removal is **32 tons sediment per acre filter strip area per year**. Therefore, the annual cost is:

**\$4.83 per ton sediment removed per acre filter strip per year**

**General Data For Streambank Stabilization**

Discount Rate	<b>3.50%</b>	
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	per acre / year
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$6.67</b>	per acre / year
Inflation Rate of Annual Costs	<b>4.00%</b>	

Project Length (feet)	<b>348</b>
Project Width (feet)	<b>125</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

**COSTS**

	<b>\$</b>
Total one-time	<b>36,966.8</b>
Total annual	<b>\$6.67</b>

**PAYMENTS RECEIVED**

Total one-time	<b>\$0.00</b>
Total annual	<b>\$0.00</b>

<sup>c</sup>Williams et al., 2004 (adjusted for inflation)

**Estimated Capital Costs<sup>c</sup>**

Engineering & design	\$ 8,530.80
Equipment costs	\$ 14,652.00
Labor costs	\$ 1,148.00
Material costs	\$ 12,636.00
<b>Total</b>	<b>\$ 36,966.80</b>
<b>Total, \$/ft</b>	<b>\$ 106.23</b>

**Net Present Value Table: Streambank Stabilization (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$36,966.80	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$6.67	\$0.00	\$0.00	\$0.00
2	\$0.00	\$6.94	\$0.00	\$0.00	\$0.00
3	\$0.00	\$7.21	\$0.00	\$0.00	\$0.00
4	\$0.00	\$7.50	\$0.00	\$0.00	\$0.00
5	\$0.00	\$7.80	\$0.00	\$0.00	\$0.00
6	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00
7	\$0.00	\$8.44	\$0.00	\$0.00	\$0.00
8	\$0.00	\$8.78	\$0.00	\$0.00	\$0.00
9	\$0.00	\$9.13	\$0.00	\$0.00	\$0.00
10	\$0.00	\$9.49	\$0.00	\$0.00	\$0.00
11	\$0.00	\$9.87	\$0.00	\$0.00	\$0.00
12	\$0.00	\$10.27	\$0.00	\$0.00	\$0.00
13	\$0.00	\$10.68	\$0.00	\$0.00	\$0.00
14	\$0.00	\$11.11	\$0.00	\$0.00	\$0.00
15	\$0.00	\$11.55	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89

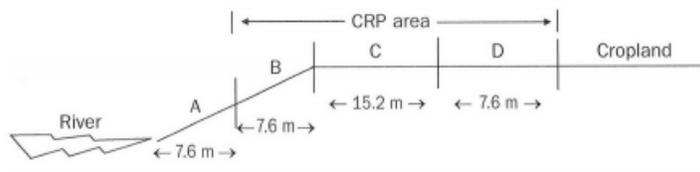
16	\$0.00	\$12.01	\$0.00	\$0.00	\$0.00	16	\$141.00
17	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00	17	\$145.23
18	\$0.00	\$12.99	\$0.00	\$0.00	\$0.00	18	\$149.58
19	\$0.00	\$13.51	\$0.00	\$0.00	\$0.00	19	\$154.07
20	\$0.00	\$14.05	\$0.00	\$0.00	\$0.00	20	\$158.69
21	\$0.00	\$14.61	\$0.00	\$0.00	\$0.00	21	\$163.45
22	\$0.00	\$15.20	\$0.00	\$0.00	\$0.00	22	\$168.36
23	\$0.00	\$15.81	\$0.00	\$0.00	\$0.00	23	\$173.41
24	\$0.00	\$16.44	\$0.00	\$0.00	\$0.00	24	\$178.61
25	\$0.00	\$17.10	\$0.00	\$0.00	\$0.00	25	\$183.97
Sum totals	\$36,966.80	\$277.78	\$0.00	\$0.00	\$0.00	Sum totals	\$3,299.56
Present Value	\$205.44	\$170.81	\$0.00	\$0.00	\$0.00	Present Value	\$2,063.84
<b>Net Present Value Annualized Value</b>	<b>\$37,244.58</b>					<b>Net Present Value Annualized Value</b>	<b>\$2,063.84</b>
	<b>\$2,259.78</b>						<b>\$125.22</b>

Total cost equals annualized cost of filter strip plus annualized rent foregone:

**\$2,385 per acre**

Annual streambank erosion rates as estimated along the Little Arkansas River in a study supported by the Little Ark WRAPS program (Hermes, 2012) were utilized (2.8 tons sediment per linear foot per year). Sediment reduction efficiency of stabilization projects was assumed equal to 95% based on sites monitored by Williams et al (2004). Assuming a linear length of 348 ft, total sediment reductions of **925 tons per year** are expected per acre streambank stabilization projects.

**\$2.58 per ton sediment removed per year by 1 acre (348 linear ft) streambank stabilization project**



- A. 7.6 meters on average of willow and cottonwood trees using a 1.2 meter spacing for willows and 1.8 meter spacing for cottonwood.
- B. 7.6 meters of cottonwoods, silver maples, and/or sycamore trees using an 2.4 meter spacing.
- C. 15.2 meters of trees and shrubs including one row each of green ash, black walnut, and burr oak trees using a 3.0 x 3.7 meter spacing and one row each of choke cherry, fragrant sumac, and American plum shrubs using a 1.8 x 1.8 meter spacing.
- D. 7.6 meters of native grass mixtures of Big Bluestem, Indiangrass, Switchgrass, Sideoats Gramma, and Western Wheatgrass.

Hermes, K. 2012. Lower Arkansas basin streambank erosion assessment. ArcGIS comparison study: 1991 vs 2010 aerial photography. Kansas Water Office, Topeka, KS.

**General Data For Permanent Vegetation**

Discount Rate	<b>3.50%</b>
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>
Annual Cropland Rental Growth Rate	<b>3.00%</b>
Total Annual Costs	<b>\$6.67</b>
Inflation Rate of Annual Costs	<b>4.00%</b>

per acre /  
year

per acre /  
year

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

**COSTS**

**PAYMENTS RECEIVED**

Total one-time	<b>\$205.44</b>
Total annual	<b>\$6.67</b>

Total one-time	<b>\$0.00</b>
Total annual	<b>\$0.00</b>

**Net Present Value Table: Permanent Vegetation (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$101.42	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$6.67	\$0.00	\$0.00	\$0.00
2	\$0.00	\$6.94	\$0.00	\$0.00	\$0.00
3	\$0.00	\$7.21	\$0.00	\$0.00	\$0.00
4	\$0.00	\$7.50	\$0.00	\$0.00	\$0.00
5	\$0.00	\$7.80	\$0.00	\$0.00	\$0.00
6	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00
7	\$0.00	\$8.44	\$0.00	\$0.00	\$0.00
8	\$0.00	\$8.78	\$0.00	\$0.00	\$0.00
9	\$0.00	\$9.13	\$0.00	\$0.00	\$0.00
10	\$0.00	\$9.49	\$0.00	\$0.00	\$0.00
11	\$0.00	\$9.87	\$0.00	\$0.00	\$0.00
12	\$0.00	\$10.27	\$0.00	\$0.00	\$0.00
13	\$0.00	\$10.68	\$0.00	\$0.00	\$0.00
14	\$0.00	\$11.11	\$0.00	\$0.00	\$0.00
15	\$0.00	\$11.55	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89

16	\$0.00	\$12.01	\$0.00	\$0.00	\$0.00	16	\$141.00
17	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00	17	\$145.23
18	\$0.00	\$12.99	\$0.00	\$0.00	\$0.00	18	\$149.58
19	\$0.00	\$13.51	\$0.00	\$0.00	\$0.00	19	\$154.07
20	\$0.00	\$14.05	\$0.00	\$0.00	\$0.00	20	\$158.69
21	\$0.00	\$14.61	\$0.00	\$0.00	\$0.00	21	\$163.45
22	\$0.00	\$15.20	\$0.00	\$0.00	\$0.00	22	\$168.36
23	\$0.00	\$15.81	\$0.00	\$0.00	\$0.00	23	\$173.41
24	\$0.00	\$16.44	\$0.00	\$0.00	\$0.00	24	\$178.61
25	\$0.00	\$17.10	\$0.00	\$0.00	\$0.00	25	\$183.97
Sum totals	\$101.42	\$277.78	\$0.00	\$0.00	\$0.00	Sum totals	\$3,299.56
Present Value	\$101.42	\$170.81	\$0.00	\$0.00	\$0.00	Present Value	\$2,063.84
<b>Net Present Value</b>	<b>\$379.20</b>					<b>Net Present Value</b>	<b>\$2,063.84</b>
<b>Annualized Value</b>	<b>\$23.01</b>					<b>Annualized Value</b>	<b>\$125.22</b>

Total cost equals annualized cost of permanent vegetation plus annualized rent foregone: **\$148.2 per acre**

Converting 1 acre of cultivated land to permanent vegetation is assumed to reduce sediment loading by 94%, as based on modeling studies by Smith (2011) and Mankin et al. (2013). Assuming annual sediment load of 4.5 tons per acre cropland per year, annual sediment reductions achieved by converting to permanent vegetation are estimated to be **4.2 tons per year per acre**. Based on the lifecycle costs outlined above, the annual cost per ton sediment removed is:

**\$35.29 per ton sediment removed per acre permanent vegetation restored per year**

**General Data For Wetland Restoration**

Discount Rate	<b>3.50%</b>	per acre / year
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$6.67</b>	per acre / year
Inflation Rate of Annual Costs	<b>4.00%</b>	

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

<b>COSTS</b>		<b>PAYMENTS RECEIVED</b>	
Total one-time	<b>\$1,000.00</b>	Total one-time	<b>\$0.00</b>
Total annual	<b>\$6.67</b>	Total annual	<b>\$0.00</b>

**Net Present Value Table: Wetland Restoration (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$6.67	\$0.00	\$0.00	\$0.00
2	\$0.00	\$6.94	\$0.00	\$0.00	\$0.00
3	\$0.00	\$7.21	\$0.00	\$0.00	\$0.00
4	\$0.00	\$7.50	\$0.00	\$0.00	\$0.00
5	\$0.00	\$7.80	\$0.00	\$0.00	\$0.00
6	\$0.00	\$8.12	\$0.00	\$0.00	\$0.00
7	\$0.00	\$8.44	\$0.00	\$0.00	\$0.00
8	\$0.00	\$8.78	\$0.00	\$0.00	\$0.00
9	\$0.00	\$9.13	\$0.00	\$0.00	\$0.00
10	\$0.00	\$9.49	\$0.00	\$0.00	\$0.00
11	\$0.00	\$9.87	\$0.00	\$0.00	\$0.00
12	\$0.00	\$10.27	\$0.00	\$0.00	\$0.00
13	\$0.00	\$10.68	\$0.00	\$0.00	\$0.00
14	\$0.00	\$11.11	\$0.00	\$0.00	\$0.00
15	\$0.00	\$11.55	\$0.00	\$0.00	\$0.00
16	\$0.00	\$12.01	\$0.00	\$0.00	\$0.00
17	\$0.00	\$12.49	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89
16	\$141.00
17	\$145.23

18	\$0.00	\$12.99	\$0.00	\$0.00	\$0.00
19	\$0.00	\$13.51	\$0.00	\$0.00	\$0.00
20	\$0.00	\$14.05	\$0.00	\$0.00	\$0.00
21	\$0.00	\$14.61	\$0.00	\$0.00	\$0.00
22	\$0.00	\$15.20	\$0.00	\$0.00	\$0.00
23	\$0.00	\$15.81	\$0.00	\$0.00	\$0.00
24	\$0.00	\$16.44	\$0.00	\$0.00	\$0.00
25	\$0.00	\$17.10	\$0.00	\$0.00	\$0.00
Sum totals	\$1,000.00	\$277.78	\$0.00	\$0.00	\$0.00
Present Value	\$1,000.00	\$170.81	\$0.00	\$0.00	\$0.00
<b>Net Present Value Annualized Value</b>		<b>\$1,277.78</b>			<b>\$77.53</b>

18	\$149.58
19	\$154.07
20	\$158.69
21	\$163.45
22	\$168.36
23	\$173.41
24	\$178.61
25	\$183.97
Sum totals Present Value	\$3,299.56 \$2,063.84
<b>Net Present Value Annualized Value</b>	<b>\$2,063.84</b> <b>\$125.22</b>

Total cost equals annualized cost of wetland restoration plus annualized rent foregone: **\$202.75 per acre**

Re-establishing wetlands on previously drained cropland is expected to result in annual sediment reductions of **17 tons**, under the following assumptions: (1) area of restored wetland to directly drained cropland is 1:5 and (2) sediment reduction by the restored wetland is 75%. Accounting for foregone rent due to re-dedication of cropland to wetland, the annual cost of wetland restoration, in terms of sediment removed is:

**\$11.93 per ton sediment per year per acre wetland restored**

**General Data For Terrace-waterway**

Discount Rate	<b>3.50%</b>	
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	per acre / year
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$6.67</b>	per acre / year
Inflation Rate of Annual Costs	<b>4.00%</b>	

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

<b>COSTS</b>		<b>PAYMENTS RECEIVED</b>	
Total one-time	<b>\$30.00</b> <sup>a</sup>	Total one-time	<b>\$0.00</b>
Total annual	<b>\$13.60</b> <sup>a</sup>	Total annual	<b>\$0.00</b>

<sup>a</sup>Devlin et al., 2003

**Net Present Value Table: Terrace-waterway (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$13.60	\$0.00	\$0.00	\$0.00
2	\$0.00	\$14.14	\$0.00	\$0.00	\$0.00
3	\$0.00	\$14.71	\$0.00	\$0.00	\$0.00
4	\$0.00	\$15.30	\$0.00	\$0.00	\$0.00
5	\$0.00	\$15.91	\$0.00	\$0.00	\$0.00
6	\$0.00	\$16.55	\$0.00	\$0.00	\$0.00
7	\$0.00	\$17.21	\$0.00	\$0.00	\$0.00
8	\$0.00	\$17.90	\$0.00	\$0.00	\$0.00
9	\$0.00	\$18.61	\$0.00	\$0.00	\$0.00
10	\$0.00	\$19.36	\$0.00	\$0.00	\$0.00
11	\$0.00	\$20.13	\$0.00	\$0.00	\$0.00
12	\$0.00	\$20.94	\$0.00	\$0.00	\$0.00
13	\$0.00	\$21.77	\$0.00	\$0.00	\$0.00
14	\$0.00	\$22.64	\$0.00	\$0.00	\$0.00
15	\$0.00	\$23.55	\$0.00	\$0.00	\$0.00
16	\$0.00	\$24.49	\$0.00	\$0.00	\$0.00
17	\$0.00	\$25.47	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89
16	\$141.00
17	\$145.23

18	\$0.00	\$26.49	\$0.00	\$0.00	\$0.00
19	\$0.00	\$27.55	\$0.00	\$0.00	\$0.00
20	\$0.00	\$28.65	\$0.00	\$0.00	\$0.00
21	\$0.00	\$29.80	\$0.00	\$0.00	\$0.00
22	\$0.00	\$30.99	\$0.00	\$0.00	\$0.00
23	\$0.00	\$32.23	\$0.00	\$0.00	\$0.00
24	\$0.00	\$33.52	\$0.00	\$0.00	\$0.00
25	\$0.00	\$34.86	\$0.00	\$0.00	\$0.00
Sum totals		\$566.3	8	\$0.00	\$0.00
Present Value		\$348.2	7	\$0.00	\$0.00
<b>Net Present Value</b>	<b>\$596.38</b>				
<b>Annualized Value</b>	<b>\$36.19</b>				

18	\$149.58
19	\$154.07
20	\$158.69
21	\$163.45
22	\$168.36
23	\$173.41
24	\$178.61
25	\$183.97
Sum totals	\$3,299.56
Present Value	\$2,063.84
<b>Net Present Value</b>	<b>\$2,063.84</b>
<b>Annualized Value</b>	<b>\$125.22</b>

Total cost equals annualized cost of terrace-waterway system plus annualized rent foregone: **\$161.41 per acre**

Terrace-grass water way systems are assumed to reduce edge-of-field sediment concentrations from cropland by 40% (Zhou et al., 2009). Assuming a baseline sediment loading of 4.5 tons sediment per year and that 10 acres of cropland are treated per 1 acre terrace-waterway system, implementation of terrace-grass waterway system is expected to reduce edge-of-field sediment from 45 tons to 23 tons, thereby resulting in total sediment removal of **18 tons sediment per year**.

**\$8.97 per ton sediment removed per acre terrace-waterway system**

**General Data For Riparian buffer (assumes re-establish with trees)**

Discount Rate	<b>3.50%</b>	
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	per acre / year
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$6.67</b>	per acre / year
Inflation Rate of Annual Costs	<b>4.00%</b>	

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

<b>COSTS</b>		<b>PAYMENTS RECEIVED</b>	
Total one-time	<b>\$585.00</b> <sup>b</sup>	Total one-time	<b>\$0.00</b>
Total annual	<b>\$0.00</b>	Total annual	<b>\$0.00</b>

<sup>b</sup>Williams et al. (2004)

**Net Present Value Table: Riparian buffer (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Net Property Tax Impact
0	\$585.00	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
8	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
9	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
13	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

**NPV Table: Cropland Rent (per acre)**

Year	Rent
0	\$0.00
1	\$90.50
2	\$93.22
3	\$96.01
4	\$98.89
5	\$101.86
6	\$104.91
7	\$108.06
8	\$111.30
9	\$114.64
10	\$118.08
11	\$121.62
12	\$125.27
13	\$129.03
14	\$132.90
15	\$136.89
16	\$141.00

17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sum totals	\$585.00	\$0.00	\$0.00	\$0.00	\$0.00
Present Value	\$585.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Net Present Value</b>	<b>\$585.00</b>				
<b>Annualized Value</b>	<b>\$35.49</b>				

17	\$145.23
18	\$149.58
19	\$154.07
20	\$158.69
21	\$163.45
22	\$168.36
23	\$173.41
24	\$178.61
25	\$183.97
Sum totals	\$3,299.56
Present Value	\$2,063.84
<b>Net Present Value</b>	<b>\$2,063.84</b>
<b>Annualized Value</b>	<b>\$125.22</b>

Total cost equals annualized cost of riparian buffer establishment plus annualized rent foregone: **\$160.72 per acre**

The ratio of cropland:riparian buffer area is assumed to be 5, therefore, 5 acres of cropland are drained per 1 acre riparian buffer. Following removal rates reported by Mankin et al. (2007) and Zhou et al (2009), riparian buffers are expected to have a 50% sediment removal efficiency. These assumptions result in an annual sediment reduction of about **11 tons per acre riparian buffer per year**. Therefore, the annual cost is:

**\$14.61 per ton sediment removed per acre riparian buffer per year\***

\*note that this does not consider potential reductions in erosion rates from the stream channel.

