

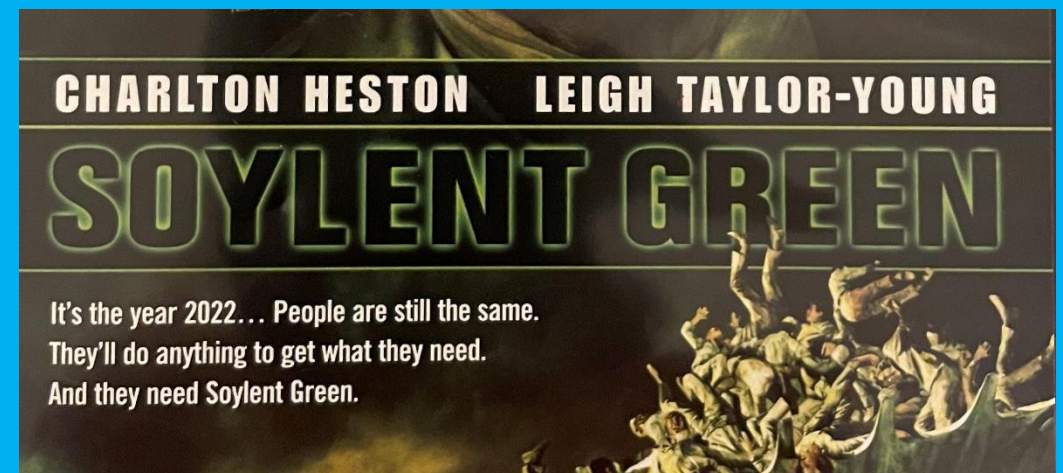
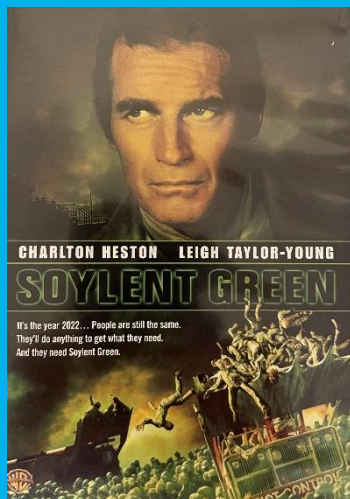
Illicit Discharge Detection and Elimination or IDDE

Clean Water Act (became law October 18, 1972) established the framework for regulating discharges of pollutants into waters of the U.S.

Quick definition of an illicit discharge:

Introduction of pollutants to a stream, river, lake through a discharge from a permitted stormwater outfall or ditch.

For a construction site, an illicit discharge often represents the worst case scenario for offsite water quality impacts.



Illicit Discharge Detection and Elimination or IDDE

Three main parts of IDDE:

- 1) Monitoring for discharge of pollutants to storm water outfalls and ditches flowing to streams, rivers, reservoirs and lakes.
- 2) Determining the source or generating site(s) of the pollutant.
- 3) Once identified, eliminating the pollutant source and/or making adjustments to best management practices at the generating site(s).



Illicit Discharge-Education and Enforcement

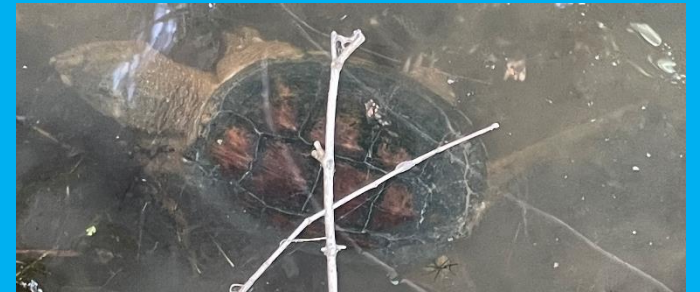
Education and training of personnel at sites causing illicit discharge will always be used to prevent illicit discharges. Upon discovery of an illicit discharge and where the source has been identified, the lack of training is almost always a major contributor to why the illicit discharge occurred.

Within Monroe County, Chapter 767 is used to document the illicit discharge, identify and cite the responsible party (or parties), establish time frames to achieve compliance and if necessary, implement enforcement.



Why Do We Care About Preventing Illicit Discharges and Sediment Releases?

- Protect natural resources (source drinking water supplies) communities depend upon.
- Maintain water quality
- Protect aquatic ecosystems
- Prevent flooding
- Protect aquatic recreational uses



How Do We Prevent Illicit Discharges from Construction Sites?

