

EROSION AND SEDIMENT CONTROL SEMINAR

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**ESC Plan Reviews & Regulatory Inspections Standard
Operating Procedures**

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SWET**



PHASE I PERMIT VS. PHASE II PERMIT

- PHASE I PERMIT REQUIREMENTS

- Began in 1990 for Medium and Large Municipalities (100,000 + population) requiring them to obtain NPDES permit coverage for their storm water discharges.
- Phase I communities are required to get individual permits written specifically for them.
- Rockford is the only Phase 1 municipality in Illinois.

- PHASE II PERMIT REQUIREMENTS

- Began in 2003 requiring small MS4's (determined by the Bureau of Census) to obtain permit coverage.
- Required Small MS4's to obtain a General NPDES Permit (ILR40)



Each is required to develop and implement a storm water management plan to reduce the contamination of storm water runoff and prohibit illicit discharges.

Legal Authority

- NPDES Municipal Separate Storm Sewer System (MS4) Stormwater permits requires municipalities to implement and erosion and sediment control inspection and enforcement program.
- City of Rockford's Code of Ordinance Chapter 109, Article II

Sec. 109-25. - Industrial or construction activity discharges.

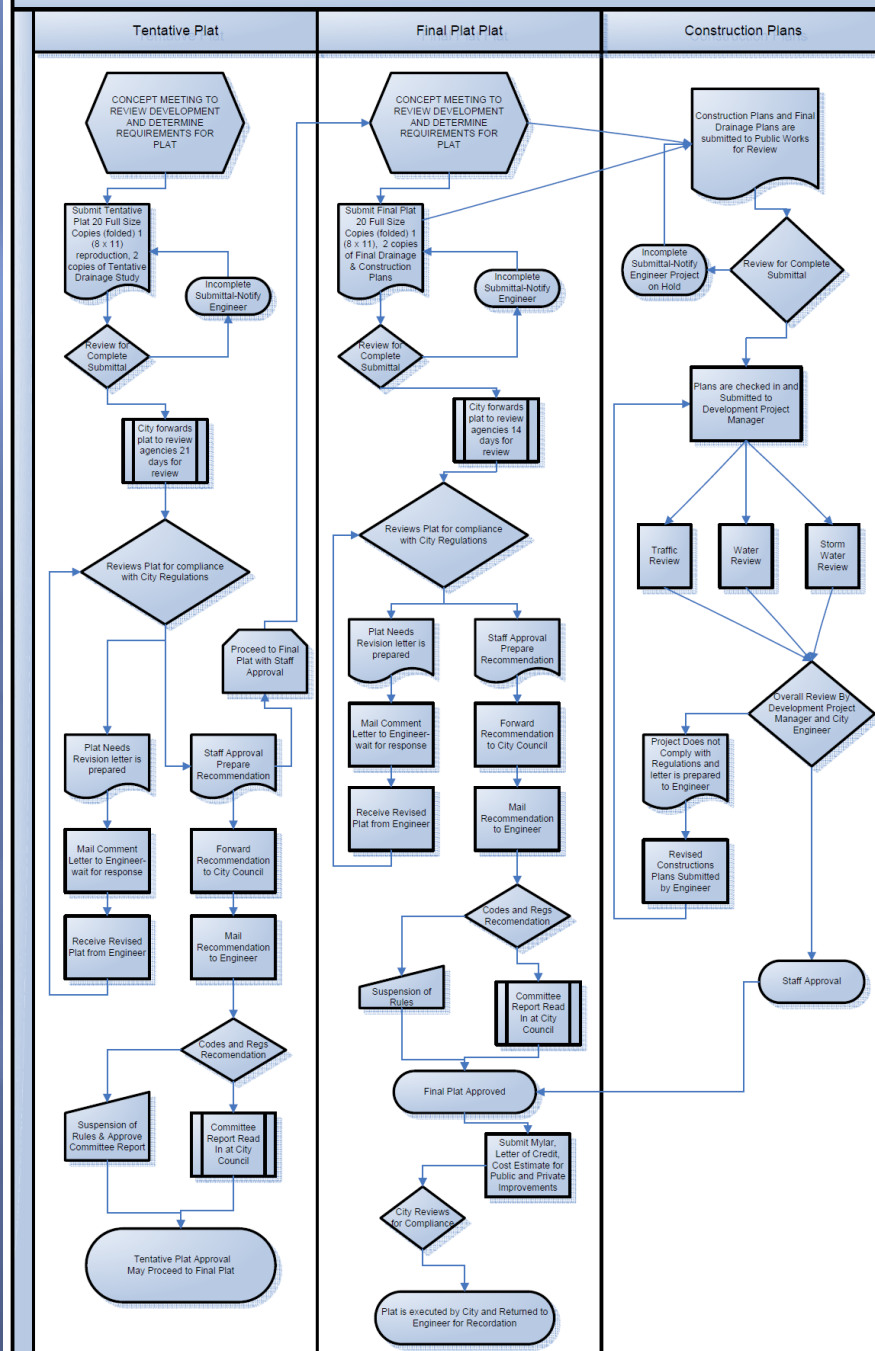
Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the administrator prior to the allowing of discharges to the MS4.