**General Data For No-till**

Discount Rate	<b>3.50%</b>	
Cropland Rental Rate - not CCRP rental rate	<b>\$90.50</b>	per acre / year
Annual Cropland Rental Growth Rate	<b>3.00%</b>	
Total Annual Costs	<b>\$0.00</b>	per acre / year
Inflation Rate of Annual Costs	<b>3.00%</b>	

Project Length (feet)	<b>660</b>
Project Width (feet)	<b>66</b>
Acres (length x width/43,560)	<b>1.00</b>
Length of analysis (years)	<b>25</b>
Cropland Property Tax (\$/acre)	<b>\$5.00</b>
Tame Grass Property Tax (\$/acre)	<b>\$5.00</b>

**COSTS**

**PAYMENTS RECEIVED**

Total one-time		Total one-time	<b>\$0.00</b>
Total annual	<b>\$0.00</b>	Total annual	<b>\$0.00</b>

**Net Present Value Table: No-till conversion (per acre)**

Year	One Time Costs	Annual Costs	One Time Payments	Annual Payments	Cropland rent: Annual Opportunity Cost
0	\$68.80	\$0.00	\$0.00	\$0.00	\$0.00
1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
8	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
9	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10	\$0.00	\$92.46	\$0.00	\$0.00	\$0.00
11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
13	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	\$0.00	\$124.26	\$0.00	\$0.00	\$0.00

21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	\$0.00	\$167.00	\$0.00	\$0.00	\$0.00
31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
38	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
40	\$0.00	\$224.43	\$0.00	\$0.00	\$0.00
41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
43	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
49	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
50	\$0.00	\$301.61	\$0.00	\$0.00	\$0.00

Sum totals	\$68.80	\$1,694.52	\$0.00	\$0.00	\$0.00
NPV	\$68.80	\$566.62	\$0.00	\$0.00	\$0.00
<b>Net Present Value</b>		<b>\$635.42</b>			
<b>Annualized Value</b>		<b>\$28.32</b>			

**Capital costs** to convert to no-till based on 2014 custom rates for state of Kansas, assuming intensive crop rotation (typical of no-till operations in south central Kansas to maximize profitability and reduce erosion through more continuous crop growth). Custom hire rates to plant wheat (\$18.05 per acre) and milo (\$18.33 per acre) and drill soybeans (\$17.70 per acre) with an additional herbicide application (\$14.72 per acre) yield total no-till cost of \$68.80 per acre. Typically, a threshold acreage (~400 acres) is enrolled such that the payment can be applied to purchase needed no-till equipment rather than continuing to hire custom no-till operations annually.

**Maintenance costs** presented above assume new acreage is enrolled in no-till every 10-years to sustain the supply of sediment credits generated per acre no-till to account for unforeseen reversal in tillage methods. In practice, once a landowner opts to enroll in no-till they tend to remain in no-till, particularly if they have purchased necessary equipment. However, this assumption was made to build in additional certainty of continued sediment credit supply for the purpose of developing an appropriate sediment credit payment rate (Section 3.2.4) and sustaining program funding (Section 3.3).

**Sediment load reductions** assumed for no-till are 3.5 tons/acre/yr, reflecting a 70% sediment retention efficiency over conventional tillage practices. Given this efficiency, the sediment removal cost of no-till is **\$8.99 per ton per acre per year**.

## **Appendix C**

Examples of program structures considered and/or adopted by other cities and states with offsite stormwater management programs.

<b>Program Element</b>	<b>Lenexa, KS</b>	<b>Washington, DC<sup>a</sup></b>	<b>St. Paul, MN<sup>a</sup></b>	<b>Fredericksburg, VA<sup>a</sup></b>	<b>North Carolina<sup>a</sup></b>	<b>Chesapeake Bay, MD<sup>a</sup></b>	<b>Maine<sup>a</sup></b>	<b>Charlotte, NC<sup>b</sup></b>
<b>Program currency</b>	Runoff detention	Runoff Volume	Runoff Volume	Runoff volume	Phosphorus (P), Nitrogen (N)	Phosphorus	Phosphorus	Runoff volume
<b>Eligibility</b>	Not specified	Developments unable to meet onsite minimum retention	Developments unable to meet onsite minimum retention	Open to any development not meeting 1-in volume offset	Developments unable to reduce nitrogen export to predevelopment	Limited to “Critical Areas” within watershed	Limited to projects in selected lake watersheds	Re-development projects
<b>Minimum onsite control measures</b>	Not specified	Must have approved stormwater management program (SWMP) in place	Onsite rate control 2-, 10-, and 100-year storms	Not provided	Not specified, but minimum N and P removal standards are must be met	Must demonstrate onsite volume reductions infeasible	60% onsite P reduction	Not specified
<b>Payment rate (\$/impervious ac)<sup>d</sup></b>	\$14,300	Not yet determined	\$40,000	Not yet determined	\$362 for P <sup>e</sup> \$252-\$462 for N	\$87,750	\$67,000	\$60k city core; \$90k suburbs
<b>Credit ratio</b>	None specified	1:1	1:1 to 1.3:1	1.5:1 new development; 1.25:1 redevelopment	None specified	None specified	None specified	None specified
<b>Spatial bounds</b>	All regional retention projects constructed w/in Lenexa	Within DC district (62 mi <sup>2</sup> )	Same subwatershed as project site, preferable within same local jurisdiction	Within same watershed	Same 8-digit hydrologic unit code (HUC), ~ 15-65 mi <sup>2</sup>	Same 12-digit HUC watershed, ~ 15-65 mi <sup>2</sup>	Same watershed as impacted lake	With City on city-controlled lands or private easements
<b>Program administration</b>	City collects funds (user fees, tax, stormwater utility), identifies offsite BMP locations, and implements and maintains	Under development	District administers credits and keeps record of used and available credits; Onsite and offsite parties arrange transaction and provide District with certification	Under development	Administered by North Carolina Ecosystem Enhancement Program, which implements BMPs through mitigation bank or design/build by private entity	Local jurisdiction responsible for documenting why onsite compliance not feasible and tracking and reporting offset program performance.	Administered by Stormwater Administrators who track receipts and offsite payments, annual reports of BMPs implemented, and program expenditures.	Administered by City of Charlotte, which acts to aggregate in-lieu payments from developer and implement BMPs

<sup>a</sup>As summarized by the Center for Watershed Protection, 2012

<sup>b</sup>As reported by Valderrama et al., 2013

<sup>c</sup>Payment rate given per pound N (\$12-22) or P (\$134 per pound) and were converted to \$/impervious acre by assuming annual N and P load of 21 and 2.7 pounds, respectively, per acre impervious surface.

<sup>d</sup>With the exception of the Nuese River Watershed program, all program costs are based on cost offsite BMPs implemented within urban area

## Appendix D

### Offsite BMP Program Costs, estimated by Program Year

**Table D.1:** Program costs based on no-till, 50% of acres replaced every 5 years

**Table D.2:** Program costs based on no-till, 100% of acres replaced every 5 years

**Table D.3:** Program costs based on streambank stabilization

#### Description of Table Headings

- A. *Year*: Corresponds to the year of the program. For the purposes of estimating total programmatic costs, a program duration of 50 years was assumed.
- B. *Annual new/redevelopment (ac)*: Acreage of new and redevelopment projects within the City of Wichita that participate in the program. For the purposes of estimating total programmatic costs, a development rate of 600 acres per year was assumed. Given the scaling of program costs to sediment credits needed, costs per acre are relatively similar regardless of the total number assumed.
- C. *Cum. (Cumulative) Onsite sediment credit demand (tons)*: Corresponds to the estimated sediment load generated per acre new or redevelopment (0.32 tons per acre developed, or about 0.5 tons per impervious acre), expressed as cumulative tonnage for each year of the program. As summarized in Table 5, this sediment load represents a 50-50 mixture of commercial and residential land uses, and assumes a sediment credit ratio of 2:1 (i.e., 2 tons of sediment must be retained offsite to offset 1 ton of sediment generated onsite).
- D. *Cum. (Cumulative) Offsite sediment credit supply (tons)*: Corresponds to the tonnage of sediment retained through offsite BMPs, as based on the cumulative area of offsite BMPs implemented. For no-till (Tables D.1 and D.2), a sediment retention rate of 3.2 tons per acre per year was assumed. For streambank stabilization (Table D.3), a sediment retention rate of 590 tons per acre stabilized per year (or 590 tons per 347 linear feet stabilized per year) was assumed.
- E. *Offsite BMP Implemented*: Refers to the area of cropland converted to no-till (Table D.1 and D.2) or length of streambank stabilized (Table D.3) as needed to provide the supply offsite sediment reduction credits in column D.
- F. *Cumulative offsite BMP implemented*: Calculates the cumulative area of no-till (Table D.1 and D.2) or streambank length stabilized (Table D.3) by program year.
- G. *Offsite BMP Capital Costs*: Accounts for the cost to construct the area of offsite BMPs from column E. For BMPs implemented after year 0 of the program, an annual inflation factor of 2.7% is applied to construction costs.
- H. *Offsite BMP maintenance and replacement costs in time*: Costs in time for all maintenance and/or replacement costs incurred over the lifetime of BMPs implemented in the corresponding program year (i.e., from Column E.). An annual inflation factor of 3% is assumed for maintenance costs.
- I. *Admin costs*. Administrative costs in each program year, assumed equal to 30% of total capital and recurring costs.
- J. *Total program costs*. The sum of BMP capital, maintenance, and administrative costs over the life of the program, expressed on a cumulative basis.

**Table D.1. Example timeline and funding requirements for offsite BMP program based on the cost to meet onsite sediment demand through converting conventionally tilled cropland to no-till. To fulfill permanence requirements, assumed 50% of no-till acres must be replaced every 5-years. A 3% annual inflation rate is assumed.**

<b>A.</b> Year	<b>B.</b> Annual new and re- develop- ment (ac)	<b>C.</b> Cum. onsite sediment credit demand (tons)	<b>D.</b> Cum. offsite sediment credit supply (tons)	<b>E.</b> Acreage no-till implemented	<b>F.</b> Cum. Offsite BMP implemented	<b>G.</b> Offsite BMP capital costs	<b>H.</b> Offsite BMP replacement costs, in time	<b>I.</b> Admin costs	<b>J.</b> Total program costs, cum
0	0	0	3840	1200	1200	\$82,560	\$-	\$8,916.48	\$91,476
1	600	384	3840	0	1200	\$-	\$-	\$9,183.97	\$100,660
2	600	768	3840	0	1200	\$-	\$-	\$9,459.49	\$110,120
3	600	1152	3840	0	1200	\$-	\$-	\$9,743.28	\$119,863
4	600	1536	3840	0	1200	\$-	\$-	\$10,035.58	\$129,899
5	600	1920	3840	0	1200	\$-	\$47,854.83	\$10,336.64	\$188,090
6	600	2304	3840	0	1200	\$-	\$-	\$10,646.74	\$198,737
7	600	2688	3840	0	1200	\$-	\$-	\$10,966.15	\$209,703
8	600	3072	3840	0	1200	\$-	\$-	\$11,295.13	\$220,998
9	600	3456	3840	0	1200	\$-	\$-	\$11,633.98	\$232,632
10	600	3840	7680	1200	2400	\$-	\$55,476.87	\$11,983.00	\$300,092
11	600	4224	7680	0	2400	\$114,282	\$-	\$12,342.49	\$426,717
12	600	4608	7680	0	2400	\$-	\$-	\$12,712.77	\$439,430
13	600	4992	7680	0	2400	\$-	\$-	\$13,094.15	\$452,524
14	600	5376	7680	0	2400	\$-	\$-	\$13,486.98	\$466,011
15	600	5760	7680	0	2400	\$-	\$64,312.89	\$13,891.59	\$544,215
16	600	6144	7680	0	2400	\$-	\$66,242.28	\$14,308.33	\$624,766
17	600	6528	7680	0	2400	\$-	\$-	\$14,737.58	\$639,504
18	600	6912	7680	0	2400	\$-	\$-	\$15,179.71	\$654,683
19	600	7296	11520	1200	3600	\$-	\$-	\$15,635.10	\$670,318
20	600	7680	11520	0	3600	\$-	\$74,556.27	\$16,104.15	\$760,979
21	600	8064	11520	0	3600	\$153,586	\$76,792.96	\$16,587.28	\$1,007,945
22	600	8448	11520	0	3600	\$-	\$-	\$17,084.90	\$1,025,030
23	600	8832	11520	0	3600	\$-	\$-	\$17,597.44	\$1,042,627
24	600	9216	11520	0	3600	\$-	\$-	\$18,125.37	\$1,060,753
25	600	9600	11520	0	3600	\$-	\$86,431.15	\$18,669.13	\$1,165,853

26	600	9984	11520	0	3600	\$-	\$178,048.18	\$19,229.20	\$1,363,130
27	600	10368	11520	0	3600	\$-	\$-	\$19,806.08	\$1,382,936
28	600	10752	15360	1200	4800	\$-	\$-	\$20,400.26	\$1,403,337
29	600	11136	15360	0	4800	\$-	\$-	\$21,012.27	\$1,424,349
30	600	11520	15360	0	4800	\$-	\$100,197.39	\$21,642.64	\$1,546,189
31	600	11904	15360	0	4800	\$206,407	\$206,406.63	\$22,291.92	\$1,981,294
32	600	12288	15360	0	4800	\$-	\$-	\$22,960.67	\$2,004,255
33	600	12672	15360	0	4800	\$-	\$-	\$23,649.49	\$2,027,904
34	600	13056	15360	0	4800	\$-	\$-	\$24,358.98	\$2,052,263
35	600	13440	15360	0	4800	\$-	\$116,156.24	\$25,089.75	\$2,193,509
36	600	13824	15360	0	4800	\$-	\$358,922.79	\$25,842.44	\$2,578,275
37	600	14208	19200	1200	6000	\$-	\$-	\$26,617.71	\$2,604,892
38	600	14592	19200	0	6000	\$-	\$-	\$27,416.25	\$2,632,308
39	600	14976	19200	0	6000	\$-	\$-	\$28,238.73	\$2,660,547
40	600	15360	19200	0	6000	\$-	\$134,656.92	\$29,085.89	\$2,824,290
41	600	15744	19200	0	6000	\$277,393	\$416,089.88	\$29,958.47	\$3,547,732
42	600	16128	19200	0	6000	\$-	\$-	\$30,857.23	\$3,578,589
43	600	16512	19200	0	6000	\$-	\$-	\$31,782.94	\$3,610,372
44	600	16896	19200	0	6000	\$-	\$-	\$32,736.43	\$3,643,108
45	600	17280	19200	0	6000	\$-	\$156,104.28	\$33,718.52	\$3,832,931
46	600	17664	23040	1200	7200	\$-	\$643,149.62	\$34,730.08	\$4,510,811
47	600	18048	23040	0	7200	\$-	\$-	\$35,771.98	\$4,546,583
48	600	18432	23040	0	7200	\$-	\$-	\$36,845.14	\$4,583,428
49	600	18816	23040	0	7200	\$-	\$-	\$37,950.50	\$4,621,378
50	600	19200	23040	0	7200	\$-	\$180,967.64	\$39,089.01	\$4,841,435

Total program capital + maintenance costs (no admin) **\$3,796,594**

Administrative costs at 30% of total program costs: **\$1,044,840**

**Total program costs, capital + maintenance + admin \$4,841,435**

**Table D.2. Example timeline and funding requirements for offsite BMP program based on the cost to meet onsite sediment demand through converting conventionally**

**tilled cropland to no-till. To fulfill permanence requirements, assumed 100% of no-till acres must be replaced every 5-years. A 3% annual inflation rate is assumed.**

<b>A.</b> Year	<b>B.</b> Annual new and re- develop- ment (ac)	<b>C.</b> Cum. onsite sediment credit demand (tons)	<b>D.</b> Cum. offsite sediment credit supply (tons)	<b>E.</b> Acreage no-till implemented	<b>F.</b> Cum. Offsite BMP implemented	<b>G.</b> Offsite BMP capital costs	<b>H.</b> Offsite BMP replacement costs, in time	<b>I.</b> Admin costs	<b>J.</b> Total program costs, cum
0	0	0	3840	1200	1200	\$82,560	\$-	\$15,356.16	\$97,916
1	600	384	3840	0	1200	\$-	\$-	\$15,816.84	\$113,733
2	600	768	3840	0	1200	\$-	\$-	\$16,291.35	\$130,024
3	600	1152	3840	0	1200	\$-	\$-	\$16,780.09	\$146,804
4	600	1536	3840	0	1200	\$-	\$-	\$17,283.49	\$164,088
5	600	1920	3840	0	1200	\$-	\$95,709.67	\$17,802.00	\$277,600
6	600	2304	3840	0	1200	\$-	\$-	\$18,336.06	\$295,936
7	600	2688	3840	0	1200	\$-	\$-	\$18,886.14	\$314,822
8	600	3072	3840	0	1200	\$-	\$-	\$19,452.72	\$334,275
9	600	3456	3840	0	1200	\$-	\$-	\$20,036.31	\$354,311
10	600	3840	7680	1200	2400	\$-	\$110,953.74	\$20,637.39	\$485,902
11	600	4224	7680	0	2400	\$114,282	\$-	\$21,256.52	\$621,441
12	600	4608	7680	0	2400	\$-	\$-	\$21,894.21	\$643,335
13	600	4992	7680	0	2400	\$-	\$-	\$22,551.04	\$665,886
14	600	5376	7680	0	2400	\$-	\$-	\$23,227.57	\$689,114
15	600	5760	7680	0	2400	\$-	\$128,625.79	\$23,924.40	\$841,664
16	600	6144	7680	0	2400	\$-	\$132,484.56	\$24,642.13	\$998,791
17	600	6528	7680	0	2400	\$-	\$-	\$25,381.39	\$1,024,172
18	600	6912	7680	0	2400	\$-	\$-	\$26,142.83	\$1,050,315
19	600	7296	11520	1200	3600	\$-	\$-	\$26,927.12	\$1,077,242
20	600	7680	11520	0	3600	\$-	\$149,112.54	\$27,734.93	\$1,254,089
21	600	8064	11520	0	3600	\$153,586	\$153,585.92	\$28,566.98	\$1,589,828
22	600	8448	11520	0	3600	\$-	\$-	\$29,423.99	\$1,619,252
23	600	8832	11520	0	3600	\$-	\$-	\$30,306.71	\$1,649,559
24	600	9216	11520	0	3600	\$-	\$-	\$31,215.91	\$1,680,775
25	600	9600	11520	0	3600	\$-	\$172,862.31	\$32,152.39	\$1,885,789
26	600	9984	11520	0	3600	\$-	\$356,096.35	\$33,116.96	\$2,275,003
27	600	10368	11520	0	3600	\$-	\$-	\$34,110.47	\$2,309,113

