

Facilities & Services - Stormwater Training



Annual Training

University activities subject to state and federal environmental:

- Laws
- Permits

Training required by Illinois Environmental Protection Agency (IEPA) to discuss:

- Stormwater policies, permits, sediment/erosion control, and illicit discharges
- Permit changes



Campus Waterways



Our Water Connections

Boneyard Creek → Saline Branch →
Salt Fork → Vermilion → Wabash →
Ohio → Mississippi → Gulf

Embarras → Wabash → Ohio →
Mississippi → Gulf



Rules and Guidance

State Permit Rules – Construction and operation (ACTIVITY/SIZE DETERMINE)

Federal Law/Clean Water Act – Thou shall not pollute; contain sediment and keep out of drains/waterways (ALL SITES)

University Facility Standards – Green Stormwater Infrastructure/low impact design, Storm Water Drainage Systems/no runoff increase, Site Enforcement, Progress Cleaning/waste removal, and Soil Erosion and Sedimentation Control (ALL SITES)

U. of I. CAM – Prohibited unauthorized discharges to storm sewers (ALL SITES)

U. of I. Campus Landscape Master Plan and Rainwater Management Program – Guidance for landscaping and rainwater management to help meet rules (ALL SITES)



Campus Permits

- Municipal Separate Storm Sewer System (MS4) Operating Permit
- Industrial Stormwater Operating Permit
- Stormwater Construction Permit



MS4 Permit

Campus general stormwater activities

Required due to campus residential size and density

- 50,000 people
- 500 people per square mile

IEPA General Permit revised 7/2025



MS4 Requirements

New 2025 – training, educational resources, construction/municipal inspections, maps, landscape maintenance material reduction and assessments

- 12 months to comply with new conditions after Notice of Coverage received

Develop Storm Water Management Program

- Includes best management practices (BMPs) and goals for 6 minimum control measures
- University has ~58 BMPs
- Variety of campus divisions/departments/shops help comply: Capital Projects, Construction Services, Grounds, Laborers, Planning, Plumbers, Procurement, Safety & Compliance (S&C), Transportation, Utilities & Energy Services

IEPA annual report due June 1



MS4 Permit 6 Minimum Control Measures

1. PUBLIC EDUCATION AND OUTREACH

- Posters/brochures/flyers
- Biennial Green Infrastructure & Erosion Control Conference
- Boneyard Creek Community Day (BCCD)

2. PUBLIC INVOLVEMENT AND PARTICIPATION

- BCCD
- iHELP
- Green Quad Day
- All Employee Expo
- MS4 committee
- Employee illicit discharge training



MS4 Permit 6 Minimum Control Measures

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

- Drain dye testing standard operating procedure
- Creek inspections
- Commercial/industrial illicit discharge training
- Outfall maps

4. CONSTRUCTION STORMWATER RUNOFF CONTROL

- Construction meetings
- Dewatering requirements (sediment control and inspections)
- Construction operator stormwater control training
- Qualified inspectors
- Contractor site inspections and permittee site inspections (if acre or greater soil disturbance)



MS4 Permit 6 Minimum Control Measures

5. POST CONSTRUCTION STORM WATER MANAGEMENT

- Policies
- Low impact design
- Basin inspections
- Employee green infrastructure training

6. POLLUTION PREVENTION AND GOOD HOUSEKEEPING

- Vehicle maintenance
- Waste/recycling program
- Catch basin cleaning
- Spill cleanup
- Salt storage/use training
- Municipal maps/inspections
- Landscape maintenance material reduction
- Employee permit and pollution training



EPA Qualified Inspector Training

- FREE Federal EPA training
- <https://www.epa.gov/npdes/construction-inspection-training-course>
- 7-hour training course; 5 modules
- Interactive
- Final Exam-40 questions; 80% pass
- Certificate



Industrial Permit

Willard Airport IEPA permit required for industrial activities with potential to discharge to storm

- Facility Stormwater Pollution Prevention Plan (SWPPP) required in permit
- Retention pond helps decrease stormwater runoff velocity and capture sediment

