STORM WATER SAMPLING

CITY OF OKLAHOMA CITY

STORM WATER QUALITY MANAGEMENT

OUTLINE

- QUARTERLY VISUAL MONITORING
  - ALL PERMITTEES
- SECTOR-SPECIFIC ANALYTICAL MONITORING
  - A, C, D, E, J, K, L, O, S
- IMPAIRED WATERS ANALYTICAL MONITORING
  - WITHIN ONE STREAM MILE OF IMPAIRED WATERWAY – 303(D)
  - TMDL
- HIGH RISK ANALYTICAL MONITORING
  - CERTAIN OKC PERMITTEES
    - LANDFILLS
    - OTHER TREATMENT, STORAGE, DISPOSAL AND RECOVERY FACILITIES
    - TRI REPORTERS
    - OTHERS AS REQUIRED BY THE MANAGER
- QUARTERLY VISUAL MONITORING VIDEO

NOTE: INACTIVE/UNSTAFFED FACILITIES, NO EXPOSURE FACILITIES, AND NO DISCHARGE FACILITIES (OKC ONLY) ARE NOT REQUIRED TO PERFORM MONITORING.

QUARTERLY VISUAL MONITORING

ALL INDUSTRIAL STORM WATER DISCHARGE PERMITTEES

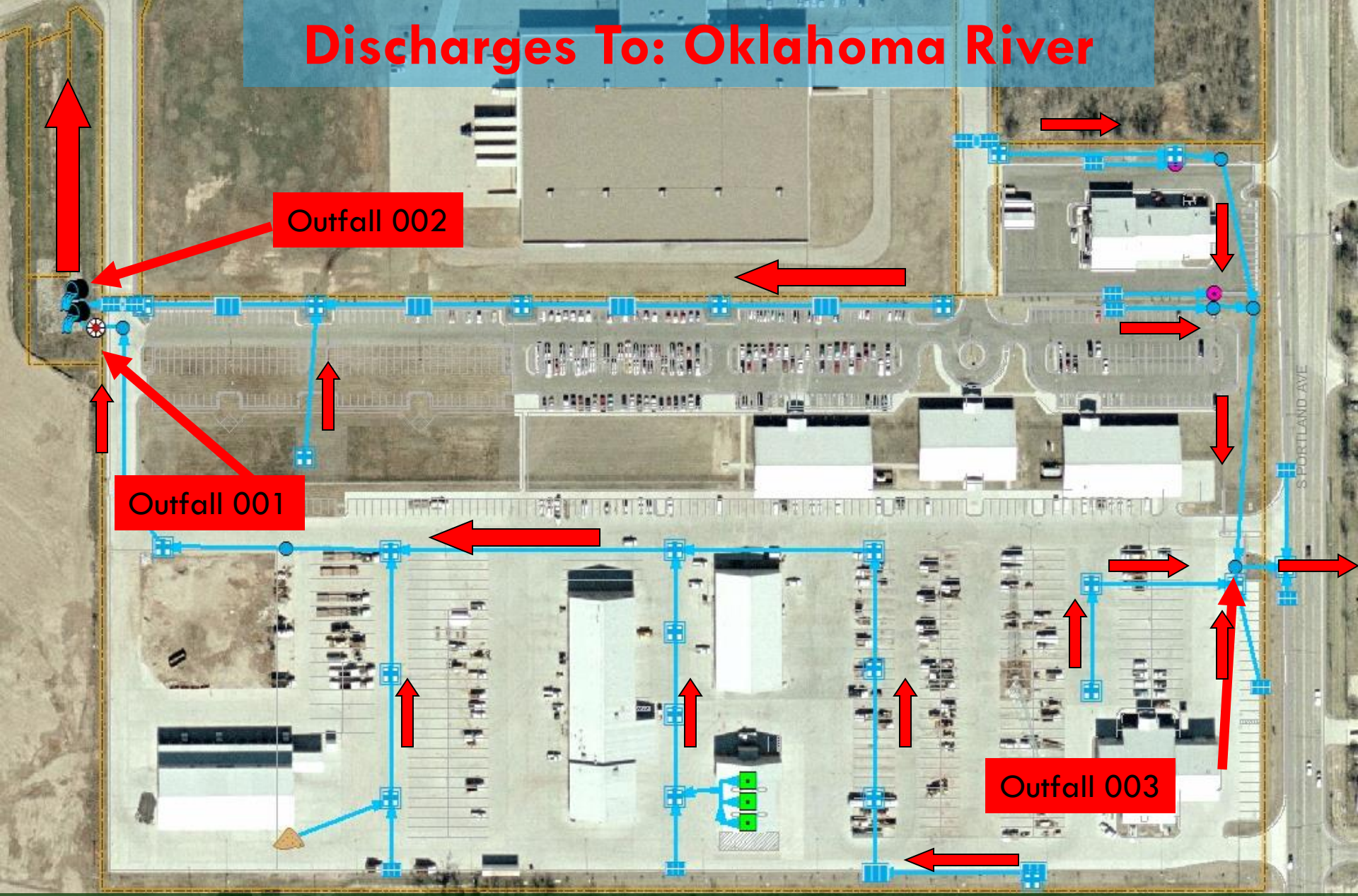
WHY ARE YOU DOING THIS?

