

Attachment 9

Storm Water Pollution Prevention Initiative

Michigan General Permit Number MIG61900

Certificate of Coverage Number MIG610194

Municipality/Agency: City of Essexville

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Purpose

The purpose of this Storm Water Pollution Prevention Initiative (SWPPI) is to bring together the following storm water pollution controls for Bay County

- 1 The goals and actions from the Kawkawlin River & Coastal Saginaw Bay/Lower Saginaw River Watershed Management Plans (WMP)
- 2 Describe pollution prevention and good housekeeping efforts as part of municipal operations to meet the NPDES permit requirements
- 3 Indicate the proposed implementation of post construction controls for areas of significant development and redevelopment within the jurisdiction.
- 4 A program-wide description and timeframe of the process for implementing the water quality improvements.
- 5 Discuss the evaluation methods to demonstrate the reduction of storm water pollution to the maximum extent practicable.

The City of Essexville has the Lower Saginaw River Watershed within its urbanized area. WMP goals and objectives for the watersheds are therefore included. Table (1) lists the overall goals of the WMP. As an Authority Member, Essexville has committed to be involved and financially support the goals listed. Specifically, it has agreed to participate in the goals to be carried out by BASWA.

Retention of Records

Essexville, either internally or in the Office of the Drain Commissioner, will retain the approved SWPPI, and its associated records, in-house for a minimum of three years after the termination of the permit. The records will be available upon request by MDEQ and shall include, but not be limited to:

- 1 Information regarding the effectiveness of these activities;
- 2 Any records of analyses performed;

- 3 Any records of calibration and maintenance of instrumentation, if used;
- 4 Any recordings from continuous monitoring instrumentation.

SWPPI Goals and Priorities

Essexville is dedicated to provide strong facilitation and support to meet all permit requirements and WMP goals for the Bay Area Urbanized Area. This includes the Lower Saginaw River Watershed.

Although all aspects of the WMP(s) are important, Essexville is first committed to the reduction of nutrients, pathogens and E. coli bacteria entering the water courses of the area. These pollutants, especially E. coli, have caused the greatest concern for public health in the area. This includes annual warnings for full body contact issued by the Bay County Health Department. Goals and objectives targeted toward those reductions are primary to County Government.

Essexville, both in its capacity as an entity of government, and as a member of BASWA, will participate in all phases of the WMP(s) implementation. Essexville has jurisdiction over drains, roads, sewage disposal, and other public works.

This Storm Water Pollution Prevention Initiative is implementing approved illicit discharge elimination and public education plans for the urbanized area. The IDEP and PEP included here by reference are included in the County of Bay SWPPI. The County, through the Office of the Drain Commissioner, is involved in the implementation of these aspects of the NPDES permit.

Bay County has adopted a phosphorus reduction ordinance. Although the County has limited enforcement ability, it recognizes the need to increase awareness related to the impact of phosphorus on the water quality in the Saginaw River & Saginaw Bay. The ordinance, adopted in May of 2008, prohibits the sale of phosphorus-containing fertilizer effective January 1, 2009 within Bay County.

Bay County also received a grant to develop a farmland preservation program. The program is intended to better control and provides an overall reduction of development/urban sprawl. It will improve land use and reduce the amount of impervious surfaces in the community. Its primary goal of the program is the purchase of development rights. Environmental considerations will be included in the process of selecting and purchasing development rights.

The on-site certified storm water operator will assess each facility under their jurisdiction for the potential to discharge pollutants to surface waters of the state. An update or revision to the assessment will be made 30 days prior to discharging storm water from a new facility and within 30 day of determine a need to update/revise the facility assessment. The operator shall consider the follow factors during the assessment:

- Amount of urban pollutants stored at the site (e.g. sediment, nutrient, metals,

hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria or other site-specific pollutants)

- Identification of improperly stored materials
- The potential for polluting activities to be conducted outside (e.g. vehicle washing)
- Proximity to waterbodies
- Poor housekeeping practices
- Discharge of pollutants of concern to impaired waters

Public Education Plan (PEP)

The Public Education Plan (PEP) developed by the Bay County Drain Commissioner has been adopted by the City Of Essexville. This PEP can be referenced in its entirety by viewing the Bay County Storm Water Pollution Prevention Initiative (SWPPI) submitted August 1, 2010

Illicit Discharge Elimination Program (IDEP)

The Illicit Discharge Elimination Program (IDEP) developed by the Bay County Drain Commissioner has been adopted by the City of Essexville. This IDEP can be referenced in its entirety by viewing the Bay County Storm Water Pollution Prevention Initiative (SWPPI) submitted August 1, 2010

Construction Sedimentation and Erosion Control

As previously stated in the IDEP, Bay County has adopted part 91 of the Natural Resources and Environmental Protection Act (NREPA). Any construction activity is required to remain within Soil Erosion and Sedimentation Control (SESC) guidelines. Furthermore, the drain commissioner has developed Storm Water Management Plan and Design Standards which comply with NPDES and shall be implemented by contractors as a condition of permit approval. This will ensure proper maintenance and on-site methods are being used to prevent sedimentation to the greatest amount practicable. These regulations require proper design including proper capacity specifications and proper vegetation to maintain adequate channel protection and limit sedimentation and erosion.

Currently, Essexville is working in cooperation with the Bay County Drain Commissioner and is having site plans reviewed by the Drain Commissioner during the permitting process. To further ensure compliance, protection of storm water, and as a method of documentation, each Bay County municipality within the watershed coverage area will adopt resolutions requiring Drain Commissioner approval of site plans prior to new construction permit. All resolutions by all municipalities have been signed. As with the IDEP, all notifications of non-compliance or contamination of any kind outside the specified standards defined by the Bay County Drain Commissioner shall be reported to the Drain Commissioner and MDEQ. The Bay County Drain Commissioner will inspect all construction activities within the watershed that have received a permit and is

authorized to enforce compliance of approved standards and all associated maintenance required. Effectiveness will be shown through the number of site plans that are submitted to the Drain Office compared to the number of construction permits approved.