Sec. 109-35. - Penalties.

Any person that has violated or continues to violate this article shall be liable criminal prosecution to the fullest extent of the law, and shall be subject to a fine of not to exceed \$750.00 per violation per day.

- We will also notify IEPA of construction sites violating their permit conditions.

Subdivision Review Process



SWPPP/ESC Plan review Checklist

Note: the SWPPP template IEPA references is the USEPA template. After reviewing the IEPA ILR10 permit and the USEPA SWPPP template the following items are required in all SWPPP'.

Site Name: _____

To be used on construction sites that require an IEPA NPDES stormwater permit (ILR10)

SWPPP Content	Yes	NO	NA	Comments
Contact Information/Responsible parties				
Project Owner & contact information				
SWPPP Preparer Contact Information				
Site Information				
Project Name & Address				
Latitude & Longitude (NOI is acceptable)				
Discharge Information				
Is project discharging to the City of Rockford's MS4?				
Name of closest receiving waters				
Runoff Coefficients after construction				
Nature of Construction Activity				
Description of Project				
Size of project (total size & area to be disturbed)				
Sequence of Construction (major soil disturbing)				
Allowable Non-stormwater Discharges				
Site Maps				
Drainage patterns before and after major grading activities				
Vehicle entrance & exit locations plus controls to prevent offsite tracking				
Total site areas and areas of soil disturbance				
Location and types of all structural and non-structural controls				
Areas where stabilization practices are to occur				
Material and equipment storage areas				
Stockpile locations				
Locations of surface waters and wetlands				
Location(s) where storm water discharges from site				
Inspections & Maintenance				
Inspection Schedule & procedures				
Procedures for corrective actions				
Person(s) responsible for corrective actions				

SIMPLY PUT.....

Compliance with the ILR10 permit is a must!



Inspections

- Unless requested all inspections are surprise visits. Appointments are not made.
- If work does not commence within 2 weeks of the start date on the Grading and stormwater Discharge Application the permit is no longer valid until the City is informed of the new start date. Permit is valid for 2 years.
- The City will inspect any size construction site regardless of IEPA permitting requirements.,
- Inspection Types:
 - ***Pre-Grading Inspection:*** BMP's must be installed **prior** to the start of construction except in areas where clearing and grubbing is necessary for installation.
 - ***Drive Through Inspections:*** A visual observation assessing site conditions and BMP's installations.
 - ***Full Erosion and Sediment Control Inspection:*** Complete review of SWPPP, inspection records, ESC plan and site conditions.



Pre-Grading Inspection:

- BMP's must be installed prior to the start of construction except in areas where clearing and grubbing is necessary for installation.
- City shall perform pre-grading inspections on all sites adjacent to environmentally sensitive areas (wetlands, creeks, rivers, steep slopes, superfund sites, sites with endangered species, etc.) or as needed.
- City must be notified 48 hours prior to the start of grading in order to perform a pre-grading inspection.