- ALL INDUSTRIES THAT HAVE INDUSTRIAL STORM WATER DISCHARGE PERMITS ARE REQUIRED TO PERFORM VISUAL MONITORING AT LEAST ONCE PER CALENDAR QUARTER.
- PROVIDES VISUAL DOCUMENTATION OF WHETHER YOUR POLLUTION PREVENTION PLAN IS EFFECTIVE.

WHERE IS MY OUTFALL?

- AN OUTFALL REFERS TO ANY AND ALL AREAS WHERE STORM WATER DISCHARGES FROM YOUR FACILITY.
  - THERE COULD BE SEVERAL, DEPENDING ON THE LAYOUT OF YOUR FACILITY!
- OUTFALL(S) AT YOUR FACILITY MUST BE INDICATED ON YOUR FACILITY'S SITE MAP.
  - IF YOU ARE DEVELOPING A NEW SITE MAP, YOU MAY NEED TO WALK THE FACILITY DURING A RAIN EVENT IN ORDER TO DETERMINE OUTFALL LOCATIONS.
- IF YOU HAVE MORE THAN ONE OUTFALL, EACH OUTFALL WILL BE REQUIRED TO BE MONITORED SEPARATELY* - - EACH CALENDAR QUARTER.
- OUTFALLS MUST BE NUMBERED SEQUENTIALLY IN THIS FORMAT:
  - 001, 002, 003, ETC.

Discharges To: Oklahoma River



All of the surface water draining from this facility's property will eventually discharge into the North Canadian (Oklahoma) River through many different flow routes.

QUALIFYING RUNOFF EVENTS – THE RULES

- COLLECT SAMPLES WITHIN 30-60 MINUTES AFTER RUNOFF BEGINS DISCHARGING FROM YOUR FACILITY AT THE OUTFALL AREA(S).
  - THE GOAL: COLLECT THE FIRST FLUSH OF POLLUTANTS (IF ANY) AND RAIN WATER LEAVING YOUR FACILITY.
  - IF SAMPLES NOT COLLECTED WITHIN THE FIRST 30 MINUTES, MUST DOCUMENT WHY NOT.
- COLLECT SAMPLES DURING REGULAR WORKING AND DAYLIGHT HOURS.
  - FACILITIES OPERATING FOR EXTENDED HOURS/SHIFTS MUST HAVE PERSONNEL TRAINED AND AVAILABLE TO COLLECT SAMPLES DURING THOSE OPERATIONAL PERIODS (DAYLIGHT ONLY).
- RAINFALL EVENT MUST TOTAL AT LEAST 0.10 INCHES OF RAIN.
- MUST BE AT LEAST 72 HOURS FROM A PREVIOUS MEASURABLE RUNOFF EVENT.
  - MEASURABLE MEANS 0.10 INCHES OR MORE OF RAIN.