28	600	10752	15360	1200	4800	\$-	\$-	\$35,133.78	\$2,344,247
29	600	11136	15360	0	4800	\$-	\$-	\$36,187.80	\$2,380,435
30	600	11520	15360	0	4800	\$-	\$200,394.79	\$37,273.43	\$2,618,103
31	600	11904	15360	0	4800	\$206,407	\$412,813.27	\$38,391.63	\$3,275,715
32	600	12288	15360	0	4800	\$-	\$-	\$39,543.38	\$3,315,258
33	600	12672	15360	0	4800	\$-	\$-	\$40,729.68	\$3,355,988
34	600	13056	15360	0	4800	\$-	\$-	\$41,951.57	\$3,397,939
35	600	13440	15360	0	4800	\$-	\$232,312.48	\$43,210.12	\$3,673,462
36	600	13824	15360	0	4800	\$-	\$717,845.58	\$44,506.43	\$4,435,814
37	600	14208	19200	1200	6000	\$-	\$-	\$45,841.62	\$4,481,655
38	600	14592	19200	0	6000	\$-	\$-	\$47,216.87	\$4,528,872
39	600	14976	19200	0	6000	\$-	\$-	\$48,633.37	\$4,577,506
40	600	15360	19200	0	6000	\$-	\$269,313.84	\$50,092.37	\$4,896,912
41	600	15744	19200	0	6000	\$277,393	\$832,179.77	\$51,595.15	\$6,058,080
42	600	16128	19200	0	6000	\$-	\$-	\$53,143.00	\$6,111,223
43	600	16512	19200	0	6000	\$-	\$-	\$54,737.29	\$6,165,960
44	600	16896	19200	0	6000	\$-	\$-	\$56,379.41	\$6,222,340
45	600	17280	19200	0	6000	\$-	\$312,208.55	\$58,070.79	\$6,592,619
46	600	17664	23040	1200	7200	\$-	\$1,286,299.24	\$59,812.91	\$7,938,731
47	600	18048	23040	0	7200	\$-	\$-	\$61,607.30	\$8,000,339
48	600	18432	23040	0	7200	\$-	\$-	\$63,455.52	\$8,063,794
49	600	18816	23040	0	7200	\$-	\$-	\$65,359.19	\$8,129,153
50	600	19200	23040	0	7200	\$-	\$361,935.28	\$67,319.96	\$8,558,409

Total program capital + maintenance costs (no admin) **\$6,758,961**  
Administrative costs at 30% of total program costs: **\$1,799,446**  
**Total program costs, capital + maintenance + admin \$8,558,409**

**Table D.3. Example timeline and funding requirements for offsite BMP program based on the cost to meet onsite sediment demand through streambank stabilization projects. A 3% annual inflation rate is assumed.**

A. Year	B. Annual new and re- development (ac)	C. Cum. onsite sediment credit demand (tons)	D. Cum. offsite sediment credit supply (tons)	E. Offsite BMP implemented		F. Cum. Offsite BMP implemented		G. Offsite BMP capital costs	H. NPV of offsite BMP recurring costs at program year implemented	I. Admin costs	J. Total program costs, cum
				Streambank stabilized (linear ft)	Riparian area stabilized (ac)	Streambank stabilized (linear ft)	Riparian area stabilized( ac)				
0	0	NA	NA	2260	6.5	2260	6.5	\$240,764		\$14,681	\$255,444
1	600	384	3842	0	0.0	2260	6.5	\$0	\$22,334	\$14,681	\$292,459
2	600	768	3842	0	0.0	2260	6.5	\$0	\$0	\$14,681	\$307,140
3	600	1152	3842	0	0.0	2260	6.5	\$0	\$0	\$14,681	\$321,820
4	600	1536	3842	0	0.0	2260	6.5	\$0	\$0	\$14,681	\$336,501
5	600	1920	3842	0	0.0	2260	6.5	\$0	\$0	\$14,681	\$351,182
6	600	2304	3842	1120	3.2	3380	6.5	\$139,998	\$0	\$14,681	\$505,861
7	600	2688	5746	0	0.0	3380	9.7	\$0	\$13,433	\$14,681	\$533,974
8	600	3072	5746	0	0.0	3380	9.7	\$0	\$0	\$14,681	\$548,655
9	600	3456	5746	0	0.0	3380	9.7	\$0	\$0	\$14,681	\$563,336
10	600	3840	5746	1500	4.3	4880	14.0	\$208,583	\$0	\$14,681	\$786,599
11	600	4224	8296	0	0.0	4880	14.0	\$0	\$19,734	\$14,681	\$821,014
12	600	4608	8296	0	0.0	4880	14.0	\$0	\$0	\$14,681	\$835,695
13	600	4992	8296	0	0.0	4880	14.0	\$0	\$0	\$14,681	\$850,376
14	600	5376	8296	0	0.0	4880	14.0	\$0	\$0	\$14,681	\$865,056
15	600	5760	8296	0	0.0	4880	14.0	\$0	\$0	\$14,681	\$879,737
16	600	6144	8296	720	2.1	5600	14.1	\$117,474	\$0	\$14,681	\$1,011,892
17	600	6528	9520	0	0.0	5600	16.1	\$0	\$11,493	\$14,681	\$1,038,066
18	600	6912	9520	0	0.0	5600	16.1	\$0	\$0	\$14,681	\$1,052,746
19	600	7296	9520	0	0.0	5600	16.1	\$0	\$0	\$14,681	\$1,067,427
20	600	7680	9520	0	0.0	5600	16.1	\$0	\$0	\$14,681	\$1,082,108
21	600	8064	9520	0	0.0	5600	16.1	\$0	\$0	\$14,681	\$1,096,789
22	600	8448	9520	1110	3.2	6710	16.1	\$212,498	\$0	\$14,681	\$1,323,967
23	600	8832	11407	0	0.0	6710	19.3	\$0	\$20,752	\$14,681	\$1,359,400
24	600	9216	11407	0	0.0	6710	19.3	\$0	\$0	\$14,681	\$1,374,081
25	600	9600	11407	0	0.0	6710	19.3	\$0	\$0	\$14,681	\$1,388,762
26	600	9984	11407	0	0.0	6710	19.3	\$0	\$0	\$14,681	\$1,403,442
27	600	10368	11407	1110	3.2	7820	19.3	\$242,777	\$0	\$14,681	\$1,660,900
28	600	10752	13294	0	0.0	7820	22.5	\$0	\$24,526	\$14,681	\$1,700,107

29	600	11136	13294	0	0.0	7820	22.5	\$0	\$0	\$14,681	\$1,714,787
30	600	11520	13294	0	0.0	7820	22.5	\$0	\$0	\$14,681	\$1,729,468
31	600	11904	13294	1110	3.2	8930	22.5	\$270,078	\$0	\$14,681	\$2,014,227
32	600	12288	15181	0	0.0	8930	25.7	\$0	\$27,245	\$14,681	\$2,056,152
33	600	12672	15181	0	0.0	8930	25.7	\$0	\$0	\$14,681	\$2,070,833
34	600	13056	15181	0	0.0	8930	25.7	\$0	\$0	\$14,681	\$2,085,513
35	600	13440	15181	0	0.0	8930	25.7	\$0	\$0	\$14,681	\$2,100,194
36	600	13824	15181	1110	3.2	10040	25.7	\$308,561	\$0	\$14,681	\$2,423,436
37	600	14208	17068	0	0.0	10040	28.9	\$0	\$32,245	\$14,681	\$2,470,362
38	600	14592	17068	0	0.0	10040	28.9	\$0	\$0	\$14,681	\$2,485,043
39	600	14976	17068	0	0.0	10040	28.9	\$0	\$0	\$14,681	\$2,499,723
40	600	15360	17068	0	0.0	10040	28.9	\$0	\$0	\$14,681	\$2,514,404
41	600	15744	17068	1110	3.2	11150	28.9	\$352,528	\$0	\$14,681	\$2,881,613
42	600	16128	18955	0	0.0	11150	32.1	\$0	\$36,880	\$14,681	\$2,933,174
43	600	16512	18955	0	0.0	11150	32.1	\$0	\$0	\$14,681	\$2,947,854
44	600	16896	18955	0	0.0	11150	32.1	\$0	\$0	\$14,681	\$2,962,535
45	600	17280	18955	1110	3.2	12260	32.1	\$392,171	\$0	\$14,681	\$3,369,387
46	600	17664	20842	0	0.0	12260	35.3	\$0	\$42,409	\$14,681	\$3,426,476
47	600	18048	20842	0	0.0	12260	35.3	\$0	\$0	\$14,681	\$3,441,157
48	600	18432	20842	0	0.0	12260	35.3	\$0	\$0	\$14,681	\$3,455,838
49	600	18816	20842	0	0.0	12260	35.3	\$0	\$0	\$14,681	\$3,470,518
50	600	19200	20842	0	0.0	12260	35.3	\$0	\$0	\$14,681	\$3,485,199

Total program capital + maintenance costs (no admin) \$2,495,720  
Administrative costs at 30% of total program costs: \$748,716  
**Total program costs, capital + maintenance + admin \$3,485,199**

## Appendix E

### Little Ark WRAPs watershed field sign up sheet

The Little Arkansas WRAPS program currently uses a field sign up approach to enroll landowners in sediment reducing practices. In the current program, sediment is valued at a rate of \$50 per acre. Each water quality BMP is weighted according to an accepted percent sediment removal efficiency, the value of which is multiplied by the \$50 per ton sediment rate to determine the payment the landowner will receive. For example, if a producer signed this contract to convert 500 acres of conventionally tilled cropland in no-till, the producer would receive a total payment of \$18,750 ( $\$50/\text{acre} \times 500 \text{ acres} \times 75\%$ ). This sum would be paid out over a five-year period, with each payment made following a visit by the WRAPS-affiliated BMP agent.

# Little Ark WRAPS Watershed Field Sign Up Sheet



## Sediment Reduction Project

SD 01

	Best Management Practices	Erosion Reduction Efficiency (%)
___	Establish riparian vegetative buffer (check width) ___ less than 30' wide ___ 30' to 60' wide ___ greater than 60' wide	.25 .40 .50
___	No-till	.75
___	Crop rotations	.25
___	Conservation till ( $\geq 30\%$ residue following planting)	.30
___	Farm on the contour	.35
___	Establish new terraces	.30
___	Establish contour grass strips	.50
___	Establish grassed waterways	.30
___	Establish permanent grass	.95
___	Other	
	<b>Total Erosion Reduction (TER) (accumulative effect of BMP's)</b>	

Field Legal Description: \_\_\_\_\_

Land Operator/Manager \_\_\_\_\_

Address and Telephone Number \_\_\_\_\_

**Total Payment = ERE% x acres \_\_\_\_\_ x \$50 \$ \_\_\_\_\_**

Payments will be split over 5 years. Payments will be made after visit with BMP agent.  
 I agree to implement this practice(s) and maintain it for 5 years.

Land Manager/Operator \_\_\_\_\_ Date: \_\_\_\_\_

BMP Agent \_\_\_\_\_



Dear Community Member:

Wichita Clean Streams will host **Lights on the River**, its annual lantern launch, from 4 to 7 p.m., on Sunday, Dec. 6 at the Wichita Boathouse.

The purpose of the event is to bring awareness to water quality issues and bring Wichita residents down to the river to enjoy all the benefits a clean river has to offer. Lights on the River is a free family-friendly event that highlights Wichita's best natural asset each holiday season – the Arkansas River.

The lantern launch is expected to draw more than 1,000 attendees from Wichita and surrounding areas. The evening event will feature a variety of family-friendly activities and will conclude with a lantern float and stunning winter fireworks display. Santa will also be available for hearing wishes, giving hugs and taking Christmas photos. Along the banks, spectators will enjoy holiday music, food and warm beverages.

We are inviting our business community to provide sponsorship support for the event. As a sponsor, your business will receive many advertising benefits such as ad placement in newspapers and web sites along with other promotional ads on billboards and possible television and radio spots, depending on the level of sponsorship.

Our hope is that you too, will take pride in being a part of this great holiday event. The enclosed sponsorship levels identify the benefit package your company or organization will receive by being a part of this new community event. If you are interested in sponsoring this year's lantern launch, please contact the Lights on the River planning committee no later than Friday, Oct. 30.

We appreciate your consideration and participation of this event and hope to hear from you soon. If you need additional information or have any questions, feel free to contact me at 316.285.2775 or email [info@lightsontheriverwichita.com](mailto:info@lightsontheriverwichita.com).

Sincerely,

Sarah Goertz  
Parade Committee Chair



*Wichita Clean Streams is a group of volunteers working to improve the water quality of the Arkansas River and its tributaries. Our mission is to develop and implement water quality improvement projects in the community that restore and protect the overall health of the river's watershed ecosystem. In addition, Wichita Clean Streams seeks to educate the public on the importance of water quality and best practices residents and local entities can take to help protect the river well into the future. Printing funded by an EPA section 319 grant.*

# Sponsorship Levels

## **Fireworks Sponsor - \$2,500**

Signage at event – includes a large lighted event orb with logo

Public address recognition at event

Logo & name recognition on all marketing materials

Name recognition on all press releases

Name recognition on official event web site

## **Corporate Sponsor - \$2,000**

Signage at event – includes a midsize lighted event orb with logo

Public address recognition at event

Logo & name recognition on all marketing materials

Name recognition on all press releases

Name recognition on official event web site

## **Clean River Sponsor - \$1,000**

\$500 goes directly toward improving water quality on the Arkansas River

Signage at event – includes a midsize lighted event orb with logo

Name recognition on all marketing materials

Name recognition on all press releases

Name recognition on official event web site

## **Patron Sponsor - \$500**

Name recognition on all marketing materials

Name recognition on official event web site

## **Cube Sponsor - \$250**

Logo on lighted cube event chair

Name recognition on official event web site





# SPONSOR AGREEMENT

Contact name: \_\_\_\_\_

Organization or business name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Email address: \_\_\_\_\_

Value of donation/item: \_\_\_\_\_

Item(s) donated: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Thank you for your contribution to Wichita Clean Streams. Event proceeds will be used throughout the year to implement water quality improvement projects such as stream buffers and bank stabilization, public education about waste management, lawn care, rain barrels and rain gardens as well as assistance with replacing non-native lawns with native vegetation to slow and filter rain runoff.

Fireworks Sponsor - \$2,500

Patron Sponsor - \$500

Corporate Sponsor - \$2,000

Cube Sponsor - \$250

Clean River Sponsor - \$1,000

**Donations to Wichita Clean Streams are tax deductible.**

For information about how to make your tax-deductible contribution, contact us at:  
info@wichitacleanstreams.org or (316) 285-2775.

