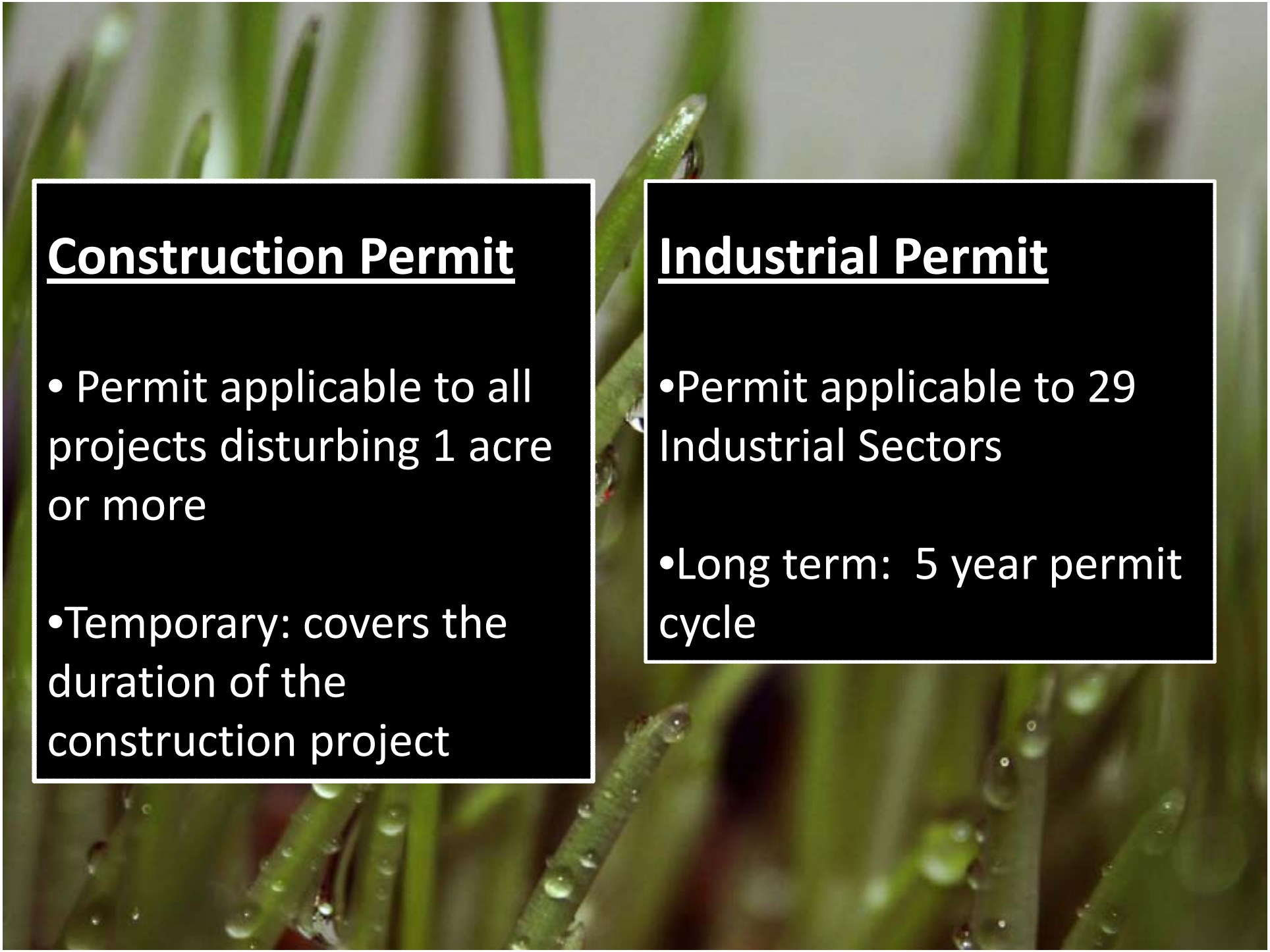
Industrial Stormwater And How It Differs From Construction

Rick Sakow
U.S. EPA Region IX
Clean Water Act Compliance Office
Tel. (415) 972-3495
sakow.rick@epa.gov



Construction Permit

- Permit applicable to all projects disturbing 1 acre or more
- Temporary: covers the duration of the construction project