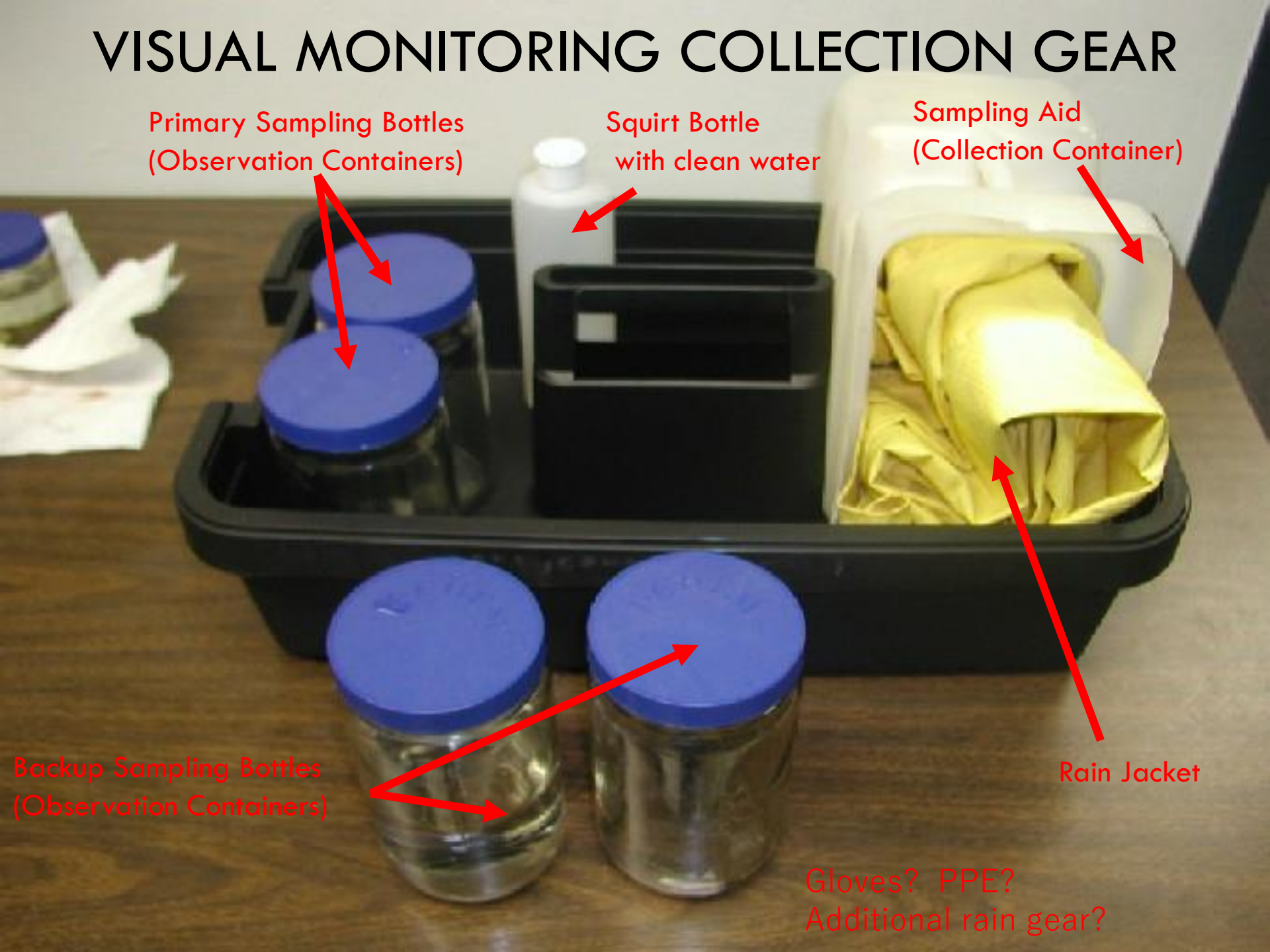
ICE AND SNOW MELT RUNOFF

- FROZEN PRECIPITATION MAY BE COLLECTED ONCE MELTING BEGINS.
  - INDICATE THE CORRECT CHOICE ON THE QUARTERLY VISUAL MONITORING FORM.
- COLLECT SAMPLES DURING A PERIOD WITH MEASURABLE DISCHARGE.
  - THE GOAL: COLLECT THE FIRST FLUSH OF POLLUTANTS (IF ANY) AND MELTED WATER LEAVING YOUR FACILITY.
  - FIRST DAY OF MELTED RUNOFF ONLY!
- COLLECT SAMPLES DURING REGULAR WORKING AND DAYLIGHT HOURS.
  - FACILITIES OPERATING FOR EXTENDED HOURS/SHIFTS MUST HAVE PERSONNEL TRAINED AND AVAILABLE TO COLLECT SAMPLES DURING THOSE OPERATIONAL PERIODS (DAYLIGHT ONLY).