NOEC Rec'd	NOEC Authorized	County	City
8-Sep-06	9-Oct-06	Sedgwick	Wichita
31-Oct-06	1-Nov-06	Sedgwick	Wichita
6-Nov-06	8-Nov-06	Sedgwick	Wichita
7-Nov-06	8-Nov-06	Sedgwick	Wichita
8-Jan-07	9-Jan-07	Sedgwick	Wichita
9-Jan-07	9-Jan-07	Sedgwick	Wichita
21-Mar-07	27-Mar-07	Sedgwick	Wichita
15-Jun-07	18-Jun-07	Sedgwick	Wichita
7-Aug-07	13-Aug-07	Sedgwick	Wichita
20-Aug-07	27-Aug-07	Sedgwick	Wichita
4-Mar-08	G-AR94-0061	Sedgwick	Wichita
5-Mar-08	5-Mar-08	Sedgwick	Wichita
24-Oct-08	28-Oct-08	Sedgwick	Wichita
12-Jan-09	12-Jan-09	Sedgwick	Wichita
20-Feb-09	24-Feb-09	Sedgwick	Wichita
7-May-09	11-May-09	Sedgwick	Wichita
2-Oct-09	13-Oct-09	Sedgwick	Wichita
26-Oct-09	29-Oct-09	Sedgwick	Wichita
29-Mar-10	29-Mar-10	Sedgwick	Wichita
29-Apr-10	30-Apr-10	Sedgwick	Wichita
6-May-10	6-May-10	Sedgwick	Wichita
30-Jun-10	6-Jul-10	Sedgwick	Wichita
10-Aug-10	11-Aug-10	Sedgwick	Wichita
2-Sep-10	3-Sep-10	Sedgwick	Wichita
18-Oct-10	19-Oct-10	Sedgwick	Wichita
5-Nov-10	8-Nov-10	Sedgwick	Wichita
11-Jan-11	13-Jan-11	Sedgwick	Wichita
1-Mar-11	2-Mar-11	Sedgwick	Wichita
14-Nov-11	14-Nov-11	Sedgwick	Wichita
20-Aug-12	23-Aug-12	Sedgwick	Wichita
20-Nov-12		Sedgwick	Wichita
31-Dec-12	4-Jan-13	Sedgwick	Wichita
31-Dec-12	4-Jan-13	Sedgwick	Wichita
31-Dec-12	4-Jan-13	Sedgwick	Wichita
6-May-13	31-May-13	Sedgwick	Wichita
10-Jun-13	19-Jun-13	Sedgwick	Wichita
10-Jun-13		Sedgwick	Wichita









NO EXPOSURE CERTIFICATION FORM
Facility Name
Sharpline Converting, Inc.
Rockwell Collins Sales & Services, Inc.
Dold Foods, LLC
Teledyne Controls Wichita
Valassis Manufacturing
Lanny J. Wallace Army Reserve Center (KS037)
Unison Industries, LLC
UPS Cartage Services - KSWCH
Pratt & Whitney Engine Services
LSI - Wichita Campus
Treat Co.
Wescon Products Company
Precision Pattern Interiors
FedEx Express - ICTA
Plastic Fabricating Co., Inc.
Safety-Kleen Systems
Goodrich Wheel and Brake Services
Safety-Kleen Systems
PCI Newco, Inc.
Stericycle - Wichita
UPS Cartage Services- KSWHA
AMETEK Advanced Industries, Inc.
Eagle Med Base EM01
Airco Group (G-AR94-0062/KSR000469)
First Student, Inc. #12615 (4141 N. Seneca St.)
Goodrich Cabin Systems
Safety-Kleen Systems
LSI Corporation
Larry J. Wallace USARC (KS037)
AMETEK B & S Aircraft Parts & Accessories
Kaman Composites Wichita (Formerly Plastic Fabricating)
Weaver Manufacturing - South
Brittain Machine Inc.
Weaver Manufacturing - North
Vitran Express
Triumph Aerospace (32nd)
Triumph Aerospace (34th)









Company Name
Sharpline Converting, Inc.
Rockwell Collins, Inc.
Hormel Foods Corporation (Dold Foods)
Teledyne Controls Wichita
Valassis Manufacturing Company
Department of the Army - US Army 89th RRC
Unison Industries, LLC
UPS Cartage Services
Pratt & Whitney Engine Services
LSI Corporation
Treat Co.
Wescon Products Company
DeCrane Aerospace
FedEx Express
Plastic Fabricating Co., Inc.
Safety-Kleen Systems
Goodrich Corporation
Safety-Kleen Systems
DeCrane Aerospace
Stericycle, Inc.
UPS Cartage Services
AMETEK Advanced Industries, Inc.
Eagle Med LLC
Airco Group
First Student, Inc. #12615
Goodrich Corporation
Safety-Kleen Systems
LSI Corporation
Dept. of the Army - 88th Regional Support Cmd.
AMETEK B & S Aircraft Parts & Accessories
Kaman Composites Wichita
Synchronous Aerospace Group
Synchronous Aerospace Group
Synchronous Aerospace Group
Vitran Express
Triumph Aerospace Systems
Triumph Aerospace Systems











## FACT SHEET

### MS4 Six Minimum Control Measures for Municipal Separate Storm Sewer Systems (MS4s) with NPDES Permits

This fact sheet outlines the general requirements for implementation of the Six Minimum Control Measures as required under a Kansas MS4 General Permit issued by the Kansas Department of Health and Environment. The general permit provided to the MS4 authority should be reviewed for additional requirements associated with implementation of the Six Minimum Control Measures such as deadlines for implementation of the requirements or supplemental requirements associated with the individual measures. The general requirements are as follows:

- A. Six Minimum Controls - The Permittee shall develop and implement BMPs with measureable goals for each of the six minimum control measures. The six minimum control measures and associated requirements are listed and explained as follows:

#### **1. Public Education and Outreach**

The permittee shall implement a public education program which includes distribution of educational materials to the community or conducting equivalent outreach activities which address the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

#### **2. Public Involvement and Participation**

The permittee shall implement a public involvement and participation program to solicit public comment and recommendations regarding the BMPs and measurable goals utilized by the permittee to comply with the permit. The permittee shall comply with State and local public notice requirements when implementing a public involvement and participation program.

#### **3. Illicit Discharge Detection and Elimination**

The permittee shall:

- a. develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4;

- b. develop a storm sewer system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a compact disk.
- c. enact ordinances or resolutions to prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions if the permittee has such authority. A copy of the ordinances or resolutions shall be submitted to KDHE.
- d. inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and
- e. develop and implement a plan to detect and address prohibited non-stormwater discharges, including illegal dumping, to the storm sewer system. Unless identified by either the permittee or KDHE as a significant source of pollutants to waters of the state the following examples of non-stormwater discharges are not prohibited from entering the Municipal Separate Storm Sewer System:
  - 1) Water line flushing;
  - 2) diverted stream flow;
  - 3) rising groundwaters;
  - 4) uncontaminated groundwater infiltration as defined under 40 CFR 35.2005(20) to separate storm sewers;
  - 5) uncontaminated pumped groundwater;
  - 6) contaminated groundwater if authorized by KDHE and approved by the municipality;
  - 7) discharges from potable water sources;
  - 8) foundation drains;
  - 9) air conditioning condensate;
  - 10) irrigation waters;
  - 11) springs;
  - 12) water from crawl space pumps;
  - 13) footing drains;

- 14) individual residential car washing;
- 15) occasional not-for-profit car wash activities;
- 16) flows from riparian habitats and wetlands;
- 17) dechlorinated swimming pool discharges excluding filter backwash;
- 18) street wash waters (excluding street sweepings which have been removed from the street);
- 19) discharges or flows from fire fighting activities;
- 20) heat pump discharge waters (residential only);
- 21) treated wastewater meeting requirements of a NPDES permit;
- 22) sump pump drains; and
- 23) other discharges determined not to be a significant source of pollutants to waters of the state, a public health hazard or a nuisance.

#### **4. Construction Site Stormwater Runoff Control**

The permittee shall develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation, at a minimum, of the following:

- a. permittees which have the authority to enact ordinances or resolutions shall enact such ordinances or resolutions to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and local law;
- b. requirements for construction site owners or operators to implement appropriate erosion and sediment control best management practices;
- c. requirements for construction site owners or operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that are likely to cause adverse impacts to water quality;

- d. procedures for site plan review which incorporate consideration of potential water quality impacts;
- e. procedures for receipt and consideration of information submitted by the public;
- f. procedures for site inspection and enforcement of control measures.

## **5. Post-Construction Stormwater Management in New Development and Redevelopment Projects**

The permittee shall develop, implement, and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must include the development and implementation, at a minimum, of the following:

- a. BMPs to prevent or minimize adverse water quality impacts;
- b. strategies which include a combination of structural and/or non-structural BMPs appropriate for the municipality;
- c. for permittees which have the authority, ordinances or resolutions to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law;
- d. ensure adequate long-term operation and maintenance of BMPs.

## **6. Pollution Prevention/Good Housekeeping for Municipal Operations**

The permittee shall develop and implement an operation and maintenance program that includes employee training to prevent and reduce stormwater pollution from municipal operations activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

# The Buffer Zone...

is that strip of vegetation located between developed land and a lake, stream or wetland. A good buffer protects the water, adds beauty and provides habitat for wildlife!

## Lawns and Shoreline do not mix!



The most common mistake is planting lawn to the water's edge. Turf grasses have shallow roots, increasing the risk of shoreline erosion. Also, lawns provide limited habitat for wildlife.

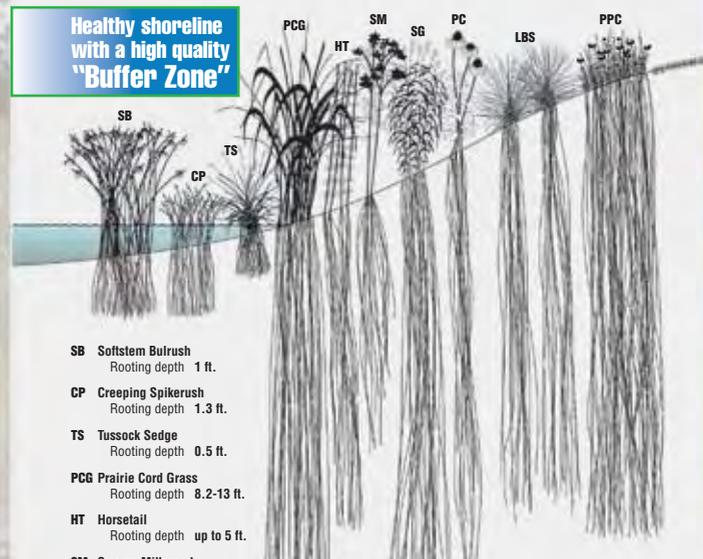
## Protect the Water, provide a Buffer!



It is not necessary to turn your entire yard into a natural prairie or forest to protect a body of water. It is easy to reach a balance between a high quality buffer along the shore and a functional yard closer to your house.

# Native plants protect your shore

Turf grass has a shallow root system. Shorelines with turf grass commonly erode. Native plants compose a high quality buffer. Their deep root systems resist erosion and stabilize shorelines.



- SB Softstem Bulrush**  
Rooting depth 1 ft.
- CP Creeping Spikerush**  
Rooting depth 1.3 ft.
- TS Tussock Sedge**  
Rooting depth 0.5 ft.
- PCG Prairie Cord Grass**  
Rooting depth 8.2-13 ft.
- HT Horsetail**  
Rooting depth up to 5 ft.
- SM Swamp Milkweed**  
Rooting depth up to 4 ft.
- SG Switch Grass**  
Rooting depth 6.5-12 ft.
- PC Purple Coneflower**  
Rooting depth 4.7-6.5 ft.
- LBS Little Bluestem Grass**  
Rooting depth 5.25 ft.
- PPC Purple Prairie Clover**  
Rooting depth 5.5-6.5 ft.

The RWMWD is a grouping of five smaller urban watersheds (Phalen Chain of Lakes, Beaver Lake, Battle Creek, Fish Creek and East St. Paul) that drain to the Mississippi River just downstream of downtown St. Paul. We are a special purpose local unit of government with a mission to protect and improve water resources and water related environments. For more information, you can visit our website at [www.rwmwd.org](http://www.rwmwd.org), or call our offices at (651) 792-7950.

Ramsey-Washington Metro  
**Watershed**  
District

(651) 792-7950  
[www.rwmwd.org](http://www.rwmwd.org)

RWM-001.bro (2006)

# The Buffer Zone

(that area along the water's edge)



## It's real estate worth protecting!

Ramsey-Washington Metro

**Watershed**  
District

*"I have never seen a high quality wetland without a high quality buffer surrounding it."*

— Jack Frost, RWMWD Board of Managers

## Six reasons why a buffer makes for a better wetland

### 1. Slows and filters runoff.

A good buffer protects your lake, stream, or wetland by slowing runoff and allowing it to soak into the ground.



### 2. Stabilizes shoreline.

Buffers prevent fluctuating water levels, moving ice, flooding, surface runoff and wave action from eroding your shoreline.

### 3. Provides habitat.

The water's edge provides food and cover for birds, butterflies, turtles and other wildlife. A good buffer can be a very diverse habitat.

### 4. Enhances aesthetics.

Natural buffers beautify your yard with a variety of colorful wildflowers that bloom throughout the season. Buffers can also create a natural screen, increasing privacy.

### 5. Increases property value.

A high quality buffer is an asset that can add resale value.



### 6. Limits nuisance wildlife.

A native plant buffer creates a natural barrier to Canada geese.

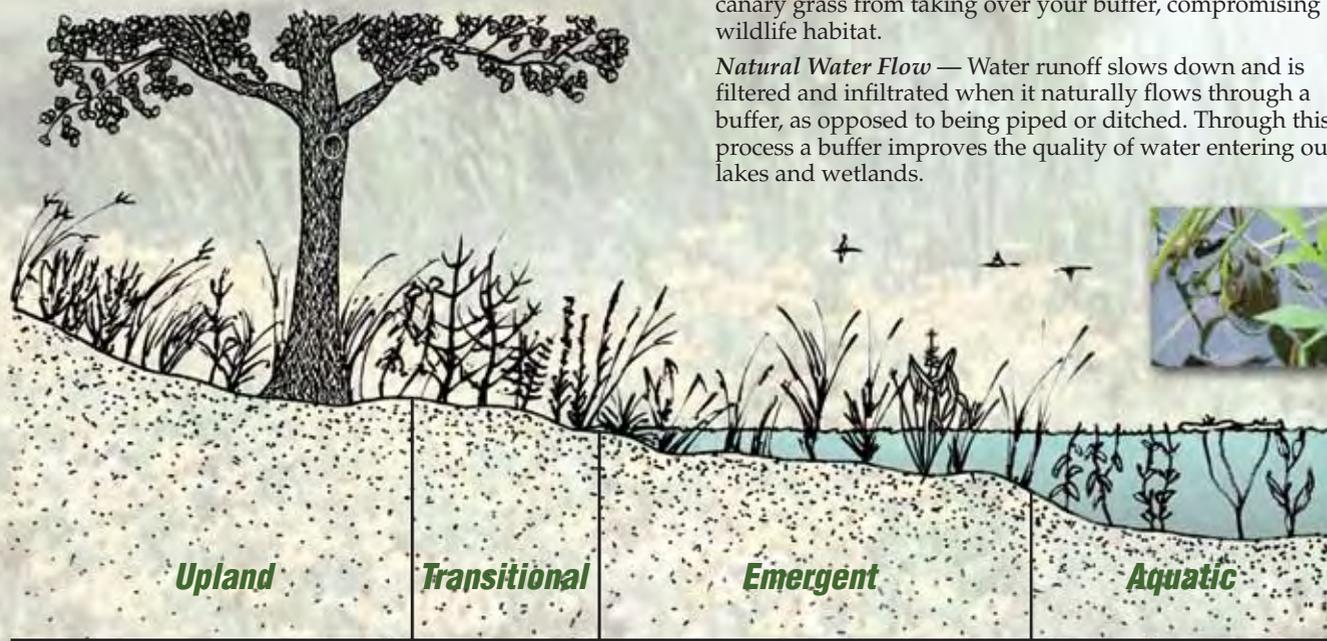
## What makes a good buffer?

**Wider is Better** — The wider the buffer the greater the benefit. But even a 10-foot buffer is better than no buffer at all.

**Natural Vegetation** — A mix of native plant species – trees, grasses, and wildflowers – adds to buffer quality and improves wildlife habitat. Deep-rooted native plants are best adapted to hold soils in place.

**Weed Management** — Like any urban landscape your buffer needs maintenance. Periodic weeding will prevent invasive species such as purple loosestrife, buckthorn and reed canary grass from taking over your buffer, compromising wildlife habitat.

**Natural Water Flow** — Water runoff slows down and is filtered and infiltrated when it naturally flows through a buffer, as opposed to being piped or ditched. Through this process a buffer improves the quality of water entering our lakes and wetlands.



**The ideal buffer has a mix of native species in all four plant zones.**

## How to create (or enhance) your own buffer

There are three main steps to creating or enhancing your own buffer. We recommend that you use the resources listed below to get started.

### 1. Study your property —

Evaluate and learn about your shoreline or wetland edge. What type of plants are growing there? Do you have an undisturbed buffer? How wide is it? Are there signs of erosion?

### 2. Create a plan —

Determine your buffer area. Research ways to remove invasive plant species. Decide on methods to increase native plant species diversity – e.g., stop mowing, seed selected areas and plant along the water. Select appropriate plant species. If erosion is a concern, choose appropriate methods of soil stabilization, which may include regrading. (Note: A permit may be needed to plant below the Normal Water Level – Call MN DNR Central Region at 651.722.7956 for more information.)

### 3. Implement your plan —

Prepare your site. Stop mowing. Spread out and slow down water flow to minimize erosion. Remove invasive weed species and turf grass. Plant or seed your buffer. Maintain your natural buffer – e.g., water the first year, weed, and replant bare spots. Watch for new native plant species becoming established. Record your observations. Share your knowledge with others!

## Resources and additional information

(Please call the Watershed District at 651.792.7950 if you do not have web access and would like more information on buffers.)

Ramsey-Washington Metro Watershed District  
[www.rwmwd.org](http://www.rwmwd.org)

University of Minnesota – Shoreland Management  
[www.shorelandmanagement.org](http://www.shorelandmanagement.org)

List of Minnesota native plant suppliers  
[www.dnr.state.us/gardens/nativeplants/suppliers.html](http://www.dnr.state.us/gardens/nativeplants/suppliers.html)

Grants for purchasing native plants in Ramsey County  
[www.ramseyconservation.org/swcd/home.html](http://www.ramseyconservation.org/swcd/home.html)

MN DNR Restore your Shore – CD and book resources  
[www.dnr.state.mn.us/restoreyourshore/index.html](http://www.dnr.state.mn.us/restoreyourshore/index.html)

October 15, 2013

«Name»

«Address»

«City», «ST» «Zip»

RE: City of Wichita-Stormwater Bi-Annual BMP Inspection.

«Development Name» «SW ID #»

«Site Address»

Dear Owner/Manager:

The City of Wichita is required under State & Federal law, by the National Pollutant Discharge Elimination System (NPDES), to implement a stormwater management program. This program allows the City of Wichita to continue discharging stormwater to rivers and streams.

You are being notified because City records listed you as the owner or manager of the subject development, having stormwater Best Management Practice (BMP) devices that regulate runoff pollution.

One of the requirements of the NPDES regulations, as well as the city's ordinance, is that a bi-annual inspection, is conducted by a qualified person (licensed and or certified individual) and results submitted to the City of Wichita. You should find the inspection form within the operations & maintenance manual provided by the engineer that completed this site's design.

