

# SWQMP Municipal Operations Pollution Prevention and Good Housekeeping

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## SECTION A: Measurable Goals – Documentation Review

### POLLUTION PREVENTION AND GOOD HOUSEKEEPING PART C

#### 4.7.2 Specific Tasks and Measurable Goals

1. Provide measurable goals for the MCM that are included in your SWQMP Part C MCM 6 with specific reduction percentages and time tables.
  - a. **Street Sweeping Schedule has been implemented throughout the City.** (See Attached)
  - b. **The City has an Urban Forestry Department that manages and consults on the vegetation, trees and green spaces.** The City of Evansville Engineer's Office consults and communicates with the other departments and the Urban Forestry Departments in order to assure that the green spaces are maintained and all vegetation and trees receive proper care etc.
  - c. **Fertilizers, Pesticides and Herbicides are applied according to manufacturers' specifications and by licensed individuals trained in the application.** The City of Evansville's Department heads who are overseeing application of fertilizers, pesticides and herbicides require that those employees that are providing the application are trained in the proper application. They also stress to the employees that they follow all manufacturer's specifications while applying those chemicals.
  - d. **Erosion Control is utilized on all projects that have disturbances of medians or embankments.** The City Engineer designs and oversees all projects funded by the City of Evansville and always includes erosion control for all projects and improvements within the right of way. The Storm Water Coordinator also inspects the projects regularly to ensure that all erosion control measures are installed properly, maintained as well as proper stabilization is acquired before completion of the projects by the contractors.
  - e. **Storm Drain System Cleaning has been implemented throughout the City.** The City of Evansville has a system for cleaning out the storm inlets whereas the materials are stored and let solidify and then the material is taken to the landfill that is equipped to take this type of material. The material is weighed and charted in order to keep track of the tonnages that are removed. ( See Attached).
  - f. **Structural Best Management Practices will continue to be inspected and maintained.** The Structural Best Management Practices are at locations that are either located on public property that is maintained by the entity that is in charge of that property and are kept in excellent condition. In addition the Storm Water Coordinator makes visual inspections regularly to assure that the BMPs are in proper condition and do not need extra attention.

- g. **Provide yearly training to Municipal Employees with regard to Storm Water Quality Issues and Storm Water Management Practices within Municipal Operations.** The Storm Water Coordinator provides video training yearly to the Municipal Employees with regard to Storm Water Management and Quality Issues. The Video that is used at this time is “RAIN CHECK”. A sign in sheet is required to be signed by each employee at the time they view the video to assure that the employees are all being trained and documentation is kept for IDEMs review when necessary. (See Attached).
  - h. **Update and Maintain a Storm Water Management Municipal Operations Pollution Prevention Plan.** The Storm Water Coordinator works with the Department Heads to update the SWPPP for the municipal operations to keep the information accurate and up to date.
  - i. **Perform, as needed, improvements to Drainage Ditches and Outfalls to stabilize ditch banks and improve overall water quality and drainage in the City.** The Storm Water Coordinator works very closely with the inspectors and office staff within the City Engineer’s Office, County Surveyor and County Engineer to try to improve, where possible, water quality and drainage within the City. Budgetary constraints are often the downfall of some of our issues but we try to prioritize and improve where ever possible.
2. Explain if the goals have been met. If the goals were not met explain why.

    - a. As stated above, all of the measurable goals have been met. There may be some areas that could be improved in the areas of improvements to drainage ditches and outfalls in order to determine the department responsibilities for maintenance of these structures. There have been some discussions among departments that they do not feel that they are responsible for certain outfalls, ditches leaving outfalls because they have never maintained them before. That being said, discussion with department heads will need to take place in order to determine who is responsible for some of these areas. The City Engineer’s Office and Street Maintenance Department work closely together to try to accommodate and improve where necessary.
  3. Provide a list of municipal owned and operated facilities. Identify facilities that have industrial permits. (See Attached List.) None of our operations have a Rule 6 Permit for Industrial Sites.