EQUIPMENT NEEDED

- CLEAN OBSERVATION CONTAINER(S) SUCH AS A CLEAR TWO-LITER BOTTLE, MASON JAR, OR OTHER CLEAR CONTAINER(S).
  - ONE PER OUTFALL – MAKE SURE THEY'RE LABELED WITH THE OUTFALL NUMBER!
- BOOTS, WADERS, OR CLOTHES THAT YOU DO NOT MIND GETTING WET AND DIRTY.
  - RAIN GEAR?
- YOUR NOSE, EYES, AND HANDS.
- QUARTERLY VISUAL MONITORING REPORT FORM AND A PEN/PENCIL
- SPECIALIZED EQUIPMENT MAY INCLUDE:
  - SWIMMING POOL EXTENSION POLE FOR REACHING INTO FLOWING WATER
  - WATERPROOF PAPER
  - LATEX GLOVES AND OTHER PROTECTIVE SAFETY GEAR (EYE PROTECTION, LIFE VEST, ETC.)
  - SAMPLING AID (COLLECTION CONTAINER)

VISUAL MONITORING COLLECTION GEAR



SAMPLING PROCEDURE

- USE A SEPARATE, CLEAN OBSERVATION CONTAINER LABELED FOR EACH OUTFALL (GLASS OR PLASTIC).
- UTILIZE A CLEAN COLLECTION CONTAINER TO COLLECT SAMPLES AND IMMEDIATELY DISPENSE THE SAMPLE INTO THE OBSERVATION CONTAINER.
  - WHILE DIPPING THE COLLECTION CONTAINER INTO THE WATER FLOW, MAKE CERTAIN THAT THE CONTAINER IS NOT COMPLETELY SUBMERGED.
    - THIS ALLOWS ANY FLOATING MATERIALS TO ALSO BE COLLECTED.
  - DO NOT SCOOP SEDIMENT FROM THE BOTTOM OF THE SAMPLING LOCATION.
  - COLLECT APPROXIMATELY 500ML (ABOUT A QUART) OF WATER FOR EACH.
  - RINSE THE COLLECTION CONTAINER PRIOR TO SAMPLING THE NEXT OUTFALL, IF THERE ARE MULTIPLE OUTFALLS AT YOUR FACILITY.
- ONCE ALL COLLECTION AND OBSERVATION ACTIVITIES HAVE BEEN COMPLETED AND DOCUMENTED, WASH, RINSE, AND DRY YOUR SAMPLING EQUIPMENT TO BE READY FOR THE NEXT QUALIFYING EVENT.

SAMPLING PROCEDURE

WHEN SAMPLING SHALLOW WATER, SAMPLING AIDS (SUCH AS THIS PRE-CLEANED PLASTIC JUG WITH THE TOP CUT OFF) MAKE EXCELLENT COLLECTION CONTAINERS.

DOCUMENTATION

- QUARTERLY VISUAL MONITORING IS DOCUMENTED ONTO QUARTERLY VISUAL MONITORING REPORT FORM.
- DOCUMENT ONE OUTFALL PER PAGE.
- DOCUMENT ALL QUARTERS AND OUTFALLS – SAMPLED OR NOT (AND WHY).
- KEEP ALL RECORDS IN THE SWP3.
- CORRECTIVE ACTIONS, FOR ANY PROBLEMS FOUND, MUST BE DOCUMENTED ONTO CORRECTIVE ACTION FORM.
- IF APPLICABLE, DOCUMENT WHY IT WAS NOT POSSIBLE TO TAKE SAMPLES WITHIN THE FIRST 30 MINUTES AFTER RUNOFF BEGINS (FIRST FLUSH).
  - LEGALLY, YOU HAVE UP TO AN HOUR (60 MINUTES), AFTER RUNOFF BEGINS, TO COLLECT THE SAMPLES.
  - ENCOURAGES PERMITTEES TO SAMPLE THE FIRST FLUSH!
  - NO "SPOT" FOR THIS ON THE FORM, JUST WRITE IT IN.
- DOCUMENT PROBABLE SOURCES OF OBSERVED CONTAMINATION.
- IF NO QUALIFYING STORM EVENT OCCURS IN A CALENDAR QUARTER, DOCUMENTATION MUST BE INCLUDED, SIGNED AND CERTIFIED INTO THE SWP3.