Industrial Permit

- Permit applicable to 29 Industrial Sectors
- Long term: 5 year permit cycle

Common Tribal Activities that Require Industrial Permit Coverage

- Sewage treatment plants
- Landfills
- Mining and oil and gas
- Hazardous waste treatment, storage or disposal facilities
- Auto dismantlers
- Recycling facilities
- Transportation facilities

Inspections

Construction Permit

•Either once every 7 calendar days

or

•Once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater

Industrial Permit

•Visual assessments
•Quarterly Benchmark Monitoring
•Annual effluent limitations guidelines monitoring
•Applicable Tribal monitoring

Visual Assessments of Discharges

Quarterly: Take a grab sample during a rain event to assess key visual indicators of stormwater pollution: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other qualitative markers of pollution.

Benchmark Sampling

Collect stormwater samples at discharge Points for laboratory analysis. The results are compared with benchmarks to serve as an indicator of the performance of stormwater control measures.

ELG Compliance Sampling Certain industries are subject to Federal effluent limitation guidelines (ELGs) which are numeric limits or caps for specific pollutants in stormwater runoff. Sampling is required to determine compliance with those limits. Typically, permits require corrective action and further sampling when an effluent limitation is exceeded. An exceedance of an applicable effluent limitation guideline constitutes a violation of the permit.

Table 1. Applicable Effluent Limitations Guidelines (2008 MSGP Part 2.1.3)	
Regulated Activity	**40 CFR Part/Subpart**
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A
Runoff from asphalt emulsion facilities	Part 443, Subpart A
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D
Runoff from hazardous waste landfills	Part 445, Subpart A
Runoff from non-hazardous waste landfills	Part 445, Subpart B
Runoff from coal storage piles at steam electric generating facilities	Part 423

Impaired Waters Monitoring

The 2008 MSGP requires facilities that discharge into waters that are known to be impaired to monitor for the pollutant causing the impairment. This requirement is triggered regardless of whether the particular pollutant is used or stored at the industrial site; however the facility may be able to discontinue monitoring after the first year if the pollutant is not present in the sample and is not expected to be present in any discharge.

Resources to help you identify impaired receiving waters

An exceedance of an applicable effluent limitation guideline constitutes a violation of the permit.

- **EPA's Water Locator Tool**
  www.epa.gov/npdes/stormwater/msgp Locates nearby receiving waters and impaired waterbodies within a 10 mile radius of your facility.

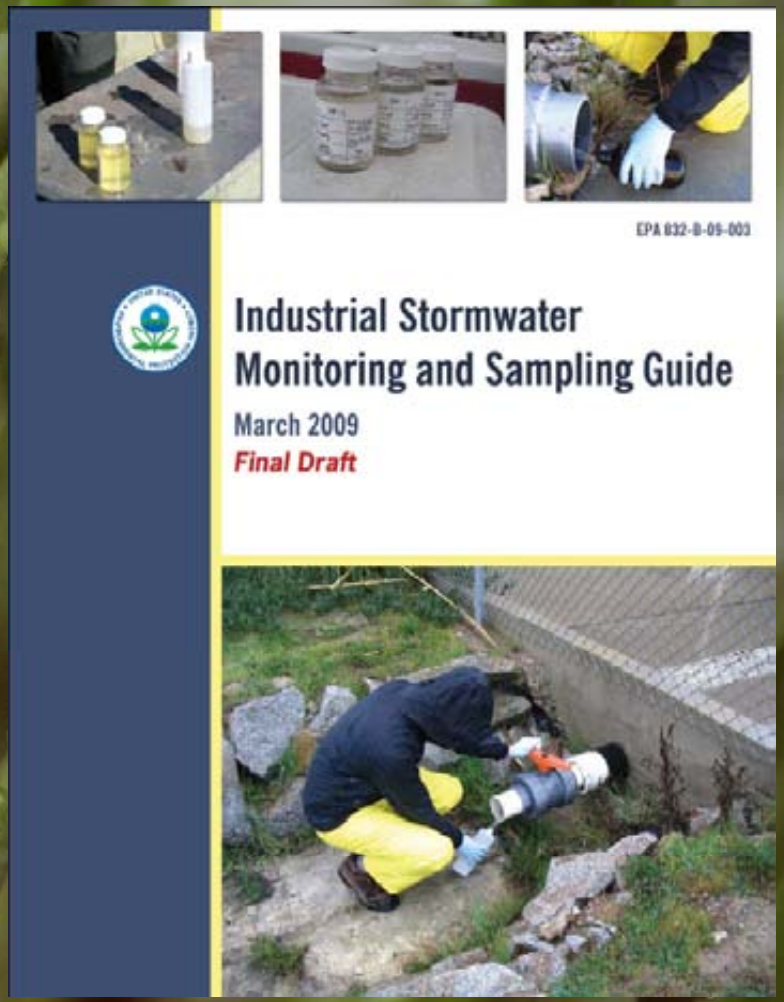
- **EPA's Enviromapper**
  www.epa.gov/enviro/emef Locates nearby waterbodies and the location of impaired waterbodies by entering your facility's zip code, address, watershed, or latitude/longitude data.