## **SECTION B: EMPLOYEE TRAINING – Documentation Review**

1. Provide documentation of annual employee training. Past three years. (See Attached). Yearly training is provided to each of the Municipal Operations as listed in Item 3 above.
2. Provide materials used, Sign-in sheets, agenda. (See Attached).
3. Provide proposed five year training schedule. The Storm Water Coordinator will proceed with a training schedule that provides the adequate storm water training to the employees through a video, PowerPoint or an Online training mechanism (MOODLE) that will be developed through a partnership with the Computer Services (IT) in order to develop a training system on line to allow the employees to view a video (at a convenient time) and then be quizzed at the end in order to assure that the employees are educated and understand what they have just viewed. This training is being developed in order to make it easier for the departments to be trained at their locations, at a convenient time to not disrupt the work force and also to assure that they are watching the videos.

## **SECTION C: STORM WATER INFRASTRUCTURE**

### **INFRASTRUCTURE MAPPING AND CHARACTERIZATION**

1. Provide documentation that mapping and characterization of MS4 system is current. (See Attached Map.)
2. Does the map include catch basins and structural storm water controls? YES. The map is a part of the GIS mapping system that the City of Evansville has compiled. The map includes all catch basins, inlets, storm pipes, culverts, ditches and characterization of each feature in a data base.
3. Is the map readily available to staff when performing maintenance activities? YES. This map is available at all times through ARC Map software.
4. Is the map in hard copy format or/on GIS infrastructure assets or components names or numbered for better tracking. The map is provided in hard copy format for purposes of utilizing in the field, but all data is maintained in a GIS format with all infrastructure, components, details and locations are stored in the data base.
5. How is the information regarding storm water infrastructure maintained? (database, mapping systems). The data information is stored in a database in ARC Map.

### **CATCH BASIN CLEANING**

1. Provide schedule for routine maintenance and cleaning of catch basins. (See Attached spreadsheet).
2. Provide records for disposal of materials removed from catch basins or storm drains.
3. Provide SOP for Cleaning clogged drain pipes. The Street Maintenance Department has a routine schedule for cleaning drain pipes but in the event that a pipe or storm structure is reported clogged to their department, a Vacuum Truck is dispatched to the area that is reported and they will attempt to remove the obstruction. If that does not remove the blockage then further steps are taken to determine the type of obstruction and the best way to remove it (i.e. placing on project list for removal, street maintenance construction crew etc.)

### **STORM WATER MANAGEMENT STRUCTURES**

1. Are catch basins and other inlet structures marked so that the public knows they drain to surface waters? YES. The majority of inlets and catch basins have the new castings that are pre-stamped with the message that they drain to rivers or streams. Some of the older inlets have not been changed out but when new projects are done, the castings are replaced with new stamped castings.
2. Is there an inventory of the type and location of public storm water management structures within the MS4 area? (i.e., pump stations, detention ponds, retention ponds, regional ponds, debris basins, structural treatment controls, open channels, etc.)
  - a. Pump stations are indicated on the GIS Mapping system through the Water Sewer Utility.
  - b. Detention Ponds/Retention Ponds are typically privately maintained and owned. No inventory has ever been done.
  - c. Regional Ponds – The City does not have any regional ponds.
  - d. Structural Treatment controls are monitored by Levee Authority and Water Sewer Utility.
  - e. Open Channels are shown on the Storm Drainage Map in GIS.
3. Identify how vegetation is maintained in grassed swales, rain gardens, pond perimeters, and other vegetated storm water controls. Street Maintenance, Levee Authority and Parks Department provide the maintenance along most of our vegetated areas. They are trained annually to know the proper way to provide chemicals when spraying and to not direct any of the yard waste, litter and grass clippings into the streets or storm sewers.

4. How often are these facilities inspected? The BMPs are inspected routinely by employees of the departments responsible for maintenance. The spring and summer months the BMPs are monitored more closely because of the need for mowing and maintaining the grass and weeds.
5. Are records kept of material and debris removed during maintenance and disposal of that material? The materials removed are taken directly to the landfill where tickets are provided showing the amount of materials being deposited. The departments each keep the records of materials removed and disposed of.
6. Is the data collected used to evaluate the storm water program? Problem areas are identified, monitored and placed on a list for future projects or improvements.

