







WHY ARE YOU DOING THIS?

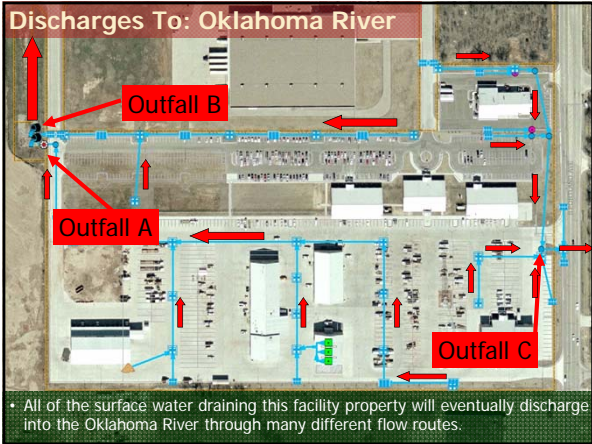
- ✘ All industries that have storm water permits are required by Law to perform visual monitoring at least once per calendar quarter.
- ✘ Provides visual documentation of whether your pollution prevention plan is working or not.

WHAT IS AN OUTFALL?

- ✘ Any and all areas where storm water discharges from your facility.

VISUAL MONITORING SAMPLING SITE LOCATION IDENTIFICATION

- ✘ Look at your facility's site map. The site maps should designate where your effluent or drainage outlet points (outfalls) are located.
- ✘ If this information is not available already, a facility walk may be required.



VISUAL MONITORING SAMPLING SITE LOCATION IDENTIFICATION (CONT.)

- ✘ In this case, the facility grounds have three (3) distinct drainage areas.
- ✘ Each area has a defined outfall that will require quarterly visual monitoring.
- ✘ Each time visual monitoring is performed, all outfalls must be sampled and documented.

WHAT IS THE REQUIRED TIMEFRAME TO COMPLETE THE VISUAL MONITORING?

- ✘ Sample during daylight hours (e.g. normal working hours).
- ✘ Samples should be collected between 30 minutes and 1 hour after runoff starts.
- ✘ The goal is to catch the first portion of the runoff, or the “first flush”, coming off of the facility’s grounds.
- ✘ The “first flush” will often contain the greatest portion of pollutants during a runoff event.

WHAT QUALIFIES AS A STORM EVENT THAT NEEDS TO BE MONITORED?

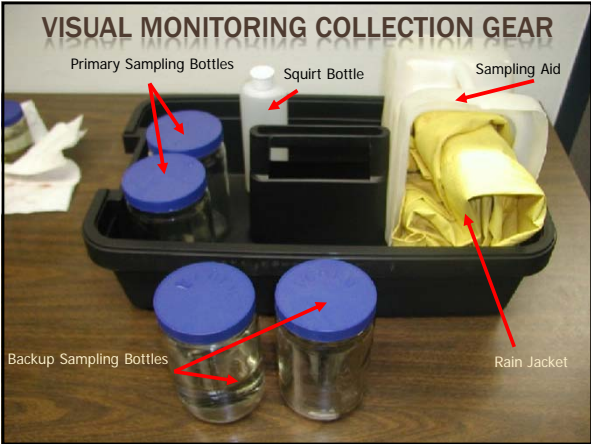
- ✘ Qualifying storm events must have rainfall totals of 0.10” or greater.
- ✘ The storm event must produce runoff to be sampled.
- ✘ The event must occur at least 72 hours after the previous measurable (greater than 0.10” rainfall) rain event.

USING ICE AND SNOW MELT

- ✦ Sample during daylight hours (e.g. normal working hours).
- ✦ Samples should be collected between 30 minutes and 1 hour after runoff starts.
- ✦ Just like with rainfall runoff, the goal is to collect the “first flush” sample containing the greatest portion of pollutants.

EQUIPMENT NEEDED...

- ✦ Clean collection container such as a clear two-liter bottle, mason jar, or other clear container.
- ✦ Boots, waders, or clothes that you do not mind getting wet and dirty.
- ✦ Your nose, eyes, and hands.
- ✦ Specialized equipment may include a swimming pool extension pole for reaching into flowing water, waterproof paper, latex gloves and other protective safety gear (eye protection, life vest etc.).



SAMPLING PROCEDURE

- ✘ A few common-sense rules apply to collecting a representative sample:
 - + Use a separate, clean observation container labeled for each outfall.
 - + Take the sample using the observation container or use another clean container (plastic jug with the top cut off) and immediately dispense the sample into the observation container.
 - + Rinse the collection container (if used) prior to moving to the next outfall.

SAMPLING PROCEDURE (CONT.)