- **Topographic maps**
  http://topomaps.usgs.gov/ordering_maps.html From the U.S. Geological Survey (USGS)

Guide for Conducting Industrial Inspections

EPA developed this how-to primer to help industrial operators conduct visual and analytical monitoring of stormwater discharges associated with the 2008 MSGP

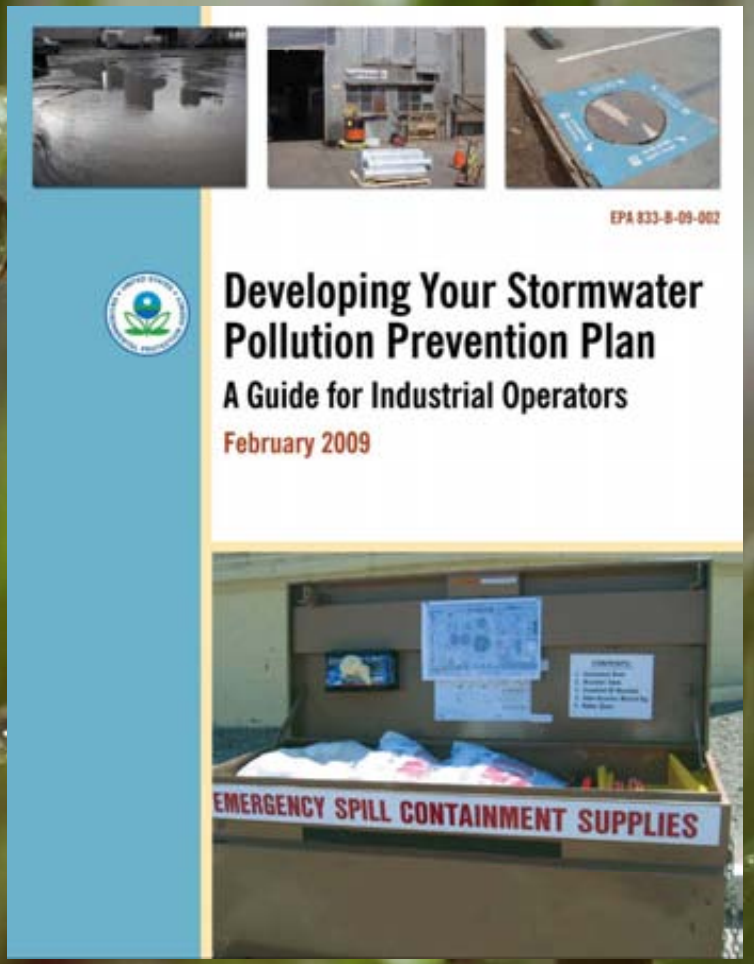
http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf



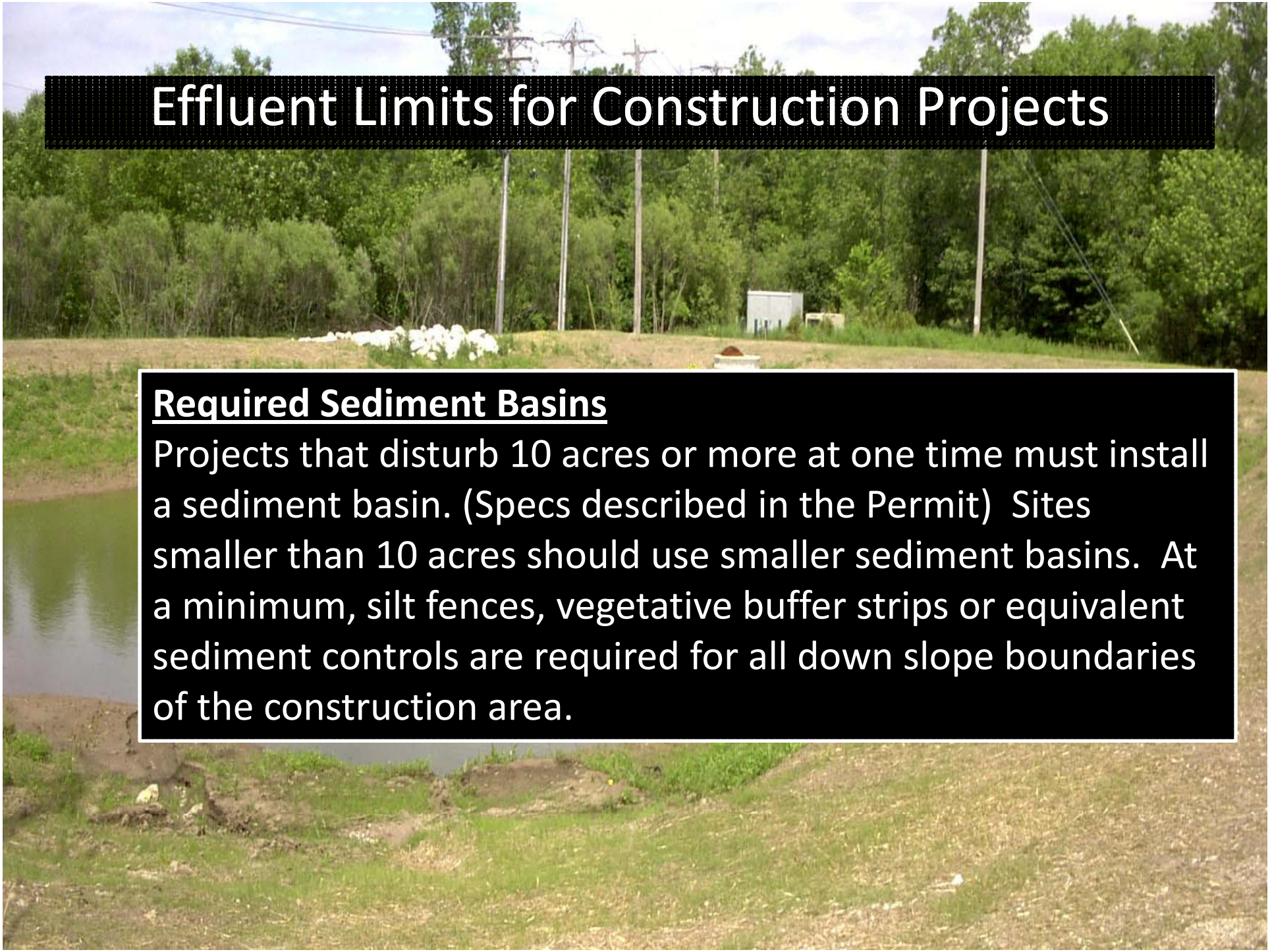
Industrial SWPPP Guide

EPA developed this guidance on how to develop a SWPPP that meets the requirements of the 2008 MSGP