IEPA General Permit revised 7/2023



Industrial Requirements

Permit, SWPPP and annual report. IEPA report and SWPPP updates due July 23

- Annual facility inspection report
- Monthly deicing inspections when chemical used
- Quarterly visual waterway/outfall inspections
- Quarterly airport activity inspections
- Facility map
- Construction projects on any industrial permitted site still need additional construction permit if over acre soil disturbance



Construction Permit

Permit needed if 1 acre or greater soil disturbance, including stockpile and storage areas

- Other required documents – ISHPO and IDNR Endangered Species EcoCat approvals, SWPPP & erosion control drawings
- Environmental Compliance works with project and consultant to review & submit documents to IEPA for 30-day review
- Post Notice of Coverage (permit approval)

IEPA General Permit revised 9/2023



Construction Requirements

Inspections and sediment control –

- Weekly and after 0.5” rainfall inspections; contractor qualified personnel
- Daily dewatering inspections/documented/photos; discharges routed through sediment control and to vegetated or filler stone area; contractor qualified personnel
- Chemicals stored at least 50 ft from inlets/waterways
- SWPPP erosion control and stabilized entrance
- SWPPP maps with potential stormwater discharge points
- Prior and during site erosion control inspections; permittee qualified personnel



Illicit Discharges

A discharge that is not composed entirely of stormwater

Few exceptions:

- Discharge permitted separately
- Fire fighting activities, hydrant flushing, condensate, landscape irrigation water, dechlorinated pool water, pavement wash water with no soap or spilled chemicals

If you don't know, ask!



Recognition is important

Sediment and chemicals:

- Reduce sewer and stream capacity and increase flooding
- Reduce light and limit aquatic plant growth
- Deplete water oxygen and harm fish
- Stick to and smother fish eggs
- Decrease recreational water quality
- Decrease water quality for consumption
- Potential regulatory fines and cleanup expenses



What to look for

- Cloudy creek water
- Oil sheen on creek water
- Chemical and oil spills or improper drum storage
- Improper deicing salt use/storage
- Sediment laden water being discharged to storm
- Unprotected drains near loose construction soil
- Construction entrance dirt tracking on street
- Unmaintained silt fences or soil stockpiles

