Wet Weather TMDL Screening Guide

Collection Materials

-Rubber gloves
-Rain Jacket/boots
-100 ml sample bottles (1 for each sample point)
-Labeling tape
-Sampling device (i.e. a toss can or pole sampler if points are difficult to reach)
-Cooler
-Ice pack
-TMDL Screening Log
-TMDL Sampling Plan (Outfall IDs and Maps)

Step 1:

Refer to your TMDL Sampling Plan to know exactly which points need to be sampled. Each point that NEW members are responsible for sampling is described in the most recent iteration of your TMDL Sampling Plan. This will help you plan the most efficient route and know which points you will need to do some additional planning in the event they are more than a 30-minute drive from your location since the points must be sampled within the first 30-60 minutes of the rain event to capture the “first flush”. This is explained in more detail in later steps.

Step 2:

Conduct wet weather sampling between May 1st and October 31st. There must be a 72-hour dry period prior to sampling. Wet weather sampling involves mobilizing at the beginning of a rain event and taking the sample(s) within the first 30-60 minutes to capture the “first-flush.” This means that you are collecting a sample after the first half hour of the rain event but prior to the first hour of rain. Adequate rainfall (0.1 inches) must take place to generate sufficient runoff. Grab samples should be taken once a rain event begins and storm water starts discharging at discharge points. The lab must receive the sample(s) within the 6-hour hold time.

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Step 3:
Collect the sample utilizing the following procedure:

1. Ensure all sampling conditions are met and notify the lab of incoming samples.
2. Fill out the *Wet Weather Screening Checklist* and *Wet Weather TMDL Screening Log*.
3. Dress appropriately and put on fresh latex gloves for each sample being collected.
4. Take a grab sample of the stormwater flow coming from the outfall or point of discharge, within the first 30-60 minutes of the rain event.
5. Samples should be collected using the provided 100ml sterile bottles.
6. The cap should remain uncontaminated throughout the sampling process.
7. The bottle should be filled but not overflowing with water. If the bottle overflows or becomes compromised during the sampling process, use a new bottle.
8. Label the samples.
9. Store the sample on an ice pack within a cooler.

Step 4:
Take the sample to the St. Clair County Health Department. Remember this is time sensitive. Samples must be received within six hours of collection. The Health Department will make a copy of the TMDL Screening Log. Retain the original log for your organization's records.

Step 5:
The Health Department will contact you with the results once they are finalized.

-Note: EGLE's action level for follow-up investigations is 1,000 E. coli/100 ml for outfall monitoring. If the lab detects the presence of 1,000 E. coli/100ml follow up actions will be required.

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Step 6:
If concentrations of E. coli are found to be elevated above the action level (1,000 E. coli/100ml), focus on BMP implementation with direct influence on the structure with the elevated sample and then follow up with a second sample of the elevated structure. If results from the second round of sampling do not identify a reduction and all appropriate BMPs have been implemented, EGLE staff will work with the permittee to identify next steps at the time of permit reissuance.

-Note: The *Wet Weather TMDL Screening Checklist* will need to be completed for every rain event until the second sample is collected.

Additional Resources:

- Visit EGLE's Total Maximum Daily Loads website for more information: https://www.michigan.gov/egle/about/organization/water-resources/tmdls
- View a video on outfall grab sample collection here: https://youtu.be/8bkM0-o3G5A?si=kkBowjrUxbVGnjqZ
- View a video on culvert grab sample collection here: https://youtu.be/oWKdonc9iDw?si=cayvgFuodINEr-BF