#### **SECTION D: FLOOD MANAGEMENT – DOCUMENTATION REVIEW**

1. Provide an inventory of flood management structures. The City of Evansville has an Outfall Inventory that includes the flood control structures for Ohio River. These are primarily maintained by the Levee Authority. The Levee Authority Director routinely inspects all structures and works directly with the Corps of Engineers to assure that all outfalls and flood control structures are operating correctly.
2. Have these structures been assessed to determine whether retrofitting could provide additional water quality benefits? Not to my knowledge. These structures are under the United States Corps of Engineer's Jurisdiction and the Levee Authority.
3. Provide documentation of inspections of structures. The City of Evansville has a Levee Authority who monitors all outfalls with flood control structures along the levee at the Ohio River. The other outfalls are inspected regularly in conjunction with our IDDE Program. The Storm Water Coordinator has prepared and provided an inspection form to the Levee Authority for them to start using in the future.

## **SECTION E: MUNICIPALLY OWNED FACILITY OPERATION AND MAINTENANCE – Records Review**

1. Provide Inventory of municipally owned facilities (i.e., public works yards, public transit facility, public parking lots, public parks/open areas, material storage areas, public buildings landfills, transfer stations, storage facilities, composting.) SEE ATTACHED
2. Does each facility have a SWPPP? The Storm Water Coordinator has prepared a SWPPP for each of the departments in one City of Evansville Municipally Owned Operations SWPPP. (SEE ATTACHED)
3. Who is responsible for implementation of the SWPPP at the facility? The Department heads for each of the department are responsible.
4. Provided a copy of the SOP for maintenance activities at each facility if applicable. The SOP for each department has been provided with the Municipal Operations Inspections and information. (SEE ATTACHED)
5. Provided a copy of the materials inventory for the facility. This information is included in the Municipal Operations Inspections and information portion of this report. (SEE ATTACHED)
6. Provide an overhead map of the facility? This information is included in the report (SEE ATTACHED)
7. Provide documentation for management of stockpile storage, maintenance, and disposal. The City of Evansville does not typically have stockpile storage. However, if there are any necessary for a temporary purpose, they are protected either by silt fence, tarp covering or placed in a vegetated area that will allow the vegetation to filter out the pollutants.
8. Provided documentation for management of Composting materials. The only department that has a composting site is Mesker Park Zoo and they are permitted through IDEM for their site.

**(The Following is additional information that was requested on the first worksheet).**

9. *Provide a copy of the tracking documentation used for the following activities as appropriate:*
  - a. *Litter pick-up - The City of Evansville has partnered with Keep Evansville Beautiful to organize a monthly "CLEAN EVANSVILLE ANTI- LITTER CAMPAIGN" which enlists volunteers from the community to pick up trash and targets specific areas each month in order to try to clean up the city. (See Attached). Also the Vanderburgh County Sheriff's Office has a program where they utilize work release prisoners to pick up trash and litter on the busy thoroughfares as a community service program. This litter is also tracked and recorded. (See Attached). The City also partners with ORSANCO who has various trash pickups along the Ohio River yearly. The City of Evansville participates every year and we have an average of 35 – 50 citizens who help clean up the Ohio River Riverbanks in downtown Evansville.*
  - b. *Remediation of outfall scouring – The City of Evansville's Storm Water Coordinator has inspected the outfalls and makes inspection sheets as well as takes pictures of the outfalls. Any scouring, damage or blockages are reported. The problems are then*

*reviewed and prioritized and depending on funding are repaired or placed on a project when funding is available. Data Base is kept that is linked to the GIS Map and pictures and inspection are all recorded.*