- ✘ While dipping the sample container, make certain that the opening is partially exposed out from the water surface. This will allow floatable debris and surface contaminants to be collected into the sample container.
- ✘ Do not scoop bottom sediments off of the outfall surface.
- ✘ Once the sample has been acquired, make the appropriate field observations and move to your next outfall.
- ✘ After all collection activities are completed, wash, rinse, dry and store your sampling equipment for the next appropriate sampling event.



SAMPLE VOLUME

- ✘ The recommended minimum sample volume for each outfall structure sampled is one (1) quart (approximately 500 mL).
- ✘ Always record the sample volume on your worksheet.

WHERE DO I RECORD MY DATA?

- ✘ A Visual Monitoring Sheet is provided in your Storm Water Pollution Prevention Plan.
 - + This sheet can be found in the Worksheet Forms section.
- ✘ The following slide shows an example data sheet that can be used for recording your Visual Monitoring Results.
- ✘ Document each sample individually.
- ✘ Keep all records for three (3) years.

Visual Monitoring Sheet											
Quarterly Visual Monitoring - Storm Water Quality										(Worksheet 25)	
Date: _____		Quarter: 1 2 3 4				Year: _____					
<small>The samples must be taken within the first 20 minutes, not later than 1 hour, of when the rain begins discharging from your facility, preferably during regular working (weekday) hours. The water record must be greater than 0.1 inches in magnitude and allowed 72 hours from the first measurable storm event.</small>											
Rainfall Amount: _____		Amount of water collected: _____				Rate of Discharge: _____					
Time Discharge (in runoff) began: _____		Comments: _____									
Outfall Number	Time Collected	Color	Odor	Clarity	Floating Solids	Suspended Solids	Oil/Fuel Sheen	Foam	Other	Settled Solids*	Action Taken & Date
001											
002											
003											
004											
005											
006											
007											
008											
009											
010											


*Settled solids shall be examined after allowing to settle, undisturbed, 24 hours from the collection time.

Signature: _____ Printed Name: _____
 Title: _____ Date: _____

VISUAL MONITORING PARAMETERS		
Parameter	Method	Results
Color	Visual	Clear, yellow, red, brown, milky, etc.
Odor	Smell	None, earthy, sewage, musky, rotten eggs, petroleum, etc.
Clarity	Visual(look through the container)	1.) Can't see through the bottle 2.) Can see through, but can't read newsprint 3.) Can see through, and can read newsprint 4.) Pretty clear, but not as clear as bottled water 5.) As clear as bottled water
Floating Solids	Visual	Yes / No Describe
Suspended Solids	Visual(look through the container)	Yes / No Describe
Oil / Fuel Sheen	Visual	Color and amount
Foam	Visual	Yes / No Describe thickness, color, how much surface it covers
Other obvious indicators of storm water pollution	Visual	Tell it like you see it
Settled Solids	Visual(after settling for 24 hours)	Describe amount of solids that have settled out (Such as: tablespoons, cups, millimeters, etc. of material settled out.)

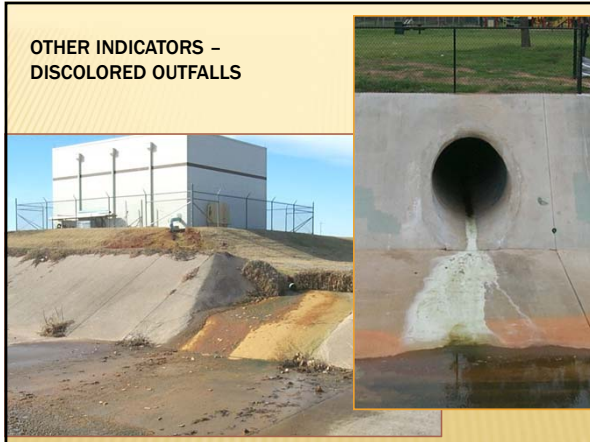
OTHER INDICATORS

* **Other obvious indicators of storm water pollution:**



•Indicate what was observed that would lead a reasonable person to believe that the storm water was polluted.
 •A specific example may be excessive trash (illegal dumping), excessive surface scum, or fish kills.

OTHER INDICATORS - DISCOLORED OUTFALLS



ADVERSE WEATHER CONDITIONS

- When adverse weather conditions prevent the collection of samples during the quarter, you must take a substitute sample during the next qualifying storm event.
- Documentation of the rationale for no visual assessment for the quarter must be included with your SWPPP.
- Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local **flooding**, **high winds**, or **electrical storms**, or situations that otherwise make sampling impractical, such as **drought** or extended **frozen** conditions.

QUESTIONS & COMMENTS