Completed bi-annual inspection forms should be submitted to: City of Wichita Stormwater Management, 455 N Main 8<sup>th</sup> floor, Wichita, KS. 67202 on or before January 15<sup>th</sup> 2014.

If you are no longer the owner or manager of this property or have questions please contact Renee Batchman at 268-4498.

Sincerely,

Scott C. Lindebak, P.E.  
Stormwater Manager

# YOUR POST CONSTRUCTION BMP HELPS KEEP MY WATER CLEAN

Your property was designed and constructed with a Stormwater Management facility known as a BMP. Let's look at common examples of required periodic maintenance.

For additional information on how to keep Wichita waterways clean please visit [TadsWater.com](http://TadsWater.com)

## IT'S SIMPLE. YOU JUST NEED TO KNOW WHERE TO LOOK.

Any questions you have concerning required maintenance of BMPs can be answered in your Operations & Maintenance Manual.



Tad  
Stormwater Spokesfrog

### CONTACT US

Questions about Stormwater Utility Charges  
**265-1300**

Report Illegal Discharges  
**268-4498**

Storm Sewer Issues  
**268-4090**

Recycling Questions  
**660-7200**

Sedgwick County Household Hazardous Waste Facility  
**660-7458**

Stormwater Management  
City of Wichita  
Public Works & Utilities Department  
455 N. Main, 8th Floor  
Wichita, KS 67202  
(316) 268 - 4498  
[www.wichita.gov](http://www.wichita.gov)



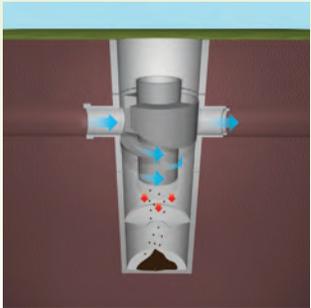
Hello HOA Boards,  
Commerical Property  
Owners and  
Landowners with  
SWM facilites



Here are some typical  
BMPs you may have:



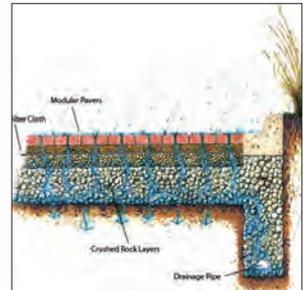
Wet Pond



Hydrodynamic Separator



Grass Filter Strip



Pervious Pavement



Rain Garden

## BMP INSPECTIONS



## BMP COMPLIANCE RESOURCES

- Routine inspections with grounds maintenance or appointed person.
- Biannual inspections completed by **qualified person (professional engineer) or other certified professionals such as CPSEC, CPSWQ.**

## EXAMPLE INSPECTION LIST FOR WET PONDS



1. Trim and mow overgrown areas
2. Dispose of trash and debris
3. Remove unappealing weeds
4. Clean your gutters, pipes and drains
5. Fill in dead spots with new vegetation
6. Pick up animal waste
7. Sanitize and dispose of hazardous spills

## REMEMBER:

BMPs are designed to reduce stormwater **volume, peak flows, and/or nonpoint source** pollution through **evapotranspiration, infiltration, and detention.**

The best way to mitigate stormwater impacts from new developments is to use practices to **treat, store, and infiltrate runoff onsite before it** can affect water bodies downstream.

# HELP PREVENT EROSION AND RUNOFF

Disturbed ground at a construction site exposes soil to erosion and runoff. Every construction site must use BMPs to control sediment and erosion. Projects that disturb one acre or more must have a stormwater prevention plan that addresses efforts to prevent site-generated and construction-related pollutants from leaving the construction site.



## STAY UP-TO-DATE

The site will be inspected a minimum of once every seven calendar days, and also within 24 hours of the end of each rain event if less than 0.5 inches fell.

For additional information on how to keep Wichita waterways clean please visit [TadsWater.com](http://TadsWater.com)



*Tad*  
Stormwater Spokesfrog

## CONTACT US

Questions about Stormwater Utility Charges  
**265-1300**

Report Illegal Discharges  
**268-4498**

Storm Sewer Issues  
**268-4090**

Recycling Questions  
**660-7200**

Sedgwick County Household Hazardous Waste Facility  
**660-7458**

Stormwater Management  
City of Wichita  
Public Works & Utilities Department  
455 N. Main, 8th Floor  
Wichita, KS 67202  
(316) 268 - 4498  
[www.wichita.gov](http://www.wichita.gov)

Proper Placement of  
Temporary BMPs

# AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE

It's far more efficient and cost-effective to PREVENT pollution than to try to correct problems later.



# CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

TO STAY IN COMPLIANCE WITH THE LAW AND KEEP YOUR PROJECT ON SCHEDULE, MAKE SURE BMPs ARE IN PLACE AND FUNCTIONING.



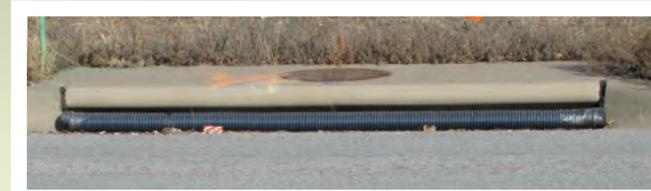
## PERIMETER CONTROLS

- Surround the entire site.
- Avoid running over perimeter controls with vehicles or heavy equipment.
- Inspect weekly or after each rain event.



## DUMPSTERS

- Close lids on dumpsters.
- Cover roll-off dumpsters with rollback tarp.
- Sweep surrounding area daily.



## BUILDING MATERIALS/ STAGING AREAS

- Keep extra absorbent materials on site to quickly pick up spills.
- Store containers and materials on pallets, rather than directly on the ground.
- Provide secondary containment when practical.



## EARTH-MOVING EQUIPMENT

- Conduct maintenance of equipment on site.
- Clean up mud tracks and dirt trails left behind by vehicles.

## WASHOUT AREAS

- Use a berm with an impervious liner to contain wet materials (e.g., paint, stucco, concrete) and prevent runoff in nearby areas.

## STORM DRAINS

- Protect storm drains at all times with perimeter controls such as gravel bags.



## ESTABLISH A CONSTRUCTION ENTRANCE

- Limit vehicle and equipment access to one route.
- Stabilize unpaved entrances with crushed rock.



## DIRT AND GRADING

- Cover or spray stockpiled dirt and gravel with water to control dust.

## IMPORTANT STEPS FOR POLLUTION PREVENTION

1. Follow your Stormwater Pollution Prevention Plan. Adjust and modify BMPs as necessary SWPPP.
2. Understand Stormwater Compliance, update and manage your SWPPP to match your projects needs.
3. Install protection at inlets nearest to the construction area.
4. Contact the inspector assigned to your project to answer any questions.

# STORM WATER POLLUTION PREVENTION PLAN

## BROOKS LANDFILL

Prepared for



September 2009

## Management Commitment of Resources

The City of Wichita is committed to the implementation of the procedures outlined in this SWPPP and the prevention of pollutants to navigable waters of the United States. This Plan has the full approval of management at a level of authority to commit the resources necessary to implement the SWPP Plan. A copy of this SWPP Plan shall be maintained at the facility at all times and will be made available to the EPA or State of Kansas for on-site review during normal working hours.

Authorized Management Representative Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

# STORM WATER POLLUTION PREVENTION PLAN

## Brooks Landfill

Prepared by



September 2009

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APPENDIX B. Monthly Site Inspections

APPENDIX C. Comprehensive Site Compliance Evaluation Reports

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# 1 INTRODUCTION

The purpose of this Storm Water Pollution Prevention Plan (SWPPP) is to prevent contamination of storm water runoff as a result of industrial activities conducted at the Brooks Landfill. The City of Wichita owns and operates this facility at 4100 North West Street in Wichita, Kansas. The goals of this SWPPP are as follows:

1. Identify potential sources of pollution that may be reasonably expected to contribute to the contamination of storm water runoff.
2. Establish Best Management Practices (BMP) that eliminate or effectively reduce the routes for contamination to enter the storm water runoff.

The United States Environmental Protection Agency (USEPA) has developed regulations to reduce the introduction of pollutants into storm water from industrial sites. These regulations have been delegated to the Kansas Department of Health and Environment (KDHE) to administer. Currently, KDHE considers an industrial facility to be in compliance if the owner has submitted a Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the General Permit and has developed a SWPPP. This SWPPP was prepared according to the requirements stated within the USEPA and the KDHE guidance documents (Appendix F).

## **1.1 SWPPP Pollution Prevention Team**

The members of the Brooks Landfill Pollution Prevention Team (Appendix A, Worksheet #1) are responsible for the day-to-day tasks related to storm water runoff pollution prevention. The members of the SWPPP Pollution Prevention Team will conduct employee training programs, ensure implementation of BMPs, complete all site inspections, and supervise the day-to-day operations at the site which negatively affect storm water quality. Collectively, the SWPPP Pollution Prevention Team is responsible for the following tasks:

- Performing scheduled inspections.
- Training facility personnel.
- Ensuring that the BMPs in the plan are being implemented.
- Maintaining records.
- Revising the SWPPP to reflect changes to the BMPs employed and to the applicable regulations.
- Preparing the Comprehensive Site Compliance Evaluation for insertion into Appendix C of this document once each year.

The following individuals are designated as the primary members of the SWPPP Pollution Prevention Team at the Brooks Landfill:

Individual: Aaron Henning  
 Title: Assistant Maintenance Engineer  
 Phone: (316) 268-4087

Individual: Tony DeCicco  
 Title: Maintenance Engineer  
 Phone: (316) 268-4081

These individuals (or persons in their positions) must maintain and update this SWPPP. The Pollution Prevention Team must also coordinate between “front line” employees and management concerning pollution prevention issues. The Pollution Prevention Team is responsible for carrying out the requirements of the SWPPP as summarized in the following table.

**Table 1-1 Requirements of the SWPPP**

<b>Activity</b>	<b>Frequency</b>
<b>1. Site Inspections</b>	Monthly, records in Appendix B, recordkeeping requirement of 3 years
<b>2. Comprehensive Site Compliance Evaluation</b>	Annually
<b>Comprehensive Site Compliance Evaluation Report</b>	Completed within 2 weeks following Evaluation and inserted in Appendix C
<b>Comprehensive Site Compliance Evaluation Report Implementation</b>	Performed within 12 weeks of the Evaluation Report
<b>3. Visual Inspection of Storm Water</b>	Periodically during wet weather events. Results included in Comprehensive Site Compliance Evaluation Report
<b>4. Employee Training</b>	Annually, keep record of training in Appendix D, Employee Training
<b>5. Spill Reporting</b>	If spill occurs, documented in Appendix E, Significant Spills and Leaks
<b>6. SWPPP recertification</b>	Once every five years by a Kansas P.E., Appendix F

## **2 FACILITY DESCRIPTION AND STORM WATER DRAINAGE**

### ***2.1 Facility Description***

The Brooks Landfill is located at 4100 North West Street in Sedgwick County, Wichita, Kansas. The Brooks Landfill is owned by the City of Wichita, and operated by Herzog Disposal Service. The Landfill is located just north of the intersection of K-96 and West Street, in the northwestern portion of Wichita. The site lies along the western bank of the Arkansas River before it splits with the Wichita Valley Center Flood Control Channel.

The landfill has approximately 273 acres, with an additional 463 acres of adjacent farmland owned by the City but not used for landfill activities. Brooks consists of a closed municipal solid waste landfill and a currently operating construction and demolition waste landfill and an industrial waste monofill that accepts friable asbestos waste. The site has a scale house/office building, a Vehicle Maintenance Building, and a landfill gas collection and processing plant with an office trailer.

The Standard Industrial Classification (SIC) for this facility is 4953. This plan covers activities where contaminants could possibly be introduced into the storm water runoff such as refueling and maintenance of vehicles. Contaminants of concern used in these activities include diesel, gasoline, and motor oil. A site map is presented following Worksheet #2 in Appendix A. The important features identified on the site map include the locations of the potential stormwater pollution activities and the stormwater outfalls.

### ***2.2 Facility Drainage***

The site is entirely surrounded by a drainage ditch and berm system that allows surface drainage to be collected and transferred to either of two outfalls. The closed cells utilize an interior area drain and ditch system. Drainage from the closed portions flows in all directions to four swales. One swale drains to the south immediately east of the north-south access road, while a second drains to the north and is located east of the access road. Runoff from the eastern two-thirds of the landfill drains east, where it is directed to a third swale along the eastern boundary of the site. This swale drains to the north to a drainage culvert through the levee at the northeast corner of the site. A fourth swale flows generally east to west between cells in the northeast corner of the site. Drainage along the western boundary of the site is comprised of sheet flow. Ultimately, all drainage ends up in the exterior drainage ditch and berm system.

There are a total of three drainage culverts located on the site. The first culvert is the outfall to the Arkansas River at the northeastern corner of the site. The second culvert is located under the West Street entrance into the site, which allows drainage from the western portion to flow under West Street to the ponding area in the southeastern corner of the site. The third culvert is under Highway 96, which allows offsite drainage to flow under the highway to the ponding area as well.

The SWPPP site map will be updated by the SWPPP Pollution Prevention Team whenever changes are made that would affect storm water runoff.

### ***2.3 Inventory of Exposed Materials***

Materials which could potentially come into contact with precipitation and contaminate storm water runoff have been summarized in the Material Inventory worksheet presented in Appendix A, Worksheet #3. Currently, there are not any significant quantities of materials exposed to storm water. Materials currently stored at this facility that could possibly come in contact with storm water include diesel, gasoline, and oil; however, all of these materials are unlikely to come into contact with storm water as described in Worksheet #3.

If during the Comprehensive Site Compliance Evaluation (Section 5.2), it is determined that a material has been added or removed from the Brooks Landfill, the Materials Inventory worksheet should be updated. New worksheets should be added to the SWPPP when a new material is introduced to the site. If the use of a material is discontinued, it should be crossed out on the worksheet, and the date its use was discontinued should be noted. The changes should be initialed by the appropriate member of the SWPPP Pollution Prevention Team.

### ***2.4 Significant Spills and Leaks***

According to facility personnel there have been no spills or leaks of toxic or hazardous pollutants in reportable quantities for the previous three years (Appendix A, Worksheet #4). In Appendix G, a blank Worksheet #4 should be completed and included in Appendix E if any spills occur in the future.

### **3 OUTFALL INVENTORY**

Two storm water outfalls convey drainage from the site at the Brooks Landfill. Outfall 1 is on the northeast edge of the site.



**Figure 3-1. Outfall 1**

Outfall 2 is located in the southeast corner of the site.



**Figure 3-2. Outfall 2**

### **3.1 Non-Storm Water Discharges**

The Brooks Landfill site was inspected for the presence of non-storm water discharges, (Appendix A, Worksheets #5 & #6). A visual inspection of the site's storm water outfalls revealed no non-storm water discharges; however, the facility should be inspected periodically to verify this conclusion is valid throughout the year. It is most convenient to conduct these inspections concurrently with the routine monthly inspections of the facilities.

The inspector should walk the site and trace the sources of any flows leaving the site that occur during dry weather. Non-storm water flows may result from illicit connections to the sanitary sewer system or from overland flow of process water. All storm sewer outfalls should be checked for the presence of non-storm water flows.

### **3.2 Description of Potential Pollution Sources**

There is one location of activity where potential contaminants could come in contact with storm water and it is on the site map.

#### **3.2.1 Fueling Area**

This area is located along the West Street entrance road. The fuel pumps are used to supply diesel and gasoline. Two AST's, with audible overflow alarms, are located within secondary containment. There is an SPCC Plan for this entire site. At this time, the Brooks Landfill has absorbent material onsite that is used if there are visible oil marks on the concrete or if fuel is spilled from the fuel pumps. After use, the absorbing material is removed and disposed. Below is a photograph of the fueling area.



**Figure 3-3. Fueling Area**

### ***3.3 Existing Storm Water Sampling Data***

Brooks Landfill was sampled during two rain events in 1991. The results of that sampling is contained the City's original Permit application dated September 1992. It is not anticipated that KDHE will require monitoring of storm water in the future.

## **4 POLLUTION PREVENTION MEASURES AND CONTROLS (BMPs)**

The following section identifies BMPs that will be implemented as part of this SWPPP (Appendix A, Worksheet #8).

### ***4.1 Good Housekeeping***

The most elementary, yet one of the most effective, of all BMPs is the practice of good housekeeping. For the Brooks Landfill, this consists of the following:

- (1) Debris exposed to stormwater should be collected and removed from the site.
- (2) Work area cleanup should follow any task, no matter how small.

Currently, the lead site maintenance worker conducts weekly site inspections to ensure good housekeeping at the site. Good housekeeping will be stressed to the employees during their annual employee training. Particular attention should be paid to the areas around fuel dispensing stations and the roadwork materials storage area.

### ***4.2 Spill Prevention and Response Procedures***

If spills occur, having proper procedures in place can prevent a spill from becoming a potentially large environmental problem. Currently, the Brooks Landfill does have a Spill Prevention Control and Countermeasure Plan in place. There has not been a spill of any significant amount of material in the past three years. Despite this excellent performance, spill prevention and response procedures must be followed in the event that a spill occurs in the future. Worksheet #4 in Appendix F can be used to record the date and time of any future spills.

### ***4.3 Inspections***

Inspections involve visually checking the potential sites of pollution on a periodic basis to confirm that good housekeeping procedures are being followed. The inspection currently occurs weekly by the lead site maintenance worker; however, it is not currently documented. To comply with KDHE Storm water Pollution Prevention Plan guidelines, a monthly record of the inspections should be kept for a period of three years in Appendix B, and a set of follow-up procedures should be in place so that corrective actions can occur if needed (A blank inspection form is included at the end of Appendix G).

#### ***4.4 Employee Training***

All Brooks Landfill employees that are responsible for storm water pollution prevention at the facility will receive training, and this training will be thoroughly documented. Training will address the following subjects:

- (1) Familiarization with all BMPs in place and ensuring that employees understand the requirements and contents of the SWPPP.
- (2) Proper handling of all materials used or commonly encountered at the facility.