- c. Proper storage and spill containment of concentrated solutions, acids, alkalis, oils or other polluting materials. - The City of Evansville employees are trained annually with regard to proper storage and spill containment. Inspections by the Storm Water Coordinator also assure that all possible pollutants are stored and handled properly as well as each Municipal Operation having a Standard Operation Procedure on site.*
- 10. Provide a copy of in-field inspection sheets used for maintenance inspections performed in the field. (See Attached OUTFALL VISUAL MONITORING INSPECTION FORM)*
- 11. Provide a Copy of the SOP for Maintenance Activities. The City of Evansville's Street Maintenance Department has the following Maintenance Activity information:*
  - a. Complaint Form/Work Order.*
  - b. Maps showing Maintenance and mowing areas.*
  - c. Snow Removal Plan, Procedures and Guidelines.*
  - d. Walkway Crew Daily and Weekly Work Schedule.*
  - e. Rules and Regulations for Employees.*
  - f. Organizational Chart for their department.*
  - g. Spill Response Procedure and Guidelines*
  - h. Maintenance and Quote solicitation for Oil Water Separator.*
  - i. Work Order Processing Flowchart.*
  - j. Standard Operating Procedures for Employees.*
  - k. Preliminary OSHA Program and Training Procedures.*
  - l. Equipment Inventory*
  - m. Vehicle Inventory*
  - n. Fuel Dispensing Records.*
  - o. Vehicle Purchase Request Form and Instructions.*
  - p. Vehicle Inspection Report.*
  - q. Personal Protection Equipment Procedures and Guidelines.*
  - r. Flood Plain Procedures and Guidelines.*
- 12. Provide a copy of the Facility SWPPPs or Program outline. (See Attached SWPPP). The original SWPPP was prepared and adopted in January 2010. The SWPPP was updated in September 2014 in order to include the Water Sewer Utility which was left out originally due to they were under management of a private firm. Also added were the new department heads as well as the Mayor as the MS4 Operator and the new City Engineer as the Qualified Professional.*
- 13. Did the Facility Manager/superintendent attend the Audit? Facility Managers/Superintendents will not be attending the Audit. However, they have all individually provided me with information with regard to their facilities.*
- 14. Provide a copy of the materials inventory for the facility. (See Attached). Each of the City of Evansville's Facilities has provided a chemical list.*
- 15. Provide procedures for management of stockpile storage, maintenance, and disposal. See Attached information for each department. The City of Evansville's Facilities do not have any stockpile storage.*
- 16. Provide Procedures for management of composting materials. NOT APPLICABLE Except at the Zoo. Mesker Park Zoo has a composting facility that is located on property off of Buchanan Road. The site is protected by a berm to keep materials on site and not allow anything to deposit in the road side ditch. (See Attached Pictures).*

## **SECTION F: VEHICLE MAINTENANCE AND FUELING – DOCUMENTATION REVIEW.**

1. Provide documentation of vehicle maintenance practices. The only departments that do in house maintenance is the Street Maintenance Department and METS. All Maintenance activity takes place inside the building. All other departments take the vehicles to auto repair and maintenance facility to have the maintenance done.
2. Provide Documentation of drainage for inside drains. (to storm sewer, to sanitary sewer, through separate? All inside drains for all of the municipal operations drain to the Sanitary Sewer. There are some of the departments that have oil separators that are maintained on a routine basis.
3. Provide BMPs for vehicle washout area, if applicable. (This may be part of the SWPPP.) The City of Evansville Storm Water Coordinator has instructed all departments that they must washout all vehicles inside a building or in a vegetated area. They have all indicated that the washing of vehicles is primarily done inside of the buildings and drains to the sanitary sewer but on the occasion that they do wash outside they do it in a pervious /vegetated area.
4. Provide documentation of fuel spills and clean –up. See Attached documentation for each department.
5. Provide documentation of fuel facility inspections. Each municipal facility that has fueling areas, conduct routine weekly inspections, however, they do not have written documentation of these inspections.
6. Provide facility map with location of spill kits available See Attached facility maps. All spill kits and absorbents for each facility are kept in an area that is in close proximity to where most spills would occur if they should occur.
7. Identify fuel overflow and tank protection, can use a photo. See Attached photos of fueling areas for each department that has fueling areas.
8. Identify BMPs for storm drains if located near the fueling station. See attached photos and maps. None of the departments have fueling stations near inlets.
9. Document fuel spill training for employees with access to and use the fueling station. The Storm Water Coordinator provides yearly training on Storm Water protection procedures. See attached documentation of training.
10. Are Fueling Stations covered? Not all of the fueling stations are covered, however they do have secondary containment.