http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf

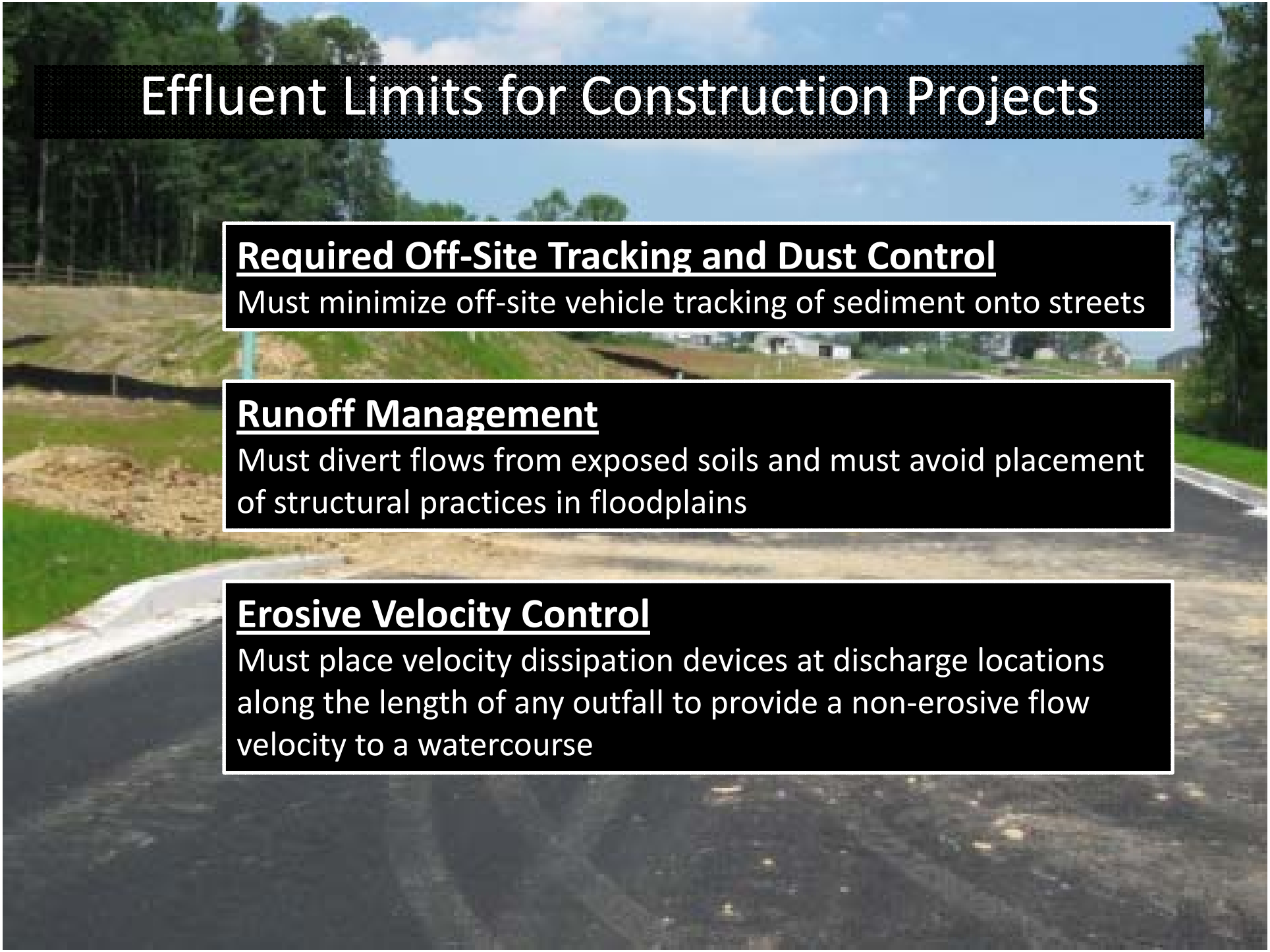


Effluent Limits for Construction Projects



Required Sediment Basins

Projects that disturb 10 acres or more at one time must install a sediment basin. (Specs described in the Permit) Sites smaller than 10 acres should use smaller sediment basins. At a minimum, silt fences, vegetative buffer strips or equivalent sediment controls are required for all down slope boundaries of the construction area.



Effluent Limits for Construction Projects

Required Off-Site Tracking and Dust Control

Must minimize off-site vehicle tracking of sediment onto streets

Runoff Management

Must divert flows from exposed soils and must avoid placement of structural practices in floodplains

Erosive Velocity Control

Must place velocity dissipation devices at discharge locations along the length of any outfall to provide a non-erosive flow velocity to a watercourse

Reporting Requirements

Construction Permit

•Notice of Intent & Notice of Completion

• Keep routine site inspections with SWPPP.

Industrial Permit

•Annual Report (findings from your annual comprehensive site inspection;

•Exceedance Reports for numeric effluent limits;

•Quarterly benchmark monitoring (sector specific)

•Impaired waters monitoring


•Thank you