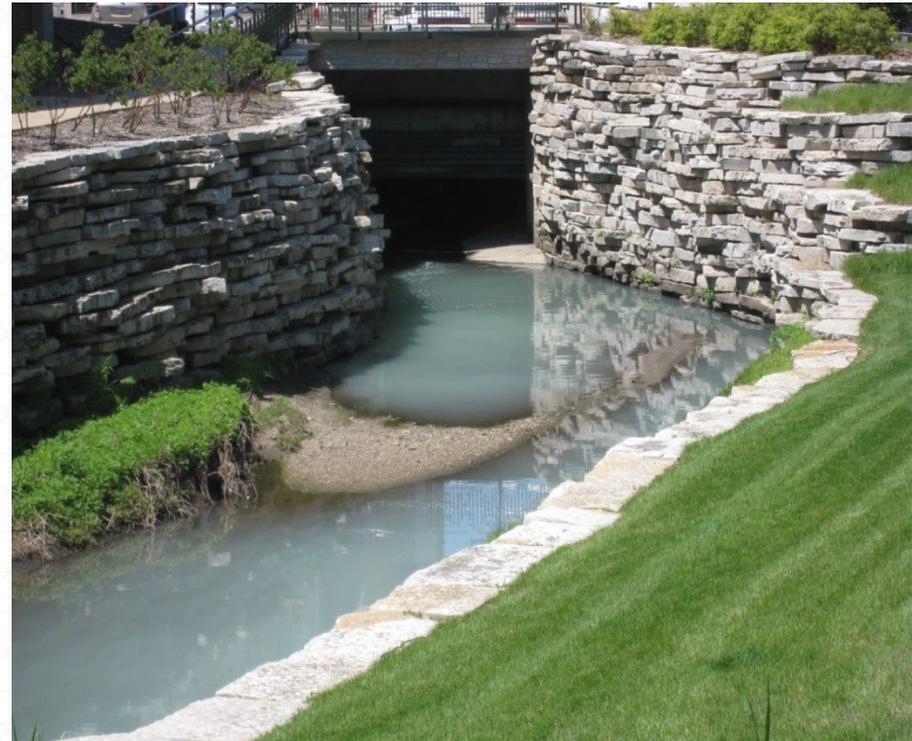


Dewatering and Sedimentation

IMPROPER DEWATERING

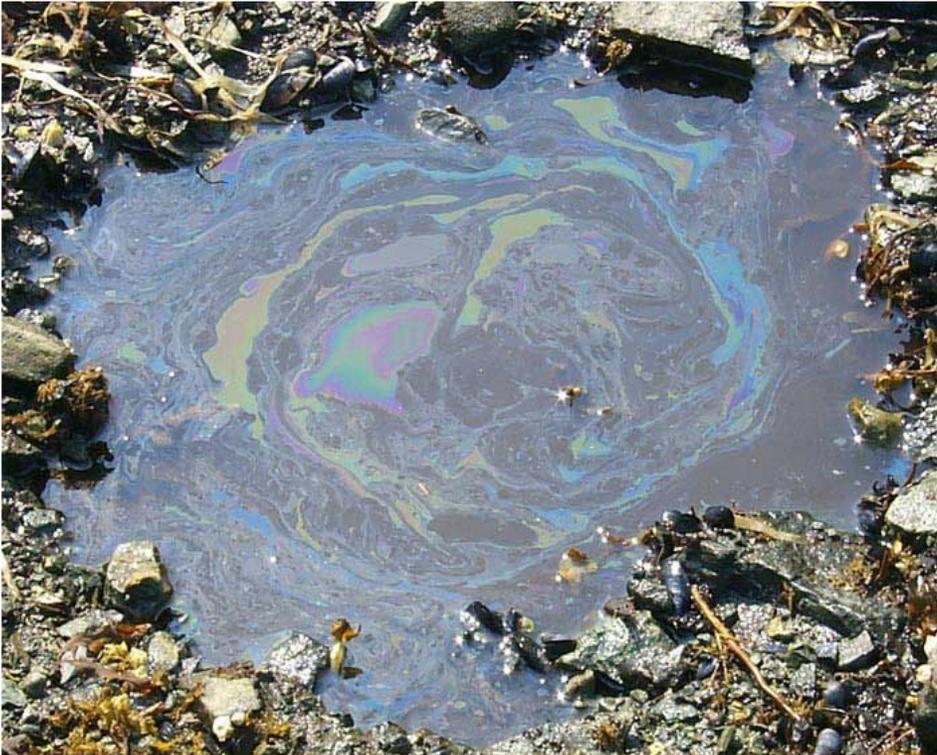


SEDIMENTATION



Oil and Grease Spills

HYDRAULIC OIL



FOOD GREASE



Improper Drum Storage

NO COLLISION PROTECTION OR SPILL PALLET



NO SPILL PALLET



Non-Stabilized Entrances

EQUIPMENT TRACKING



VEHICLE TRACKING



Unprotected Drains

SEDIMENT LADEN WATER TO DRAIN



MUD ON DRAIN



Improper Silt Fences

COLLAPSED



UNDERCUT



Spill Response

You and Environmental Compliance are here to help!

Train and share posters!

If life threatening spill call 911!

If non-life-threatening release:

- Advise the contractor
- Call F&S Service Office 217-333-0340
 - If after hours press 0 to be directed to Division of Public Safety Dispatch
 - Both offices will notify Environmental Compliance and the Labor Shop to determine source, responsibility (U. of I., cities, contractor, vender), cleanup/spill reporting to local/state/federal agencies if responsible and required



Thank you!

For additional information please visit
our stormwater page

fs.illinois.edu/stormwater-management/

Or contact F&S, Safety & Compliance
at [ecs@illinos.edu](mailto:ecs@illinois.edu)