Employee training will be conducted initially when the SWPPP is presented to the facility. Annual refresher and new hire training will be conducted by the SWPPP Pollution Prevention Team. Worksheet #10 included in Appendix D can be used to document training.

#### ***4.5 Erosion Control Measures***

For sites that are largely unpaved without adequate ground cover, soil erosion can transport large quantities of suspended sediment into the downstream waterways. However, during the site visit, it was not apparent that soil erosion is a significant problem at the Brooks Landfill. The relatively small areas without vegetation and the mild slopes keep erosion from becoming a significant problem. However, future Comprehensive Site Compliance Evaluations by the Pollution Prevention Team should include looking for signs of erosion and assess the need for implementation of erosion-control BMPs.

#### ***4.6 Record Keeping and Internal Reporting Procedures***

Accurate and thorough records of all activities are essential to maintaining the SWPPP and storm water quality. Records of the monthly inspections (Appendix B), the Comprehensive Site Compliance Evaluation Reports (Appendix C), employee training records (Appendix D), and any future spills or leaks that occur (Appendix E) will be kept on site with the SWPPP. These records will be readily available for review by regulatory agencies.

## **5 MONITORING, REPORTING, AND RECORD KEEPING REQUIREMENTS**

### ***5.1 Sampling Requirements***

At this time, KDHE is not requiring that quantitative chemical analysis be conducted on the storm water leaving the site; however, periodically during wet weather events, storm water should be visually inspected for the presence of pollutants. It is recommended that the visual inspection of the storm water be conducted periodically during the spring when wet weather events are typically frequent. Each of the two storm water outfalls identified in Section 3 should be observed. The inspection should indicate whether an oil sheen, foam, suspended solids, or floating solids are present and the color and clarity of the storm water. The results of the visual inspection of the storm water will be included in the Comprehensive Site Compliance Evaluation Report (Appendix C).

### ***5.2 Comprehensive Site Compliance Evaluation and Report***

A Comprehensive Site Compliance Evaluation inspection should be conducted on an annual basis to determine whether site conditions have changed, whether the SWPPP needs to be revised, and whether the SWPPP procedures are effective. The SWPPP should be modified if any deficiencies are identified based on the evaluation or additional BMPs could be implemented. If a BMP is identified that will be implemented, Worksheet #9 (a blank form is included in Appendix G) should be utilized and included with the Comprehensive Site Compliance Evaluation Report. Examples of changes that would result in a revision are regrading of the existing site, an additional material added to the site that could contribute to storm water pollution, or a request for chemical analysis of storm water by KDHE.

The inspection should target the two storm water outfalls and the fueling area that could potentially contribute to storm water pollution. (identified on the Site Map, Appendix A). In addition, the inspection should look for signs of erosion around the site.

It is recommended that the Brooks Landfill develop a report format for this inspection or utilize Worksheet #11 in Appendix C. The report should contain the following information: the cleanliness of the areas, a visual inspection of the storm water outfalls, confirming that non-storm water discharges are not present, the documented visual analysis of the storm water runoff from each of the outfalls, and if there were any changes to site map. These changes should be identified and the site map updated. The report must be included in Appendix C within two weeks of the Comprehensive Site

Compliance Evaluation inspection. If the report identifies additional measures that should be taken to reduce storm water pollution, the measures must be implemented within 12 weeks, and the update recorded on Worksheet #12 (a blank form is included in Appendix G). The updated worksheet should be included with the Comprehensive Site Compliance Evaluation Report.

## **6 REFERENCES**

USEPA, Storm Water Management for Industrial Activities – Developing Pollution Prevention Plans and Best Management Practices, 1992.

KDHE, Storm Water Pollution Prevention Plan Requirements and Guidelines, Attachment A, no date.

Worksheet #1  
POLLUTION PREVENTION TEAM  
MEMBER ROSTER

Facility name: Brooks Landfill  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 08/14/09

Leader: Aaron Henning Title: Assistant Maintenance Engineer  
Office Phone: 316-268-4087

Responsibilities:  
1) Signatory authority; 2) Coordinate employee training program; 3) Ensure that all SWPPP requirements are performed

Members:  
(1) Tony DeCicco Title: Maintenance Engineer  
Office Phone: 316-268-4081

Responsibilities:  
1) Conduct annual site evaluations; 2) Perform employee training; 3) Conduct weekly site inspections

(2) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

(3) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

(4) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

Worksheet #2  
DEVELOPING A SITE MAP

Facility name: Brooks Landfill  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 08/14/09

Instructions: Draw a map of your site including a footprint of all buildings, structures, paved areas, and parking lots.  
The information below describes additional elements required by EPA's General Permit.

EPA's General Permit requires the following features on the site map:

- All outfalls and storm water discharges
- Drainage areas of each storm water outfall
- Structural storm water pollution control measures, such as:
  - Flow diversion structures
  - Retention/detention ponds
  - Vegetative swales
  - Sediment traps
- Name of receiving waters (or if through a Municipal Separate Storm Sewer System)
- Locations of exposed significant materials
- Locations of past spills and leaks
- Locations of high-risk, waste-generating areas and activities common on industrial sites such as:
  - Fueling stations
  - Vehicle/equipment washing and maintenance areas
  - Area for unloading/loading materials
  - Above-ground tanks for liquid storage
  - Industrial waste management areas (landfills, waste piles, treatment plants, disposal areas)
  - Outside storage areas for raw materials, by-products, and finished products
  - Outside manufacturing areas
  - Other areas of concern (specify: \_\_\_\_\_ )





**Worksheet #5  
NON-STORM WATER DISCHARGE  
ASSESSMENT AND CERTIFICATION**

Facility name: Brooks Landfill  
 Completed by: Jim Hardesty  
 Title: Storm Water Specialist  
 Date: 08/14/09

Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
08/14/09	Outfall 1	Visual	No discharge observed	Fueling Area	Jim Hardesty
08/14/09	Outfall 2	Visual	No discharge observed	Fueling Area	Jim Hardesty

**CERTIFICATION**

I, \_\_\_\_\_ (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print)

B. Area Code and Telephone No.

C. Signature

D. Date Signed

**Worksheet #6**

**NON-STORM WATER DISCHARGE ASSESSMENT AND  
FAILURE TO CERTIFY NOTIFICATION**

Facility name: Brooks Landfill  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 08/14/09

Directions: If you cannot feasibly test or evaluate an outfall, fill in the table below with the appropriate information and sign this form to certify the accuracy of the included information.

List all outfalls not tested or evaluated, describe any potential sources of non-storm water pollution from listed outfalls, and state the reason(s) why certification is not possible. Use the key from your site map to identify each outfall.

**Important Notice: A copy of this notification must be signed and submitted to the Director within 180 days of the effective date of this permit.**

Identify Outfall Not Tested/Evaluated	Description of Why Certification Is Infeasible	Description of Potential Sources of Non-Storm Water Pollution
All outfalls evaluated		

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations, and that such notification has been made to the Director within 180 days of \_\_\_\_\_ (date permit was issued), the effective date of this permit.

A. Name & Official Title (type or print)

B. Area Code and Telephone No.

C. Signature

D. Date Signed

**Worksheet #7**

**Facility:** Brooks Landfill  
**Completed By:** Jim Hardesty  
**Title:** Storm Water Specialist  
**Date:** 08/14/09

***Pollutant Source Identification***

**Instructions:** List all identified stormwater pollutant sources and describe existing management practices that address those sources. In the third column, list Best Management Practice (BMP) options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Options
1 Gasoline and Diesel Fuel from fueling station	Absorbent material used for cleanup	None required
2		
3		
4		
5		
6		

**Worksheet #8**

**Facility:** Brooks Landfill

**Completed By:** Jim Hardesty

***BMP Identification***

**Title:** Storm Water Specialist

**Date:** 08/14/09 (page 1)

**Instructions:** Describe the Best Management Practices (BMP's) that have been selected to be included in the plan. For each of the baseline BMP's, describe actions that will be incorporated into facility operations. Also describe any additional BMP's (activity-specific and site-specific BMP's) that have been selected. Attach additional sheets if necessary.

BMP's

Brief Description of Activities

Good Housekeeping

- 1) Debris should be collected and removed from the site
- 2) Work area cleanup should follow any task, no matter how small

Inspections

- 1) Monthly visual inspection of Potential Pollution sources and Stormwater Outfalls

Employee Training

- 1) Familiarization with all BMPs in place and ensuring that employees understand the requirements and contents of the SWPPP
- 2) Proper handling of all materials used or commonly encountered at the facility.
- 3) Must be conducted annually

**Worksheet #8**

**Facility:** Brooks Landfill

**Completed By:** Jim Hardesty

**Title:** Storm Water Specialist

**Date:** 08/14/09 (page2)

***BMP Identification***

**Instructions:** Describe the Best Management Practices (BMP's) that have been selected to be included in the plan. For each of the baseline BMP's, describe actions that will be incorporated into facility operations. Also describe any additional BMP's (activity-specific and site-specific BMP's) that have been selected. Attach additional sheets if necessary.

BMP's

Brief Description of Activities

Record Keeping and Internal Reporting Procedures

1) Keep records of revisions to the SWPPP, inspection reports, employee training records, and any spills or leaks that occur onsite.

<b>Worksheet #9</b>  <b>BMP Implementation</b>	<b>Facility: Brooks Landfill</b>		
	<b>Completed By: Jim Hardesty</b>		
<b>BMP</b>	<b>Action Required for Implementation</b>	<b>Completion Date:</b>	<b>Person Responsible:</b>

# Let's Agree not to Merge

Avoiding a merger between your business and my local waterways is in our community's best interest!

For additional information on how to keep Wichita waterways clean please visit [TadsWater.com](http://TadsWater.com)



## Accidents Happen, Be Prepared!



- Have a plan & communicate it to employees
- Keep a spill kit & communicate its use and location to employees

### SUGGESTED LIST OF SPILL-KIT CONTENTS:

- Sorbent booms
- Kitty litter
- Sorbent pads
- Plastic sheeting (for drain cover)
- Garbage bags and zip ties
- Acid/base neutralizer
- Safety gloves and goggles



*Tad*  
Stormwater Spokesfrog

### CONTACT US

Questions about Stormwater Utility Charges  
**265-1300**

Report Illegal Discharges  
**268-4498**

Storm Sewer Issues  
**268-4090**

Recycling Questions  
**660-7200**

Sedgwick County Household Hazardous Waste Facility  
**660-7458**

Stormwater Management  
City of Wichita  
Public Works & Utilities Department  
455 N. Main, 8th Floor  
Wichita, KS 67202  
(316) 268 - 4498  
[www.wichita.gov](http://www.wichita.gov)



# TAKING CARE OF YOUR BUSINESS, CAN ALSO HELP TAKE CARE OF MINE!

Please help! Here are a few simple ways you can avoid an unintended hostile takeover of my local waterways.

## • COVER

Cover outdoor work and storage areas.

Image source: [www.tarpnews.com](http://www.tarpnews.com)



## • CAPTURE

Capture fluids immediately. You may be surprised at how far and quickly they can travel!

Image source: [www.flowcontrolnetwork.com](http://www.flowcontrolnetwork.com)



## • CLEAN

Clean up spills before they reach the drain using absorbents rather than a hose to reduce the risk chemicals running down the drain.

Image source: [www.spillsupply.com](http://www.spillsupply.com)



## • CONTAIN

Use simple methods to safeguard unintended leaks from spreading.



# PERFORM A POND FRIENDLY AUDIT



## DUMPSTERS AND GREASE STORAGE:

- Place dumpsters on a flat concrete surface that does not slope or drain.
- Install a secondary containment system such as a berm or curb around the dumpster.
- Place clear and visible signs on dumpsters indicating which kind of waste can be accepted.
- Never use bleach or soap to clean your dumpster and grease storage containers unless the wash water is being disposed of properly.
- Repair leaking or damaged dumpsters immediately.
- Sweep trash and litter from around the dumpster regularly.
- Keep dumpster and waste container covers closed.



## STREET, DRIVEWAY, PARKING LOT & SIDEWALKS:

- Regularly sweep paved areas instead of hosing them down.
- Inspect and clean gutters, drains and catch basins.

## LOADING DOCKS AND STORAGE AREAS:

- Limit exposure of materials to rainwater.
- Regularly check loading and unloading equipment for leaks.
- Regularly dry-sweep loading areas.
- Placed stored chemicals and waste materials in a secondary containment to catch any leaks.



## STORAGE TANKS AND FUELING AREAS:

- Provide secondary containment around fuel storage and waste tanks.
- Cover fueling areas to prevent exposure to storm water.
- Develop a spill incident response plan.
- Train employees in proper fueling techniques and spill responses.
- Clearly post emergency phone numbers.
- Regularly maintain and inspect tanks and transfer equipment.

## EMERGENCY PHONE NUMBERS

FIRE	_____
POLICE	_____
AMBULANCE	_____
POISON CENTER	_____
PHYSICIAN	_____

## **Hardesty, James**

---

**From:** Hickle, Joseph  
**Sent:** Tuesday, August 11, 2015 12:01 PM  
**To:** Hardesty, James  
**Subject:** City MS4 permit educational meeting

Jim

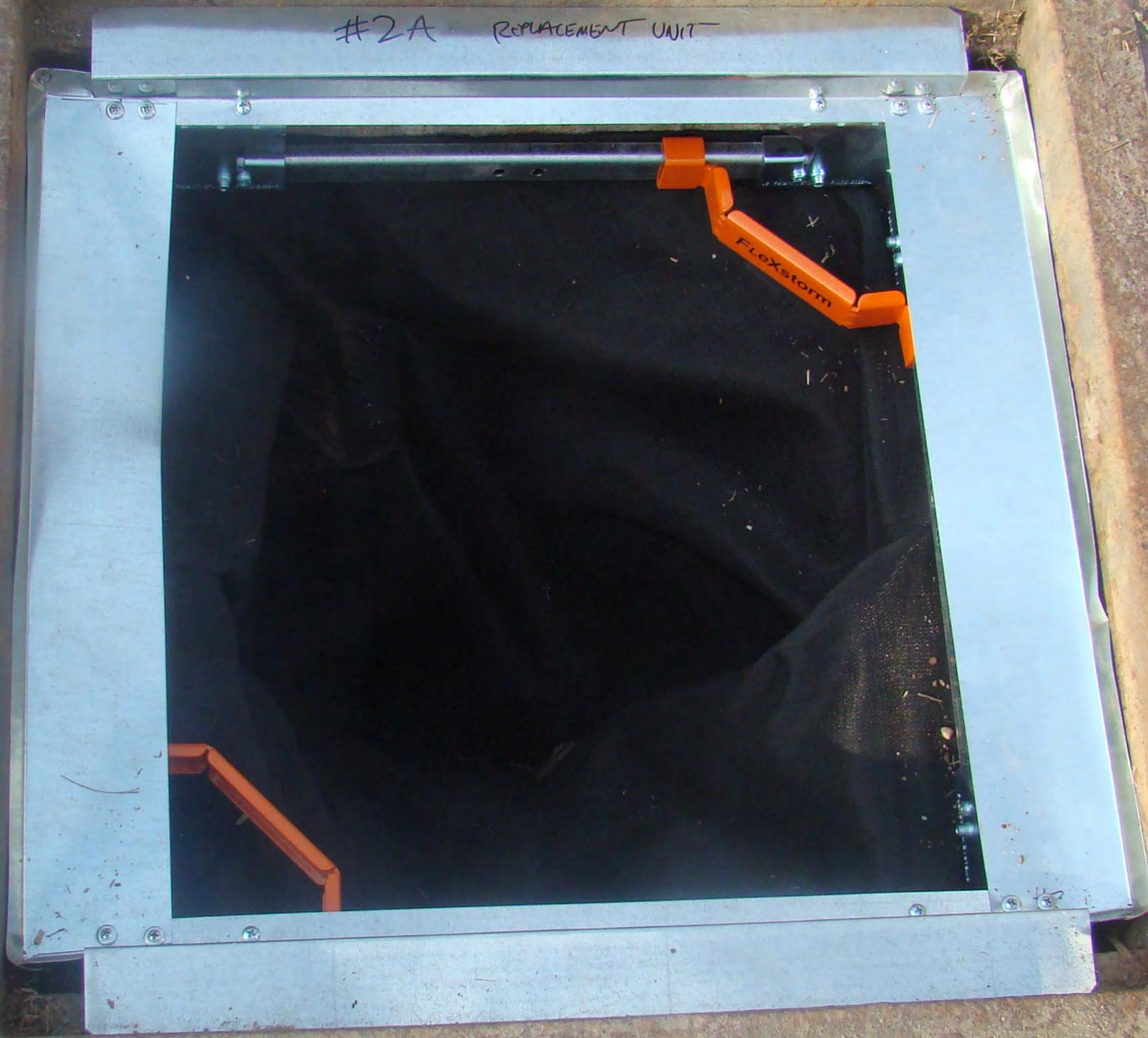
Today I presented to the Wichita Chamber of Commerce the proposed Offsite BMP Program to address water quality.

11 members were present. The Chamber audience was very respectful to this topic as an alternative BMP for the city to use to meet water quality regulations.

I also presented the overview program about the changing FEMA FIRM floodplain maps.