Answer: Identify potential pollutant sources within the Storm Water Pollution Prevention Plan and then implement the SWPPP.



Solvents and curing agents

Concern: Toxics and pH

Storage and Disposal:
Inside or covered, protected and not in direct contact with soil



Construction waste and debris

Concern: Broad spectrum of pollutants potentially introduced to waterways

Complete at least daily pick up of trash/litter and cover dumpsters at end of work day

Pollution Prevention Through Material Management



Concrete, stucco
and plaster
wastes.

Concern: pH,
total suspended
solids, total
dissolved solids

Disposal
Methods: CW
dumpster
and/or CW bags



Paint, stains and
dyes.

Concern: toxics,
volatile organic
compounds

Storage and Disposal:
Inside or covered,
protected and not in direct
contact with soil. Dispose
of as a haz waste unless
allowed to dry/solidify.

Preventing Illicit Discharges Through Material Management



Rebar, treated
lumber,
galvanized metal

Concern:
Metals and
nutrients

Store off of
ground and away
from flow paths



Fertilizers and
Herbicides

Concern:
Nutrients and
toxins

Indiana Office of
State Chemist
regulates



Portable sanitary
waste facilities

Concern:
bacteria, viruses,
protozoa,
nutrients

Place out of flow
paths and away from
storm drains. County
Health Departments
regulate as well.

Construction Site Material Management to Prevent Illicit Discharges



**Petroleum
Products**

**Concern: Oil and
grease, benzene,
Total Petroleum
Hydrocarbons (TPH)**

**Storage: Provide
secondary
containment or
double walled tanks**



**Soap,
detergents,
surfactants**

**Concern:
phosphates, pH**

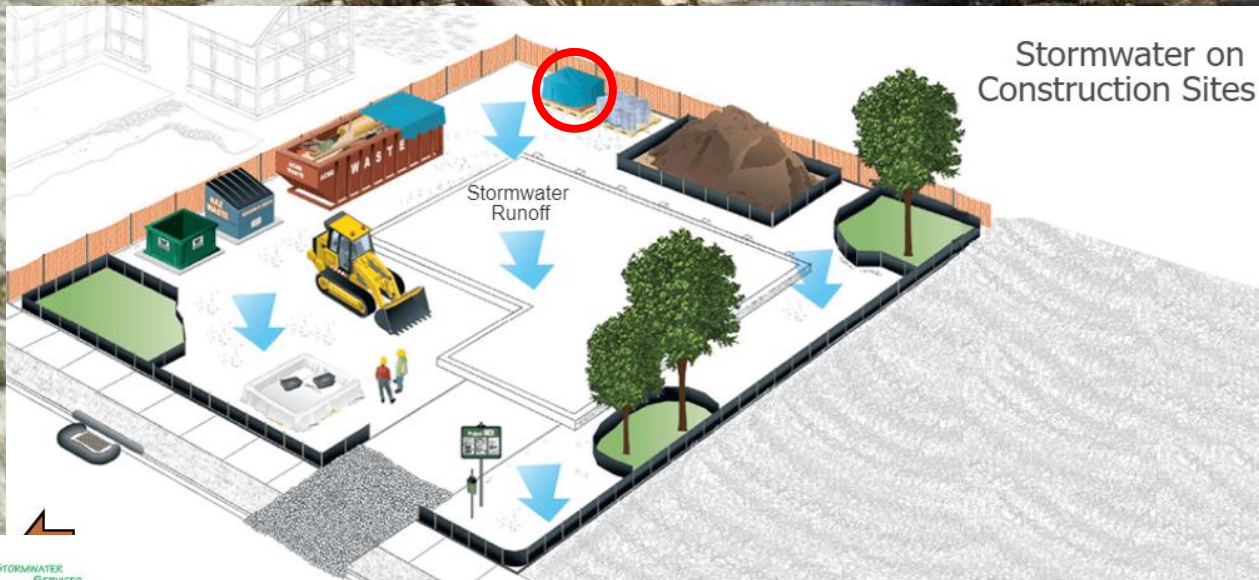
**Ensure liquid detergent
wastes are discharged to
sanitary sewer with
approval from local
utility.**

Site Map Included in SWPPP Should Show Locations of:

- Concrete Washout
- Fuel tanks if used
- Material Storage and Staging Areas
- Dumpster
- Stormwater run-on locations

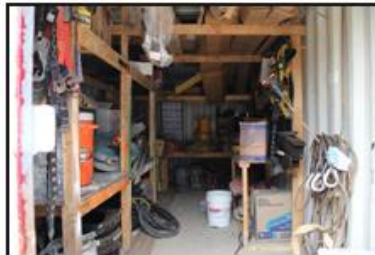
Minimize discharge of pollutants by:

- Identifying stormwater run-on locations and using diversion tactics (swales, berms, etc) to control SW flow
- Locating activities away from flow paths, storm inlets, or receiving waters
- Directing wash waters to a sediment control and/or approved sanitary sewer discharge.



General Pollution Prevention Controls

General Pollution Prevention Controls



Avoid Stormwater Contact

- Keep materials out of flow paths.
- Keep materials under cover.



Prevent Pollutant Release

- Use secondary containment.
- Maintain spill kits nearby.



Practice Good Housekeeping

- Keep work areas tidy.
- Properly dispose of wastes.

SWPPP is a fluid and dynamic document. Over the course of construction, it will need to be reviewed and updated.

Spill Response

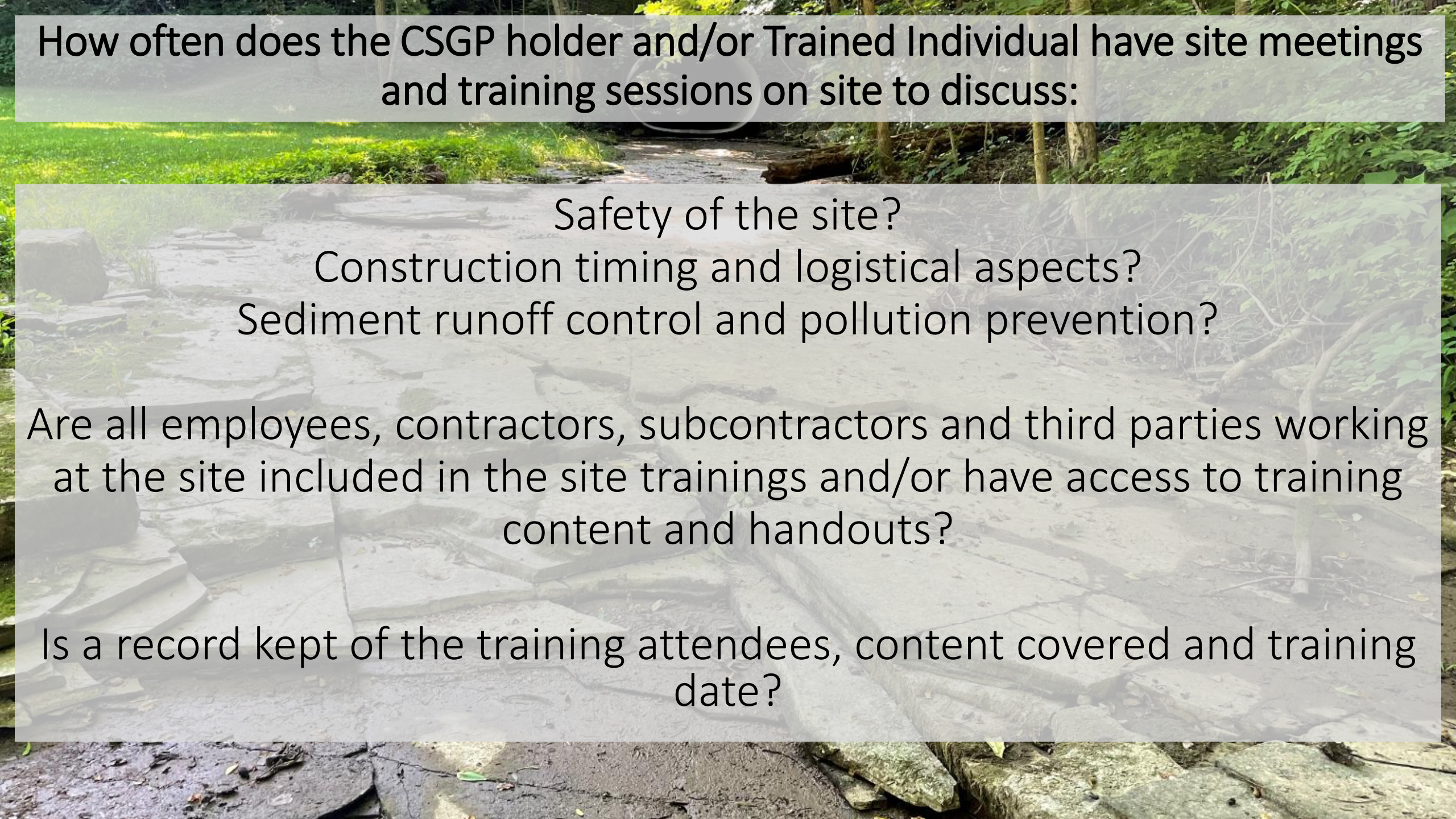
- 1) If a spill occurs, safety is first. Consider what has been spilled, how much and to where.
- 2) A spill of a unknown amount of gasoline reaching a storm drain represents a significant safety hazard.
- 3) Be prepared to contact parties identified in the spill response plan within the SWPPP.