The Drain Commissioner will incorporate a complaint tracking system for construction activity related storm water illicit discharges consistent with the IDEP complaint tracking system. If a complaint is received or county field staff recognize migrating sediment it will be reported immediately to Bay County Drain Commissioner 989.895-4290 and the MDEQ 989.894.6280

Post Construction Controls for Areas of New Development and Significant Redevelopment

Essexville, through the Bay County Drain Commissioner, is responsible for the peak flow controls for storm water within the urbanized area. In 2003, the Bay County Drain Commissioner adopted Storm Water Management Plan and Design Standards for all non-residential development and subdivisions. The Drain Commissioner will review residential sites as request. These standards consider storm water management flow and were adopted to improve water quality through on-site detention processes and attention to peak flow data. The standards require storm water to be detained and subsequently release from the sites at rates equivalent flow rates prior to the property development. The standards include the maintenance of detention basins through contracts with developers, commercial enterprises and subdivision associations. Further, the contracts require owner/operators file biannually an inspection report using procedure outlined in page 10 of this document. The municipalities where the development exists will submit a summary of inspection reports to BASWA Administrator prior to filing NPDES bi/annual reports to insure compliance. The Bay County Drain Commissioner inspects detention basins and has the authority to require necessary maintenance to ensure compliance of these standards. These standards have been designed for new construction based on 100 year storm events. Furthermore, it is currently designing peak flow controls to a significantly higher standard than what is required.

To further reduce the impacts on storm water associated with new development and redevelopment projects, the Bay County Drain Commissioner will develop a general provision for all municipalities within Bay County. In compliance with the NPDES general permit and Bay County Drain Commissioner's COC issued by MDEQ, this general provision has been incorporated into current municipal ordinances as a provision for alternative methods and incorporation of Low Impact Development (LID) practices as deemed viable by the Bay County Drain Commissioner and/or a professional engineer.

Under the standards, plan review and inspections are conducted for new commercial developments and residential developments one or more acres in size. Hydrologic reviews ensure that the addition of peak flow from impervious surface, as part of any development, is detained on-site. It is released at a rate equivalent to that of undeveloped land in that area. The on-site detention process provides some opportunity for water

quality improvement through settling/filtering. Public education practices are outlined in the PEP included by reference in this document. Soil erosion caused by construction and other water quality issues will be directed to the Bay County Drain Office who will also notify the MDEQ. Complaints will be tracked in a similar fashion to the method described for illicit discharges in the attached IDEP.

Storm Water Pollution Prevention and Good Housekeeping

Training

Under the periodic and comprehensive inspection guidelines set forth by MDEQ, a Certified Industrial Storm Water Operator is responsible for carrying out all inspections. Because all certified operators are responsible for being on site regularly, the City of Essexville will employ a Certified Storm Water Operator or contract with the Bay County Drain Commissioner to ensure a person familiar with facility maintenance or other activities is monitoring said activities for compliance of NPDES regulations.

In addition to the certified storm water operator training required in each facility's SWPPP, continuous public education will be implemented through various methods within the permit area as well as in-house training and training done individually within each facility. Each facility's certified operator will provide instruction of subjects such as storm sewer system maintenance, structural controls, lawn care, snow removal, dust control for gravel roads and parking lots, and others. Whether specific maintenance activities are contracted (i.e. snow removal, lawn care, etc.) or done by facility employees, the certified operator for that site is responsible for ensuring proper training is completed by the proper individuals. Resources such as brochures, seminars, videos etc. should be utilized, especially those provided through the U.S. EPA, Michigan State University Extension, University of Michigan, and MDEQ. All training events are to take place before work is done or contracts are signed and shall be recorded including the type of training, who received/ took part in the training, and the date the training occurred. These retained documents will show the effectiveness of the training done in promoting good housekeeping practices. In house employees will be trained every three years and new employees will be trained within the first year of hire.

Vegetative and Snow Management

Vegetated municipal properties owned and maintained by the permittee shall be identified in the Appendices as well. Upon identifying parks and other vegetated properties, each municipality's employees or contracted maintenance company will be responsible for following BMPs for vegetative lawn care, snow removal practices and salt application practices as defined through BMP/ Good Housekeeping training performed by the permittee.

The contract between the municipality and vegetative/snow maintenance company shall include the requirement that all staff is trained. The company shall provide a detailed narrative of work completed, chemicals and amounts used along with BMP's. This shall be accepted as an oversight to the work completed.

BMPs for vegetated areas are to be included in the training of contracted lawn care companies and/or facility employees. Training is to include but not be limited to: mulching of grass and leaving clippings on site, keeping clippings and fertilizers off impervious surfaces and away from catch basins, soil testing, no phosphorus fertilizers, watering practices, and proper handling of chemicals.

Snow removal BMPs will also be included in the training for the appropriate contractors or employees. Topics to be included but not limited to: appropriate locations to pile/store snow, proper amount and timing of salt/sand applications, keeping snow away from storm drains, and structural controls to prevent contamination from spring runoff from entering catch basins.

Dust Control

All municipalities within the watershed permit area with managed properties containing gravel roads, parking lots, and other gravel surfaces to include dust control in their employee/ contractor training. Topics could include but are not limited to: sweeping around gravel areas, grading practices, and dust control chemical applications.