Joe

#2A REPLACEMENT UNIT



1972 10

001 100



#1

Flexstorm



GR2811

1728121

4618120

CITY OF NIGHT



1978

W-8 F

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#4

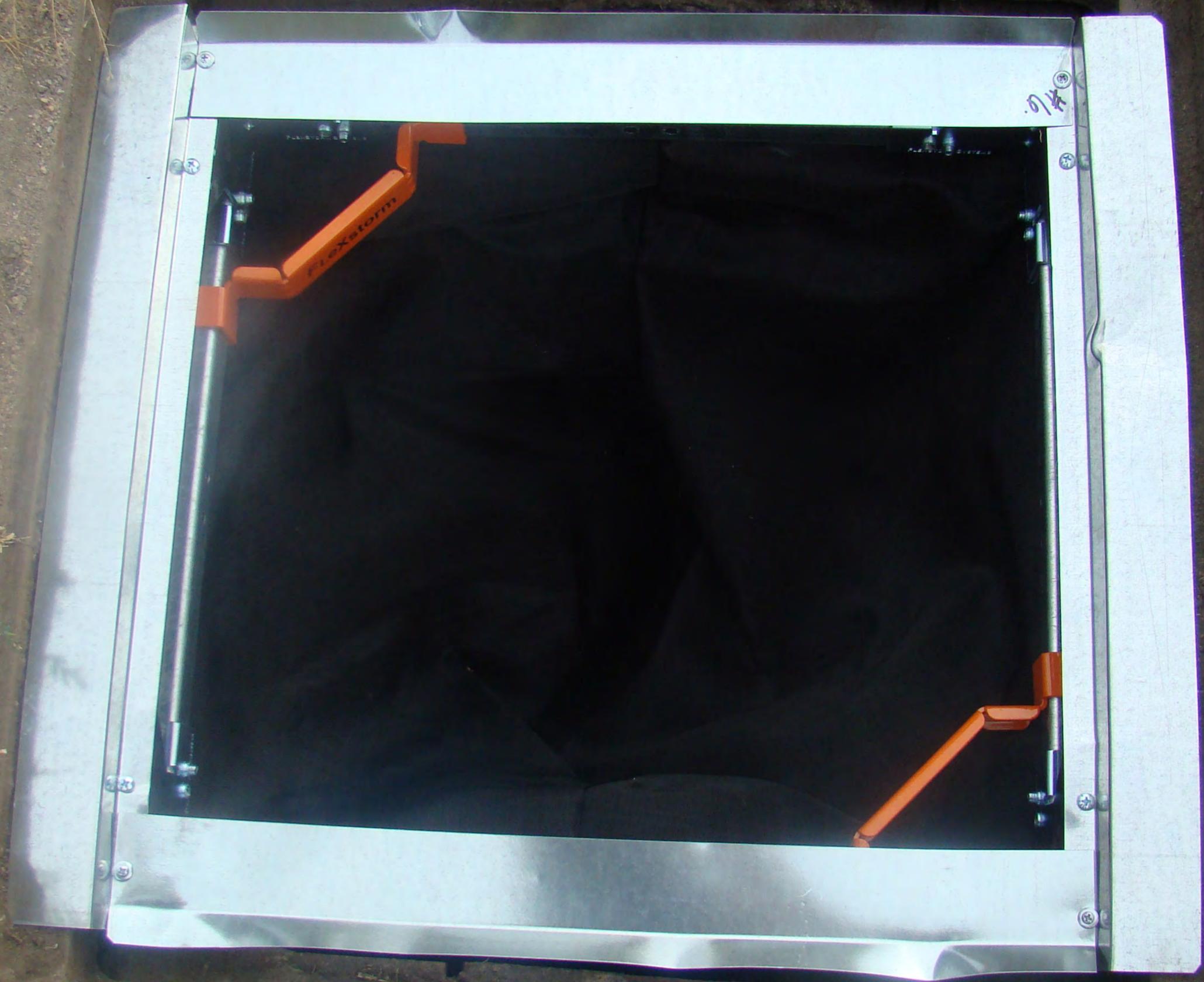
CITY OF WICHITA





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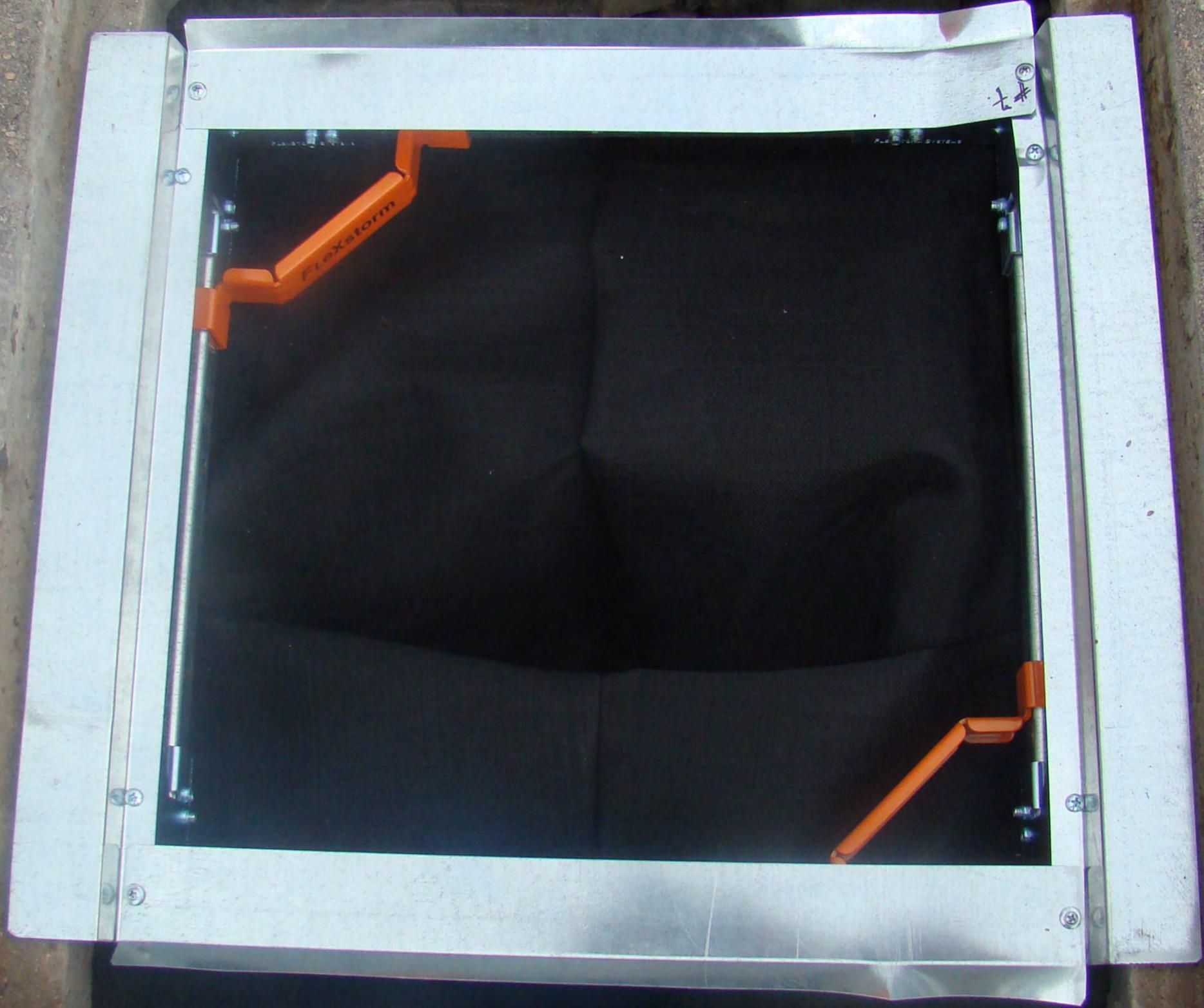


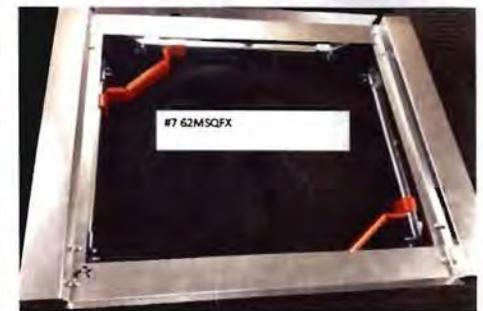
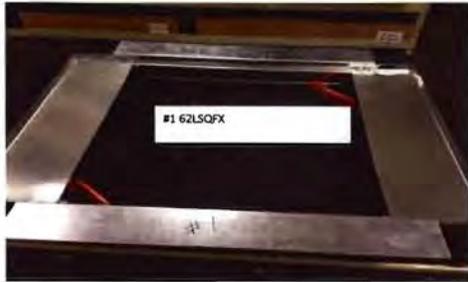


4/10

Flexatom

Flexatom





	Qty	Unit #	Notes						
#1A	1	62LRBFX	Replacement bag only						
#2A	1	62MRBFX	SENDING ENTIRE UNIT AS NO CHARGE UPGRADE						
#1	1	62LSQFX							
#2	2	62XLSQFX							
#3	1	62XLHDFX							
#4	1	62XLSQFX							
#5	1	62XLSQFX							
#6	1	62MSQFX							
#7	1	62MSQFX							
#8	1	62MRDFX							

# **STORM WATER POLLUTION PREVENTION PLAN**

## **CENTRAL MAINTENANCE FACILITY**

Prepared by



**September 2009**

## Management Commitment of Resources

The City of Wichita is committed to the implementation of the procedures outlined in this SWPPP and the prevention of pollutants to navigable waters of the United States. This Plan has the full approval of management at a level of authority to commit the resources necessary to implement the SWPP Plan. A copy of this SWPP Plan shall be maintained at the facility at all times and will be made available to the EPA or State of Kansas for on-site review during normal working hours.

Authorized Management Representative Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

# STORM WATER POLLUTION PREVENTION PLAN

## CENTRAL MAINTENANCE FACILITY

Prepared by



September 2009

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APPENDIX B. Monthly Site Inspections

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APPENDIX E. Significant Spills and Leaks

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# 1 INTRODUCTION

The purpose of this Storm Water Pollution Prevention Plan (SWPPP) is to prevent contamination of storm water runoff as a result of industrial activities conducted at the Central Maintenance Facility (CMF). The City of Wichita owns and operates this facility at 1801 South McLean Boulevard in Wichita, Kansas. The goals of this SWPPP are as follows:

1. Identify potential sources of pollution that may be reasonably expected to contribute to the contamination of storm water runoff.
2. Establish Best Management Practices (BMP) that eliminate or effectively reduce the routes for contamination to enter the storm water runoff.

The United States Environmental Protection Agency (USEPA) has developed regulations to reduce the introduction of pollutants into storm water from industrial sites. These regulations have been delegated to the Kansas Department of Health and Environment (KDHE) to administer. Currently, KDHE considers an industrial facility to be in compliance if the owner has submitted a Notice of Intent (NOI) for Storm Water Discharges Associated with Industrial Activity under the General Permit and has developed a SWPPP. This SWPPP was prepared according to the requirements stated within the USEPA and the KDHE guidance documents (Appendix F).

## ***1.1 SWPPP Pollution Prevention Team***

The members of the Central Maintenance Facility Pollution Prevention Team (Appendix A, Worksheet #1) are responsible for the day-to-day tasks related to storm water runoff pollution prevention. The members of the SWPPP Pollution Prevention Team will conduct employee training programs, ensure implementation of BMPs, complete all site inspections, and supervise the day-to-day operations at the site which negatively affect storm water quality. Collectively, the SWPPP Pollution Prevention Team is responsible for the following tasks:

- Performing scheduled inspections.
- Training facility personnel.
- Ensuring that the BMPs in the plan are being implemented.
- Maintaining records.
- Revising the SWPPP to reflect changes to the BMPs employed and to the applicable regulations.
- Preparing the Comprehensive Site Compliance Evaluation for insertion into Appendix C of this document once each year.

The following individuals are designated as the primary members of the SWPPP Pollution Prevention Team at the Central Maintenance Facility:

Individual: Aaron Henning  
 Title: Assistant Maintenance Engineer  
 Phone: (316) 268-4087

Individual: Don Cradduck  
 Title: Street Maintenance Supervisor  
 Phone: (316) 268-4091

These individuals (or persons in their positions) must maintain and update this SWPPP. The Pollution Prevention Team must also coordinate between “front line” employees and management concerning pollution prevention issues. The Pollution Prevention Team is responsible for carrying out the requirements of the SWPPP as summarized in the following table.

**Table 1-1 Requirements of the SWPPP**

<b>Activity</b>	<b>Frequency</b>
<b>1. Site Inspections</b>	Monthly, records in Appendix B, recordkeeping requirement of 3 years
<b>2. Comprehensive Site Compliance Evaluation</b>	Annually
<b>Comprehensive Site Compliance Evaluation Report</b>	Completed within 2 weeks following Evaluation and inserted in Appendix C
<b>Comprehensive Site Compliance Evaluation Report Implementation</b>	Performed within 12 weeks of the Evaluation Report
<b>3. Visual Inspection of Storm Water</b>	Periodically during wet weather events. Results included in Comprehensive Site Compliance Evaluation Report
<b>4. Employee Training</b>	Annually, keep record of training in Appendix D, Employee Training
<b>5. Spill Reporting</b>	If spill occurs, documented in Appendix E, Significant Spills and Leaks
<b>6. SWPPP recertification</b>	Once every five years by a Kansas P.E., Appendix F

## **2 FACILITY DESCRIPTION AND STORM WATER DRAINAGE**

### ***2.1 Facility Description***

The Central Maintenance Facility is located at 1801 South McLean Boulevard in Sedgwick County, Wichita, Kansas. The main function of this site is to provide maintenance, repair, washing, loading, parking, and storage of heavy Public Works vehicles and machinery. The site also contains storage of sand, salt, sand/salt mixtures, and storage of general maintenance materials. The Standard Industrial Classification (SIC) for this facility is 4225. This plan covers activities where contaminants could possibly be introduced into the storm water runoff such as refueling and maintenance of vehicles and storage of materials. Contaminants of concern used in these activities include diesel, gasoline, motor oil, and particulate matter, such as sand, soil, and gravel. A site map is presented following Worksheet #2 in Appendix A. The important features identified on the site map include the locations of the potential stormwater pollution activities and the stormwater outfalls.

### ***2.2 Facility Drainage***

There are two primary storm sewer system outfalls that provide drainage for the site (outfalls A and B). These storm sewer outfalls empty into the adjacent Arkansas River. The remainder of the site not picked up by storm sewers drains in a sheet flow toward the western side of the site, where a small drainage ditch picks up the flow. This drainage ditch is normally dry, and eventually discharges to the Arkansas River. The SWPPP site map will be updated by the SWPPP Pollution Prevention Team whenever changes are made that would affect storm water runoff.

### ***2.3 Inventory of Exposed Materials***

Materials which could potentially come into contact with precipitation and contaminate storm water runoff have been summarized in the Material Inventory worksheet presented in Appendix A, Worksheet #3. Currently, there are not any significant quantities of materials exposed to storm water. Materials currently stored at this facility that could possibly come in contact with storm water include diesel, gasoline, salt, and sediment from roadwork materials; however, all of these materials are unlikely to come into contact with storm water as described in Worksheet #3.

If during the Comprehensive Site Compliance Evaluation (Section 5.2), it is determined that a material has been added or removed from the Central Maintenance Facility, the Materials Inventory worksheet should be updated. New worksheets should be added to

the SWPPP when a new material is introduced to the site. If the use of a material is discontinued, it should be crossed out on the worksheet, and the date its use was discontinued should be noted. The changes should be initialed by the appropriate member of the SWPPP Pollution Prevention Team.

#### ***2.4 Significant Spills and Leaks***

According to facility personnel there have been no spills or leaks of toxic or hazardous pollutants in reportable quantities for the previous three years preceding the date of this SWPPP, (Appendix A, Worksheet #4). In Appendix G, a blank Worksheet #4 should be completed and included in Appendix E if any spills occur in the future.

### 3 OUTFALL INVENTORY

Two storm water outfalls convey drainage from the site at the Central Maintenance Facility. Outfall A is directly east, across McLean Blvd., and discharges to the Arkansas River. Outfall B is approximately 200' north.

**Figure 3-1. Outfall A**



**Outfall B**



### **Non-Storm Water Discharges**

The Central Maintenance Facility site was inspected for the presence of non-storm water discharges on August 26, 2009 (Appendix A, Worksheets #5 & #6). A visual inspection of the site's storm water outfall revealed no non-storm water discharge for that particular day; however, the facility should be inspected periodically to verify this conclusion is valid throughout the year. It is most convenient to conduct these inspections concurrently with the routine monthly inspections of the facilities.

The inspector should walk the site and trace the sources of any flows leaving the site that occur during dry weather. Non-storm water flows may result from illicit connections to the sanitary sewer system or from overland flow of process water. All storm sewer outfalls should be checked for the presence of non-storm water flows.

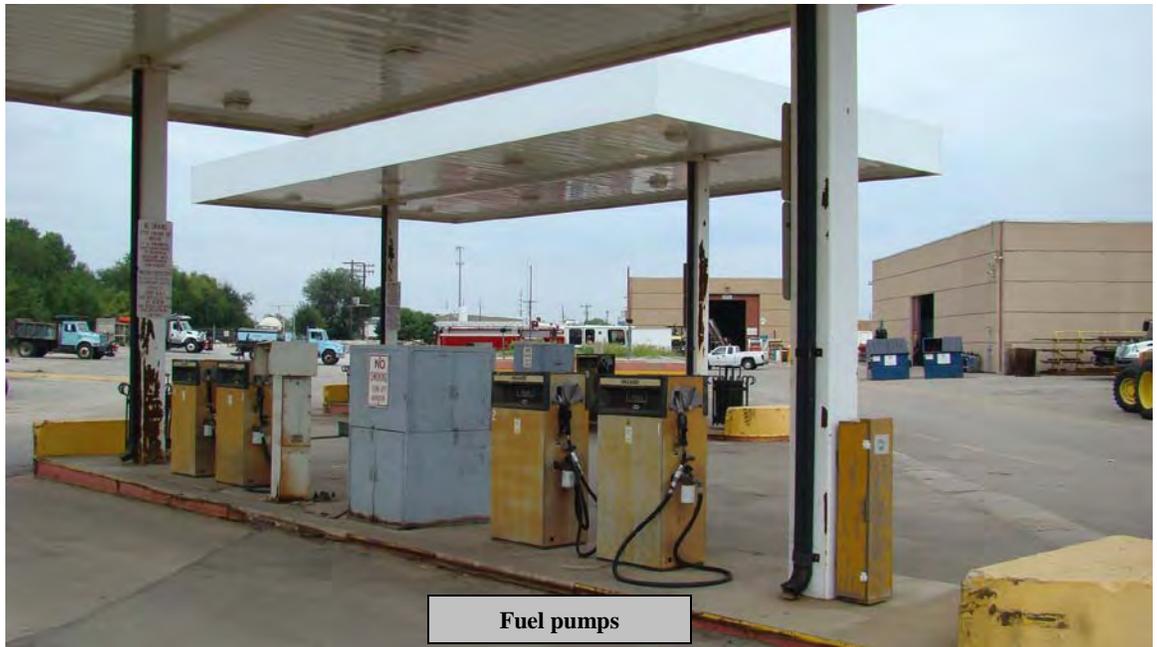
### **3.1 Description of Potential Pollution Sources**

The locations of three activities where potential contaminants could come in contact with storm water are identified on the site map. They are (1) the Public Works Fueling Area, (2) the Public Works Roadwork Material, and, (3) the Salt Dome, (Appendix A, Worksheet #7).

