

Stormwater Management - Post-Construction Policy & Procedure

Muskegon Area Intermediate School District

Permit Number: MI0060206

Issue date: August 1, 2023

Applies To: As required by the National Pollutant Discharge Elimination System (NPDES) permit for Muskegon Area Intermediate School District, the scope of this Guideline includes all development and redevelopment projects on District properties that involve either:

- a. earth disturbance of one (1) acre or greater,
OR
- b. earth disturbance of less than one (1) acre, but which are part of a larger common plan of development or sale that would disturb one (1) acre or more.

Post-Construction Requirements Policy Statement

Muskegon Area Intermediate School District development and redevelopment projects on District property are regulated under and must comply with the Muskegon Area Intermediate School District NPDES permit for stormwater discharges, as issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The Stormwater Management Post-Construction Requirements Guideline has been developed to provide guidance regarding responsibilities and actions to meet the NPDES permit conditions for development and redevelopment projects on district owned properties.

Post-Construction Plan for Stormwater Management

The post-construction plan for stormwater management on regulated sites **must** include:

- A minimum treatment volume standard to address water quality impacts.
- Channel protection criteria to address resource impairment resulting from flow volumes and rates.
- Review sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.
- Drawings showing the location of stormwater control measures and the storm system.
- Details on the proposed stormwater control measures.
- Operation & Maintenance (O&M) requirements.
- Supporting information
 - Calculations used for designing all components of the stormwater management systems.
 - Total Suspended Solids (TSS) design removal rates and supporting manufacturer documentation, if applicable.

- Geotechnical report including soil boring and infiltration test data.

The project team [Architecture, Engineering & Construction, Other Project Manager, Project Developer and/or Contractors] shall develop the post-construction plan for stormwater management in accordance with this guideline and the NPDES permit.

Water Quality Treatment Volume Standard

The minimum treatment volume standard **must** be either:

- Treat the first one (1) inch of runoff from the entire site.
- OR**
- Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site, as summarized in MDEQ's memo dated March 24, 2006
https://www.michigan.gov/documents/deq/wrd-hsu-ninety-percent_557709_7.pdf

Total Suspended Solids

The treatment methods must be designed on a site-specific basis to achieve the following:

- A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff.
- OR**
- Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Channel Protection Criteria

The channel protection criteria must maintain post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment. More restrictive channel protection criteria may be utilized on a case-by-case basis, as appropriate.

Site Plan Review

This policy is to establish a requirement to submit a site plan for review as required by the EGLE NPDES Stormwater Discharge Permit and ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are considered to the maximum extent practicable.

Muskegon Area Intermediate School District shall evaluate proposed construction activities to determine:

- If the activity meets the criteria of a development or redevelopment project with an earth disturbance greater than or equal to 1 acre, or part of a common plan of development resulting in a development or redevelopment activity greater than or equal to 1 acre in size.
- Does the development or redevelopment project discharge to waters of the state, or to a county, city, or township MS4.

If the development or redevelopment project discharges directly to waters of the state, Muskegon Area Intermediate School District shall comply with the post-construction standards outlined in this SWMP.

If the development or redevelopment project discharges to a regulated county, city, or township MS4, Muskegon Area Intermediate School District shall submit the site plan for review and approval. Site plan approval by the county, city, or township of an equivalent post-construction standard ensures acceptable compliance with the Muskegon Area Intermediate School District NPDES MS4 Stormwater Discharge Permit. Muskegon Area Intermediate School District shall obtain and maintain a copy of the site plan approval *document*.

If the development or redevelopment project discharges to a county, city, or township MS4 that is not regulated or requires site plan review, Muskegon Area Intermediate School District shall comply with the post-construction standards outlined in this SWMP.

Operations & Maintenance Plans

All structural and vegetative stormwater control measures installed as a requirement under this section of the permit shall include a plan for maintaining maximum design performance through long-term operation and maintenance.

Enforcement

The Muskegon Area Intermediate School District Stormwater Program Manager will administer and enforce the stormwater management program, including maintaining procedures, guidance, information, etc. to aid district staff and contractors in complying with the post-construction requirements for stormwater management.