

# Visual Assessment: General Overview of Permit Requirements

Ryan Grant  
DEQ, Water Resources Division  
[grantr3@michigan.gov](mailto:grantr3@michigan.gov) | 616-250-6134

## Background...why the requirement?

- MDEQ authorized to implement the federal storm water regulations
- MDEQ needs to be at least as stringent
- EPA reviews and approves MDEQ permits
- EPA required the monitoring requirement
- 2014-Permits start listing the requirement

## What is a Visual Assessment?

- Quarterly monitoring event
- Grab sample from discharge point during storm event
- Visually observe the sample and storm water discharge
- Complete written documentation which includes a photo of the sample- File

## What is the purpose?

- To evaluate the effectiveness of the storm water program
  - Are the non-structural and structural controls working
  - Does the discharge meet the conditions of the permit?

## Are there unregulated areas...? YES

- Unregulated Area include:
  - Customer or employee parking areas
  - Areas where there is no industrial activity such as lawn areas
- Unregulated Discharges include:
  - Combined sewer discharges
  - Groundwater discharges
  - Sanitary discharges

## When do you have to sample?

- Once a quarter: January – March; April – June; July – September; October – December
- Regular business hours...not on the hook 24hrs-365
- Reduced frequency opportunity criteria is written into the permit...
- Within the **first 30** minutes of a discharge during a qualifying storm event “First Flush”
- If not within 30 minutes...not to exceed **60 minutes**
- Snow melt – when ever a melting event creates a discharge
- **1 month** prior or after the comprehensive site inspection

## Qualifying storm event

- Rain event or snow melt event that results in a discharge
- 72 hours from the last discharge

## Adverse weather conditions

- What type of conditions prohibit sample collection?
  - Dangerous conditions or conditions that create inaccessibility for personnel
  - Flooding
  - Electrical Storms

- High winds
- Icy conditions
- Situations that make sampling impossible (no discharge)
  - Drought
  - Extended frozen conditions

### Who can perform the sampling?

- Qualified Personnel or the Industrial Storm Water Certified Operator can collect the samples.
  - Qualified Personnel = employee(s) that have been trained by the Certified Operator to perform the duties.

### Monitoring points

#### How the heck do I sample that?

- Sampling from catch basin
- Automatic samplers
- Sheet flow sampling
- Observations of the storm water discharge

#### Now that the samples have been collected...

- The Industrial Storm Water Certified Operator must visually evaluate the water samples within 48 hours for:
  - Unnatural Color
  - Sheen
  - Foam
  - Turbidity
  - Solids
  - Etc.

### Documentation

- Industrial Storm Water Certified Operator needs to complete the report
- Photo documentation of the samples required
- Retain reports for 3 years

### The sampling and the report is done...now what?

- Minor sheens, turbidity, etc. is a reasonable expectation and don't need to be reported...corrective actions to determine the source may be necessary.
- Gross pollutants that could cause harm to the environment or human health need to be reported as noncompliance events. Corrective actions need to be taken.

### Corrective Actions...

- If problems are observed during the Visual Assessment:
  - Check material storage areas
  - Check industrial activity areas
  - Implement additional housekeeping measures
  - Look for evidence of past or present spills
  - Anything else that may be contributing to the issues

### Remember...be SAFE

- Steep banks
- Swift currents
- Icy conditions
- Traffic hazards
- Etc.

### What compliance assistance is available?

- Industrial Storm Water Webpage: [www.michigan.gov/deqstormwater](http://www.michigan.gov/deqstormwater) - Industrial Storm Water
- Industrial Storm Water Certified Operator Training
- District Staff

### When will a permittee have to comply with the Visual Assessment requirement?

### Questions