#### **3.1.1 Public Works Fueling Area**

This area is located in the west central area of the facility. The fuel pumps in this area are used to supply diesel, and gasoline, to public works vehicles and equipment. The pumps are covered so any residual fuel spilled from the pumps is unlikely to be discharged into the storm water. At this time, the Central Maintenance Facility has absorbent material onsite that is used if there are visible oil marks on the concrete or if gasoline is spilled from the fuel pumps. After use, the absorbing material is removed and disposed. If in the future additional BMPs are required, the following options could be evaluated.

Below is a photograph of the fuel pumps.



**Figure 3-2. Fueling Area**

### **3.1.2 Roadwork Materials Area**

This area is located in the central section of the site. It consists of a storage area for the roadwork materials that the Public Works department uses to perform road repairs. These materials consist of sand, soil, and gravel. Since the materials are covered, it is unlikely that significant quantities of these materials would come in contact with storm water runoff.



**Figure 3-3. Roadwork Material Area**

### **3.1.3 Salt Dome**

The Salt Dome is located south of the Roadwork Materials Area. The salt dome is used to store salt for road application during periods of snow and ice. Since the dome covers the salt, it is unlikely that this material could come into contact with storm water. Below is a photograph of the dome.



**Figure 3-4. Salt Dome**

### **3.2 Existing Storm Water Sampling Data**

According to the SWPPP Pollution Prevention Team, storm water monitoring has not been conducted at the Central Maintenance Facility. It is not anticipated that KDHE will require monitoring of storm water in the future.

## **4 POLLUTION PREVENTION MEASURES AND CONTROLS (BMPs)**

The following section identifies BMPs that will be implemented as part of this SWPPP (Appendix A, Worksheet #8).

### ***4.1 Good Housekeeping***

The most elementary, yet one of the most effective, of all BMPs is the practice of good housekeeping. For the Central Maintenance Facility, this consists of the following:

- (1) Debris exposed to stormwater should be collected and removed from the site.
- (2) Work area cleanup should follow any task, no matter how small.

Currently, the lead site maintenance worker conducts weekly site inspections to ensure good housekeeping at the site. Good housekeeping will be stressed to the employees during their annual employee training. Particular attention should be paid to the areas around fuel dispensing stations and the roadwork materials storage area.

### ***4.2 Spill Prevention and Response Procedures***

Spills of diesel fuel, motor oil, or any of the other material could contribute pollutants to storm water discharges. If such an event occurs, having proper procedures in place can prevent a spill from becoming a potentially large environmental problem. Currently, the Central Maintenance Facility does have a Spill Prevention Control and Countermeasure Plan in place. And, there has not been a spill of any significant amount of material in the past three years. Worksheet #4 in Appendix F can be used to record the date and time of any future spills.

### ***4.3 Inspections***

Inspections involve visually checking the potential sites of pollution on a periodic basis to confirm that good housekeeping procedures are being followed. The inspection currently occurs weekly by the lead site maintenance worker; however, it is not currently documented. To comply with KDHE Storm water Pollution Prevention Plan guidelines, a monthly record of the inspections should be kept for a period of three years in Appendix B, and a set of follow-up procedures should be in place so that corrective actions can occur if needed (A blank inspection form is included at the end of Appendix G).

#### ***4.4 Employee Training***

All Central Maintenance Facility employees that are responsible for storm water pollution prevention at the facility will receive training, and this training will be thoroughly documented. Training will address the following subjects:

- (1) Familiarization with all BMPs in place and ensuring that employees understand the requirements and contents of the SWPPP.
- (2) Proper handling of all materials used or commonly encountered at the facility.

Employee training will be conducted initially when the SWPPP is presented to the facility. Annual refresher and new hire training will be conducted by the SWPPP Pollution Prevention Team. Worksheet #10 included in Appendix D can be used to document training.

#### ***4.5 Erosion Control Measures***

For sites that are largely unpaved without adequate ground cover, soil erosion can transport large quantities of suspended sediment into the downstream waterways. However, during the site visit, it was not apparent that soil erosion is a significant problem at the Central Maintenance Facility. The relatively small unpaved areas and the mild slopes keep erosion from becoming a significant problem. However, future Comprehensive Site Compliance Evaluations by the Pollution Prevention Team should include looking for signs of erosion and assess the need for implementation of erosion-control BMPs.

#### ***4.6 Record Keeping and Internal Reporting Procedures***

Accurate and thorough records of all activities are essential to maintaining the SWPPP and storm water quality. Records of the monthly inspections (Appendix B), the Comprehensive Site Compliance Evaluation Reports (Appendix C), employee training records (Appendix D), and any future spills or leaks that occur (Appendix E) will be kept on site with the SWPPP. These records will be readily available for review by regulatory agencies.

## **5 MONITORING, REPORTING, AND RECORD KEEPING REQUIREMENTS**

### ***5.1 Sampling Requirements***

At this time, KDHE is not requiring that quantitative chemical analysis be conducted on the storm water leaving the site; however, periodically during wet weather events, storm water should be visually inspected for the presence of pollutants. It is recommended that the visual inspection of the storm water be conducted periodically during the spring when wet weather events are typically frequent. The inspection should indicate whether an oil sheen, foam, suspended solids, or floating solids are present and the color and clarity of the storm water. The results of the visual inspection of the storm water will be included in the Comprehensive Site Compliance Evaluation Report (Appendix C).

### ***5.2 Comprehensive Site Compliance Evaluation and Report***

A Comprehensive Site Compliance Evaluation inspection should be conducted on an annual basis to determine whether site conditions have changed, whether the SWPPP needs to be revised, and whether the SWPPP procedures are effective. The SWPPP should be modified if any deficiencies are identified based on the evaluation or additional BMPs could be implemented. If a BMP is identified that will be implemented, Worksheet #9 (a blank form is included in Appendix G) should be utilized and included with the Comprehensive Site Compliance Evaluation Report. Examples of changes that would result in a revision are a regrading of the existing site, any additional material added to the site that could contribute to storm water pollution, or a request for chemical analysis of storm water by KDHE.

The inspection should target the storm water outfall and the areas that could potentially contribute to storm water pollution; the road work materials area, the public works fueling area, and the salt dome (identified on the Site Map, Appendix A). In addition, the inspection should look for signs of erosion around the site.

It is recommended that the Central Maintenance Facility develop a report format for this inspection or utilize Worksheet #11 in Appendix C. The report should contain the following information: the cleanliness of the areas, a visual inspection of the storm water outfalls, confirming that non-storm water discharges are not present, the documented visual analysis of the storm water runoff from each of the outfalls, and if there were any changes to site map. These changes should be identified and the site map updated. The report must be included in Appendix C within two weeks of the Comprehensive Site

Compliance Evaluation inspection. If the report identifies additional measures that should be taken to reduce storm water pollution, the measures must be implemented within 12 weeks, and the update recorded on Worksheet #12 (a blank form is included in Appendix G). The updated worksheet should be included with the Comprehensive Site Compliance Evaluation Report.

## **6 REFERENCES**

USEPA, Storm Water Management for Industrial Activities – Developing Pollution Prevention Plans and Best Management Practices, 1992.

KDHE, Storm Water Pollution Prevention Plan Requirements and Guidelines, Attachment A, no date.

Worksheet #1  
POLLUTION PREVENTION TEAM  
MEMBER ROSTER

Facility name: Central Maintenance Facility  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 8/26/09

Leader: Aaron Henning Title: Assistant Maintenance Engineer  
Office Phone: 316-268-4087

Responsibilities:  
1) Signatory authority; 2) Coordinate employee training program; 3) Ensure that all SWPPP requirements are performed

Members:  
(1) Don Craddock Title: Maintenance SupervisorSite Worker  
Office Phone: 316-268-4091

Responsibilities:  
1) Conduct annual site evaluations; 2) Perform employee training; 3) Conduct weekly site inspections

(2) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

(3) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

(4) \_\_\_\_\_ Title: \_\_\_\_\_  
Office Phone: \_\_\_\_\_

Responsibilities:  
\_\_\_\_\_  
\_\_\_\_\_

Worksheet #2  
DEVELOPING A SITE MAP

Facility name: Central Maintenance Facility  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 8/26/09

Instructions: Draw a map of your site including a footprint of all buildings, structures, paved areas, and parking lots.  
The information below describes additional elements required by EPA's General Permit.

EPA's General Permit requires the following features on the site map:

- All outfalls and storm water discharges
- Drainage areas of each storm water outfall
- Structural storm water pollution control measures, such as:
  - Flow diversion structures
  - Retention/detention ponds
  - Vegetative swales
  - Sediment traps
- Name of receiving waters (or if through a Municipal Separate Storm Sewer System)
- Locations of exposed significant materials
- Locations of past spills and leaks
- Locations of high-risk, waste-generating areas and activities common on industrial sites such as:
  - Fueling stations
  - Vehicle/equipment washing and maintenance areas
  - Area for unloading/loading materials
  - Above-ground tanks for liquid storage
  - Industrial waste management areas (landfills, waste piles, treatment plants, disposal areas)
  - Outside storage areas for raw materials, by-products, and finished products
  - Outside manufacturing areas
  - Other areas of concern (specify: \_\_\_\_\_ )

Worksheet #3  
MATERIAL INVENTORY

Facility name: Central Maintenance Facility  
 Completed by: Jim Hardesty  
 Title: Storm Water Specialist  
 Date: 8/26/09

Instructions: List all materials used, stored, or produced onsite. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff. Also complete Worksheet 3A if the material has been exposed during the last 3 years.

Material	Purpose/Location	Quantity (gallons)			Quantity Exposed in Last 3 Years	Likelihood of contact with storm water. If yes, describe reason.	Past Significant Spill or Leak	
		Used	Produced	Stored			Yes	No
Soil, sand, gravel	Roadwork Material Public Roadwork Material	varies			None	Not likely, material covered by shelter		No
Unleaded Gasoline	Fuel / Public Fueling Area	varies		20,000	Small amount of spillage	Not likely, fuel is stored in underground storage tank.		No
Diesel	Fuel / Public Fueling Area	varies		20,000	Small amount of spillage	Not likely, fuel is stored in underground storage tank.		No
Road Salt	Road deicing / Salt Dome	varies			None	Not likely, material is covered		No
Waste Oil	Oil from vehicles / Waste Oil UST	varies			None	Not likely, material is stored in underground storage tank.		No
Pesticides/Herbicides	Vegetation and pest control	varies			None	Not likely, material covered by shelter		No



**Worksheet #5  
NON-STORM WATER DISCHARGE  
ASSESSMENT AND CERTIFICATION**

Facility name: Central Maintenance Facility  
 Completed by: Jim Hardesty  
 Title: Storm Water Specialist  
 Date: 8/26/09

Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Storm Water Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
8/26/09	Outfall 1	Visual	No discharge observed	Fueling Area	Jim Hardesty
8/26/09	Outfall 2	Visual	No discharge observed	Road Work Material Storage Area	Jim Hardesty

**CERTIFICATION**

I, \_\_\_\_\_ (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print)

B. Area Code and Telephone No.

C. Signature

D. Date Signed

**Worksheet #6**

**NON-STORM WATER DISCHARGE ASSESSMENT AND  
FAILURE TO CERTIFY NOTIFICATION**

Facility name: Central Maintenance Facility  
Completed by: Jim Hardesty  
Title: Storm Water Specialist  
Date: 8/26/09

Directions: If you cannot feasibly test or evaluate an outfall, fill in the table below with the appropriate information and sign this form to certify the accuracy of the included information.

List all outfalls not tested or evaluated, describe any potential sources of non-storm water pollution from listed outfalls, and state the reason(s) why certification is not possible. Use the key from your site map to identify each outfall.

**Important Notice: A copy of this notification must be signed and submitted to the Director within 180 days of the effective date of this permit.**

<b>Identify Outfall Not Tested/Evaluated</b>	<b>Description of Why Certification Is Infeasible</b>	<b>Description of Potential Sources of Non-Storm Water Pollution</b>
All outfalls evaluated		

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations, and that such notification has been made to the Director within 180 days of \_\_\_\_\_ (date permit was issued), the effective date of this permit.

A. Name & Official Title (type or print)	B. Area Code and Telephone No.
C. Signature	D. Date Signed

**Worksheet #7****Facility:** Central Maintenance Facility**Completed By:** Jim Hardesty  
**Title:** Storm Water Specialist**Date:** 8/26/09 pg 1***Pollutant Source Identification***

Instructions: List all identified stormwater pollutant sources and describe existing management practices that address those sources. In the third column, list Best Management Practice (BMP) options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Options
<sup>1</sup> Gasoline and Diesel Fuel from fueling stations	Absorbent material used for cleanup	None required
<sup>2</sup> Roadwork materials (sand, gravel, soil)	Covered storage	None required
<sup>3</sup> Salt	Covered storage	None required
<sup>4</sup> Pesticides and Herbicides	Covered storage	None required
<sup>5</sup> Outside storage of drums	None	Move drums to covered storage.
<sup>6</sup> Truck wash-out pit	Collected water is pumped through mud trap	None required

**Worksheet #7**

**Facility:** Central Maintenance Facility  
**Completed By:** Jim Hardesty  
**Title:** Storm Water Specialist  
**Date:** 8/1/09 Page 2

***Pollutant Source Identification***

**Instructions:** List all identified stormwater pollutant sources and describe existing management practices that address those sources. In the third column, list Best Management Practice (BMP) options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Options
<sup>1</sup> Piles of road sweeping debris	None	1) Filter material in/around inlet 2) Curbing/containment at the piles, if necessary
<sup>2</sup> Storage of Calcium outside	None	Move indoors
<sup>3</sup> Seepage from mixer wash-out bay	None	Cut drain hole in divider wall
<sup>4</sup>		
<sup>5</sup>		
<sup>6</sup>		

<b>Worksheet #8</b>	<b>Facility:</b> Central Maintenance Facility <b>Completed By:</b> <u>Jim Hardesty</u>
<b><i>BMP Identification</i></b>	<b>Title:</b> <u>Storm Water Specialist</u> <b>Date:</b> <u>8/26/09 (page 1)</u>
<b>Instructions:</b> Describe the Best Management Practices (BMP's) that have been selected to be included in the plan. For each of the baseline BMP's, describe actions that will be incorporated into facility operations. Also describe any additional BMP's (activity-specific and site-specific BMP's) that have been selected. Attach additional sheets if necessary.	
BMP's	Brief Description of Activities
Good Housekeeping	1) Debris should be collected and removed from the site 2) Work area cleanup should follow any task, no matter how small
Inspections	1) Monthly visual inspection of Potential Pollution sources and Stormwater Outfalls
Employee Training	1) Familiarization with all BMPs in place and ensuring that employees understand the requirements and contents of the SWPPP 2) Proper handling of all materials used or commonly encountered at the facility. 3) Must be conducted annually

<b>Worksheet #8</b>	<b>Facility:</b> Central Maintenance Facility <b>Completed By:</b> <u>Jim Hardesty</u>
<b><i>BMP Identification</i></b>	<b>Title:</b> <u>Storm Water Specialist</u> <b>Date:</b> <u>8/26/09 (page 2)</u>
<b>Instructions:</b> Describe the Best Management Practices (BMP's) that have been selected to be included in the plan. For each of the baseline BMP's, describe actions that will be incorporated into facility operations. Also describe any additional BMP's (activity-specific and site-specific BMP's) that have been selected. Attach additional sheets if necessary.	
BMP's	Brief Description of Activities
Record Keeping and Internal Reporting Procedures	1) Keep records of revisions to the SWPPP, inspection reports, employee training records, and any spills or leaks that occur onsite.
Covered Storage	1) The Central Maintenance Facility has already done an excellent job of covering potential stormwater pollution contributors by covering the roadwork materials, vehicle storage, vehicle fuleing area, and salt storage areas.

**Worksheet #8**

**Facility:** Central Maintenance Facility

**Completed By:** Jim Hardesty

***BMP Identification***

**Title:** Storm Water Specialist

**Date:** 8/26/09 (Page 3)

**Instructions:** Describe the Best Management Practices (BMP's) that have been selected to be included in the plan. For each of the baseline BMP's, describe actions that will be incorporated into facility operations. Also describe any additional BMP's (activity-specific and site-specific BMP's) that have been selected. Attach additional sheets if necessary.

BMP's

Brief Description of Activities

Drain holes in mixer wash-out bay

Monthly Inspections will include that drains holes are not clogged. If clogged, debris will be removed.

<b>Worksheet #9</b>  <b>BMP Implementation</b>		<b>Facility: CMF</b>	
		<b>Completed By: Jim Hardesty</b>	
<b>BMP</b>	<b>Action Required for Implementation</b>	<b>Completion Date:</b>	<b>Person Responsible:</b>
Inlet Filters	Size, purchase and install 2 inlet filters	5/1/2010	Aaron Henning
Drain Holes in Mixer Wash-Out Pit	Drill/Cut Holes in Divider Wall to Provide for Cross Drainage	4/1/2010	Aaron Henning
Storage of Calcium	Move Calcium Storage Inside.	4/1/2010	Aaron Henning
Outside Drum Storage	Dispose of, or Move Drums to Covered Area.	4/1/2010	Aaron Henning