Drive Through Inspections

- A visual observation assessing site conditions and BMP's installations.
 - Minor deficiencies will be addressed with the site manager.
 - Sites with major deficiencies shall receive a full ESC inspection.
 - Major deficiencies include: overall poor site conditions, poorly installed or failure of BMP's, evidence, or potential, of sediment leaving the site.

Does Your site look like this?



Or This?



Full Erosion and Sediment Control Inspection

- Complete review of SWPPP, inspection records, ESC plan and site conditions.
 - Letter will be sent detailing deficiencies.
 - Any site with deficiencies must provide certification to the City within 7 days that maintenance was completed.
 - Failure to do so will result in a Stop Work Order.
- All sites requiring an IEPA general construction permit will receive a Full ESC inspection.
- Site that do not require an IEPA permit will be inspected at the City's discretion.



Full Erosion and Sediment Control Inspections

SWPPP Records

- Is a SWPPP Required?
 - Just because a site is less than 1 acres does not mean a SWPPP isn't required if its part of a larger common unit of development.
 - Sites that don't need a permit are still expected to have sound ESC principles.
- Is there a SWPPP?
 - The engineering plans is not the SWPPP!
 - BMP's being used must have specs in the SWPPP
- Is the SWPPP onsite? In a safe, dry location?
- Are inspections being completed with deficiencies listed.
 - Deficiencies must be addressed as soon as possible. Note completion dates.
 - As long as there's an active permit inspections must be done.

Stormwater Pollution Prevention Plan (SWPPP)
INSERT PROJECT NAME and DATE
ILEPA ILR10

Stormwater Pollution Prevention Plan (SWPPP)

For:

Insert Project Name
Insert Project Site Location/Address
Insert City, State, Zip Code
Insert Project Site Telephone Number (if applicable)

Owner:

Insert Company or Organization Name
Insert Name
Insert Address
Insert City, State, Zip Code
Insert Telephone Number
Insert Fax/Email

SWPPP Contact(s):

Insert Company or Organization Name
Insert Name
Insert Address
Insert City, State, Zip Code
Insert Telephone Number
Insert Fax/Email

SWPPP Preparation Date:

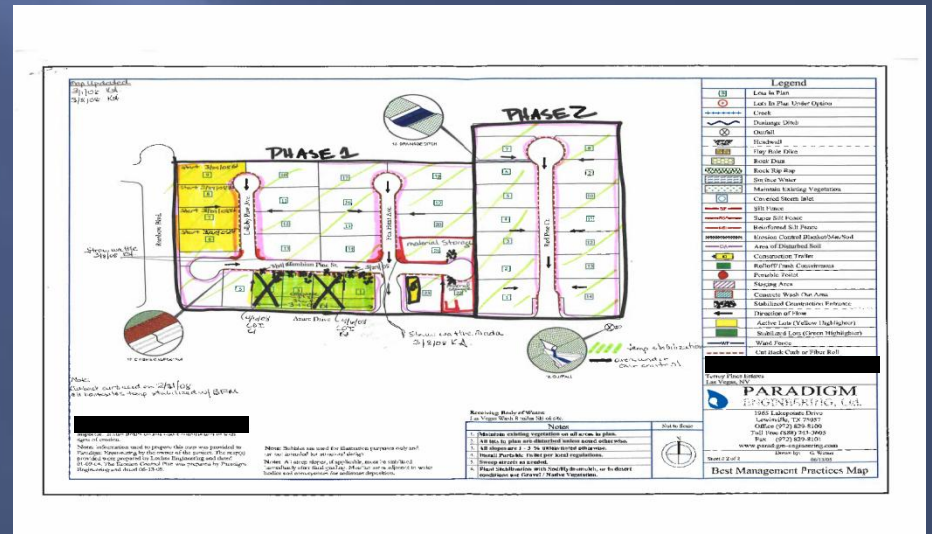
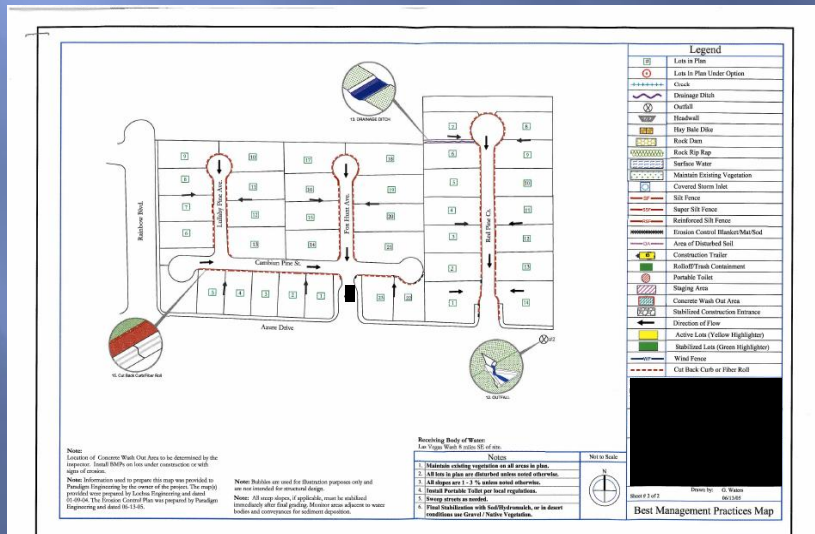
____/____/____
Estimated Project Dates:

Project Start Date: ____/____/____
Project Completion Date: ____/____/____

SWPPP Records

Does the SWPPP and erosion control plan accurately reflect site conditions?

- Are all onsite BMP's marked on the erosion control plan? Are the BMP's what the plans say?
- Are dates of installs and removals noted?
- Are washouts, port-a-john, equipment & material storage areas marked?
- Are areas of stabilization (seeded and paved) marked?
- Where does stormwater discharge from the site?



Discharge Point?

- Is the outlet stabilized?
- Are there indications of offsite discharges?
 - Sediment deposits
 - Sediment laden water
 - Downstream erosion
- See Title 35 of the Illinois Pollution Control Board,
 - Offensive Conditions (Part 302.203)
 - Offensive Discharges (Part 304.106)



Best Management Practices

Back of Curb Protection

- Silt Fence
- Cut Back Curb
- Wattles
- Erosion Control Blanket



Best Management Practices

Inlet Protection

- Do all inlets that received water from disturbed areas have protection?
- Are there affected inlets without protection?
- Is the inlet protection being maintained?



Best Management Practices

Perimeter Protection

- Is perimeter protection in place and functional
- Is it being maintained?
- Was it installed prior to the start of grading?



Best Management Practices

Stabilized Construction Entrances

- Are they installed
 - Are they being used
- Are they installed properly
 - Properly sized stone
 - Fabric installed underneath
 - Proper size



Best Management Practices

Street Sweeping

- Installing the stabilized construction entrance as specified can significantly reduce sweeping costs.
- If too much sediment is entering the street you need to determine why.



Best Management Practices

Stabilization

- Are areas not under construction stabilized?
- Is there adequate mulch cover until germination?



Best Management Practices

Concrete Washouts

- Are washouts in place and being maintained?
- Are there any inlets near the washout?



Best Management Practices

BMP's not on the Plan

- The SWPPP is a living document. As the project progresses so should the SWPPP.
- Nobody writes a perfect SWPPP. Plans need to match what is onsite!



Best Management Practices

Proper Installs & Uses

- Silt Fence
 - Proper splicing
 - Trenched properly & backfilled
 - Not in drainageway
- Erosion Control Blankets
 - Proper seed bed preparation
 - Enough staples
 - Correct type of ECB
- Straw Bales – just break them open and use them for mulch



Best Management Practices

Other potential storm water contaminants

- Poorly maintained/leaky equipment
- Port-A-John location
- Fuel can/tank placement
- Trash & Debris



Terminating Permits

Where a site has completed final stabilization and all authorized stormwater discharges from construction activities are eliminated the permittee **MUST** submit a completed notice of termination.

- Final Stabilization All soil disturbing activities have been completed and:
 - A uniform perennial vegetative cover with a density of 70% for the area has been established on all unpaved areas.
- or
- Equivalent permanent stabilization measures (riprap, gabions, or geotextiles) have been employed.



Questions?