May 2, 1972, a fire broke out at the Sunshine Mine in Kellogg, Idaho. Fires in hard rock mines (Sunshine Mine primarily produced Silver and Lead) were rare.

Of the 173 miners going to work that day, 91 never came back. Carbon monoxide exposure was determined as the cause of death.

Small rescue respirators were available, however many of the survivors reported they had not been trained to use them, the devices were only available in limited areas and many of the devices were in a rusted state.

A photograph of a stone staircase in a forest. The stairs are made of large, flat, grey stones and lead up a hillside. In the background, a stream flows through a lush green forest. The text is overlaid on a semi-transparent grey box at the top of the image.

How often does the CSGP holder and/or Trained Individual have site meetings and training sessions on site to discuss:

Safety of the site?

Construction timing and logistical aspects?

Sediment runoff control and pollution prevention?

Are all employees, contractors, subcontractors and third parties working at the site included in the site trainings and/or have access to training content and handouts?

Is a record kept of the training attendees, content covered and training date?

Important to Remember Spill Kits

4.1 (a) (8) (G) of the CSGP: A material handling and spill prevention and spill response plan meeting the requirements in 327 IAC 2-6.1,

Spill kits are part of the Response plan, should remain on-site and be accessible to anyone working on the site.

Be careful to obtain a spill kit compatible with the materials present on site.... some spill kits are specifically intended for oil/petroleum only.

Complete an inventory of the spill kit to ensure all of the components of the spill kit are present and have not become degraded/damaged.

Plan Ahead...Make Contact with A Spill Contractor Prior to a Spill

<https://www.in.gov/idem/cleanups/investigation-and-cleanup-programs/emergency-response/spill-contractor-map/>

Indiana Department of Environmental Management
Environmental Cleanups / Investigation and Cleanup Programs / Emergency Response / Spill Contractor Map

Search IDEM

Statement regarding Spill Contractor Map and Disclaimer

IDEM is providing this map of spill contractors to expedite spill response efforts. This may not be an all-inclusive listing. Other tools to find a spill contractor may include directory and online searches. This map includes contractors who indicate that they maintain 24-hour spill response capabilities using in-house personnel and equipment to respond to emergency spills within Indiana. The information being provided is not an endorsement, certification, or acknowledgement of any company, their qualification, or their ability to perform spill response. When soliciting a spill contractor whether from this list or other means it is important that you provide the contractor with details regarding spill, communicate special equipment or personal protective equipment (PPE) needs, and obtain an estimated time of arrival (ETA).

Spill Response Contractor Location Map

Map showing the locations of spill response contractors across the United States. The map includes state names, major cities, and geographical features. A search bar and navigation controls are visible in the top left of the map interface.

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Don't Forget About Spill Reporting

Section 7.5 of the CSGP (INRA00000): Reporting Spills and Noncompliance

The permittee must monitor for, identify, and report to IDEM any adverse incidents (including spills and leaks) which reach any surface water of the state. When the permittee observes or is otherwise made aware of any permit noncompliance or any adverse incident that may have resulted from a discharge from the permitted facility, the permittee must notify the IDEM Spill Line at (888) 233-7745 or (317) 233-7745.

Upon notification, IDEM Emergency Response works directly with local MS4 staff, local fire departments and Emergency Management Departments.

Look bro, this awesome presentation has ended and he is taking questions!



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