

## FAQ's – NPDES Asset Management Requirements:

1. The NPDES permit requires submittal of an Asset Management (AM) Plan on or before six months after the effective date of the permit, to include a schedule for development and implementation of an AM Program. How does the AM Plan differ from the AM Program?
  - The expectation of the AM Plan is to lay out the foundation and schedule for implementation of the AM Program. The AM Plan should list aspects of the AM Program which shall be implemented to fulfill the requirements 1) – 4) of the NPDES permit. Timeframe for development and implementation of the AM Program should generally be within 3-5 years however, each schedule will be reviewed on a case-by-case basis by DEQ District staff. The current state of the system, compliance status, whether any AM aspects are already developed, among other criteria, will be considered during review of the AM Plan review. Once the AM Program is developed, it shall be submitted for DEQ review and implemented upon approval. An AM Program is considered a dynamic program which continually evolves as the system ages/changes. Once established initially, any updates to the AM Program in response to those system changes shall be addressed in the required annual report submittals.
2. What constitutes an adequate maintenance staff?
  - Aside from the factors listed in the NPDES AM permit language, including adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance, the staffing levels should coincide with those listed in the Operation and Maintenance Manual required under Part II.C.14 of the NPDES permit. Other system-specific factors should also be considered. It is important to note providing adequate maintenance staff is not a new requirement, per the NPDES permit provision cited above and Part 41, Rule 55(2).
3. Do collection system maps need to be in electronic (i.e. GIS) format?
  - No. However, it is recommended, especially for systems which currently or plan to utilize asset management program software.
4. What are acceptable methods for determining the present condition of the fixed assets?
  - The acceptable methods for determining the present condition of fixed assets include appropriate testing and/or visual observation (televising sewers, physical inspection of equipment, etc.). However, for initial determination of present condition, it may suffice to review available information such as service/maintenance records, age of the assets, or other useful information. After such an initial condition assessment, the expectation would be for appropriate testing and/or visual observation to be completed for all assets as the AM program evolves.

5. What is the expectation for establishing OM&R Budget and Rate Sufficiency?

- The documentation will consist of a demonstration that the rates and/or charges calculated in the revenue methodology will produce sufficient revenues to cover the operation maintenance, and replacement (OM&R) expenses. If the rate calculation shows there are insufficient revenues then the permittee needs to further document that there is at least one rate adjustment within three fiscal years that reduces the revenue gap by at least 10 percent. Note that the ultimate goal of the asset management program should be to ensure sufficient revenues to cover OM&R expenses.
- Budget  
The documentation will consist of the operating budget for the system. The budget should identify those items such as labor, materials, and utilities necessary for the OM&R of the system. Replacement are those expenditures incurred during the normal life of the system for obtaining and installing equipment, accessories, or appurtenances necessary to maintain the capacity and performance for which the system was designed and constructed. In addition, the budget will also include expenditures related to capital improvement projects.
- The Rate Structure  
The documentation will consist of the revenue generating methodology, including the calculation of rates and charges. The methodology should include computations that show how actual rates and charges are developed.
- Sufficiency Demonstration  
The documentation will consist of a demonstration that the rates and/or charges calculated in the revenue methodology produce sufficient revenues to cover the OM&R expenses. If the rate calculation shows there are insufficient revenues then the permittee needs to further document that there is at least one rate adjustment within three fiscal years that reduces the revenue gap by at least 10 percent. Note that the ultimate goal of the asset management program should be to ensure sufficient revenues to cover OM&R expenses.

Managers must secure sufficient revenues to: 1) meet operations and maintenance expenditures; 2) meet existing debt payments; 3) meet future debt service needs; 4) meet reserve requirements, and 5) preserve the financial health of the utility. Knowledge of the true cost of service provides a sound basis for achieving these goals.

The rate methodology will demonstrate that sufficient revenues are being generated to cover OM&R expenses. A goal of the asset management program is that the permittee will develop an annual budget, including replacement expenses and capital improvement expenses and develop rates and charges that will sufficiently fund the identified expenses. If a shortfall occurs the permittee should develop a plan to resolve the funding deficit.

Becoming revenue sufficient means that a utility can count on receiving adequate revenues to fully fund utility operations, including debt service obligations, and capital improvements from rate revenues. The income customers provide is critical to ensuring that systems are operated properly and efficiently today—and that they will be able to continue providing high-quality service tomorrow.

6. For systems awarded Stormwater, Asset Management, and Wastewater (SAW) grant funding for development of AM programs, how might the grant requirements impact NPDES permit AM requirements?
  - Compliance with NPDES permit AM requirements in major permits is not contingent upon receiving a SAW grant award. For NPDES permit holders, SAW grants for AM program development is conditionally awarded to those that agree to accept an AM program requirement in the next reissued NPDES permit. While the initial goal of the NPDES permit AM initiative is to include AM requirements in all municipal major (generally, those with greater than 1 MGD plants) permits over the next five years, if SAW grant funding is awarded to any municipal discharger, whether it is categorized as a major or minor discharge, there will be an AM requirement in the next reissued NPDES permit.
  - SAW grant funding for AM programs requires the recipient to achieve significant progress toward achieving the funding structure necessary to implement the program within 3 years after the grant is awarded. Significant progress toward achieving the funding structure necessary to implement the program can be defined as the NPDES permit requirement for establishing OM&R Budget and Rate Sufficiency, described in item 5 above.
  - It is important to note that timeframes and deadlines for establishing compliance with NPDES permit AM requirements may differ from those associated with a SAW grant, depending on when a NPDES permit is reissued and when a SAW grant is awarded. However, we will consider an asset management plan implementation schedule, for review, that is developed within reason based on the SAW grant schedule. It is up to the NPDES permit holder/grant recipient to ensure that all NPDES permit AM requirements and SAW grant requirements are met. Additionally, for system owners subject to the Michigan Planning Enabling Act (Act 33 Of 2008) which have developed master plans, requirements for capital improvements programs should be considered.
7. Some facilities have AM requirements in their NPDES permit that differ from the current requirements. What requirements do I need to meet?
  - It is the Department's intent to review the AM Plans according to the current requirements and consistent with these FAQ's. Facilities are encouraged to work with their respective compliance staff when preparing and submitting their respective AM plans.
8. The fixed inventory assessment includes a "Business Risk Evaluation" that combines the probability of failure of the asset and criticality of the asset, as follows in (1)-(3):

(1) Rate the probability of failure of the asset on a scale of 1-5 (low to high) using criteria such as maintenance history, failure history, and remaining percentage of useful life (or years remaining).

(2) Rate the criticality of the asset on a scale of 1-5 (low to high) based on the consequence of failure versus the desired level of service for the facility, and

(3) Compute the Business Risk factor of the asset by multiplying the failure rating from 1) by the criticality rating from 2).”

Based on the needs and priorities of the permittee, would the Department accept a more nuanced (or complex) approach besides the (1 to 5 PoF) times (1 to 5 CoF) = (1 to 25 BRE) given above?

- The Department would most likely accept a more complex approach regarding the “Business Risk Evaluation” as long as that approach meets the minimum requirements in the permit regarding probability of failure and criticality of the assets.