## **SECTION G: PUBLIC STREETS OPERATION AND MAINTENANCE – DOCUMENT REVIEW**

### **STREET SWEEPING:**

1. Provide street sweeping schedule and process for disposal of material The Street Maintenance Department is contracted out to a facility that disposes of the materials that are collected. (See Attached Street Sweeping Schedule).
2. Are Public Parking Lots swept? Yes the Building Authority has a sweeper that they clean and sweep all of the City's Parking lots.
3. What types of sweepers are used? Wet or Dry? The Building Authority's vacuum is a dry vacuum.
4. How are areas scheduled? The Building Authority sweeps parking lots on a weekly basis and after any event.
5. How is the collected debris disposed? Is the Debris dewatered? The sweeper vacuums up the debris and then it is disposed of in the dumpster. The Street Sweeping is done by a contractor who is responsible for all disposal. They do not use water so there is no dewatering necessary.
6. Provide documentation of street sweeping, such as work orders. The Building Authority does not use work orders. The street sweeping is done by a contractor.

### **YARD DEBRIS REDUCTION AND DISPOSAL:**

1. Do you offer pick up for grass clippings and yard debris? The City of Evansville has trash pickup and the yard waste is picked up in the trash bins with trash pickup.
2. Do you provide information on private collectors? NO
3. Do you offer seasonal recycling or disposal services to collect leaf litter, Christmas trees or seasonal organic materials? Evansville's Solid Waste Disposal Department has a program that they offer tree disposal services. They Water Sewer Utility has a contract with a local disposal company that they collect leaf litter and other materials in the spring and fall for a few weeks each. This material is used at their landfill for organic cover.

### **PUBLIC STREETS, ROADS, AND HIGHWAYS MAINTENANCE**

1. What operation and maintenance practices are in place? (See Attached Street Maintenance Guidelines.)
2. What documentation of activities is kept? There is a data base that is kept with complaints for the work that is performed on streets, roads and highways.
3. What BMPs are used for the following activities: Ditch cleaning, sidewalk repair, asphalt patching, curb and gutter repair, street striping and dirt and gravel roads? Most of the work listed is done by private contractors. The City Street Maintenance Department does minor projects and has been trained to use proper BMPs (silt fence, inlet protection, concrete washouts etc.).

### **DEICING ACTIVITIES**

1. What deicing agent(s) do you use?
2. How are materials stored? The materials are all stored inside a covered building. (See attached photos.)
3. Are materials under cover and/or bermed? They are inside a covered building.

4. Is the amount of deicing materials used tracked?
5. Is there a program in place to pick –up material after the season?

#### **SECTION H: PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATION AND MANAGEMENT – RECORDS**

##### **REVIEW**

1. If applicable, is there a pesticide/fertilizer plan in place? There is currently no pesticide/fertilizer plan in place.
2. Where are the materials stored? The materials are all stored inside an enclosed building at Street Maintenance Department.
3. Do applicators have certification by the Indiana State Chemist Office if required? The Street Maintenance Department, Urban Forestry and Cemeteries have a certified applicator on site. (See attached certification.)
4. Provide documentation of applicator training for storm water pollution prevention. The Storm Water Coordinator provides training in storm water pollution prevention to all City employees (RAIN CHECK) which has an entire section that discusses the proper way to apply herbicides, pesticides and fertilizers in order to prevent polluting the streams and creeks. (See attached sign in sheets for training).

#### **SECTION I: STANDARDS, BMPs AND OUTREACH – RECORDS REVIEW**

##### **Contracted Services:**

1. Do you require contractors to incorporate storm water quality BMPs into their activities? YES. The engineers and inspectors are all aware of the importance and use of BMPs on their projects. When a project is designed the BMPs are shown on the plans and the Inspectors insure that all controls are in place when the project starts.
2. Are the requirements outlined in requests for Proposals (RFP)? YES. Same response as above in #1.
3. What reference materials or guidance documents are provided to contractual staff? Storm Water Quality Measures Details and descriptions are provided.
4. How do you insure compliance? We have inspectors that oversee construction and are informed of the necessary compliance measures.

##### **General Public**

1. Do you provide information to the public regarding:
  - a. Cleaning up after pets. NO
  - b. HHW Collections and electronics. The Solid Waste Management District has yearly recycling events.
  - c. Oil recycling. NO
  - d. Litter Reduction. Clean Evansville Initiative, Keep Evansville Beautiful and the Storm Water Coordinator educates and publicizes the monthly litter pick up. The Mayors office has the information on the City of Evansville’s Web page and publicizes in the newspapers as well.