DOCUMENTATION

Note: must add comments regarding why you weren't able to collect samples within the first 30 minutes, if applicable.

Quarterly Visual Monitoring Report

(Complete a separate form for each outfall you assess)

Facility Name:		DEQ Authorization No. OKR05_____
Outfall Id.:	Substantially Identical Outfall? ☐ No ☐ Yes	
Date & Time Discharge Began:	Date & Time Sample Collected:	Date & Time Sample Examined:
Substitute Sample? ☐ No	☐ Yes	
Person's Name/Title collecting sample:		
Person's Name/Title examining sample:		
Nature of Discharge: ☐ Rainfall,	Rainfall Amount: _____ inches	☐ Snowmelt

Parameters & Observation Results

Parameter	Method	Results
Color	Visual	☐ Clear ☐ Green ☐ Yellow ☐ Brown ☐ Red ☐ Black ☐ Blue ☐ Milky ☐ Other (Describe)_____
Odor	Smell	☐ None ☐ Musky ☐ Earthy ☐ Rotten Eggs ☐ Sewage ☐ Petroleum ☐ Other (Describe)_____
Clarity or Turbidity	Visual (try to see through clear container)	☐ Can't see through bottle ☐ Can see through but can't read newsprint ☐ Can see through and read newsprint ☐ Clear, but not as clear as bottled water ☐ As clear as bottled water
Floating Solids	Visual (top of water in container)	☐ Yes (Describe) _____ ☐ No
Settled Solids	Visual (bottom of container)	☐ ____ Tablespoons, or ☐ ____ Cups of solids on bottom after 60 minutes.
Suspended Solids	Visual (look through container)	Describe Observations. _____
Foam	Visual	☐ No ☐ Yes, if yes, Thickness _____ Color _____
Oil Sheen	Visual	☐ No ☐ Yes, if yes, Color _____ Extent _____
Other Obvious Indicators of Stormwater Pollution	Indicate what you observed	_____
Probable Sources of any Observed Stormwater Contamination: _____		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

DEQ's Template

VISUAL MONITORING PARAMETERS

Parameter	Method	Results
Color and Extent	Visual	Clear, yellow, red, blue, green, brown, black, milky, etc.
Odor	Smell	None, earthy, sewage, musky, rotten eggs, petroleum, etc.
Clarity or Turbidity	Come up with your own test such as: clean off the label from a 1-liter or similar size clear plastic or glass bottle, fill the bottle with the sample, and try to see things through it	1) can't see through the bottle 2) can see through but could not 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 what they are.
Settled Solids	Use same 1-liter or similar size plastic or glass bottle	Tablespoons or cups of material or millimeters of solids on bottom ***after at least 60 minutes***
Suspended Solids	Look through the container	Describe what do you see?
Foam	Visual	Yes - How thick is the foam? How much of the surface does it cover? What color is the foam? or No
Oil Sheen	Visual	Color and extent.
Other obvious Indicators of Stormwater Pollution	Indicate what you observed that would lead a reasonable person to believe that the stormwater was polluted	Describe what do you see?

OTHER INDICATORS OF POLLUTION

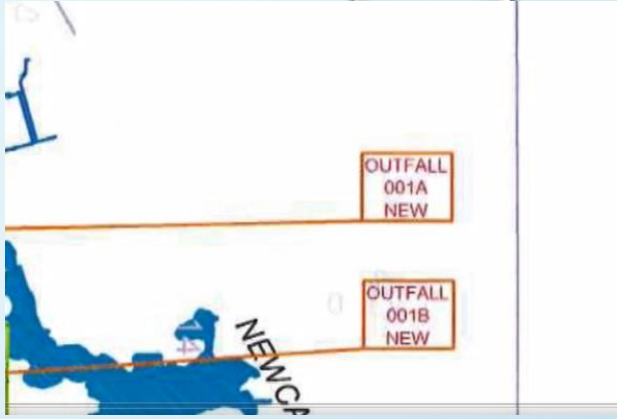
- INDICATE WHAT WAS OBSERVED THAT WOULD LEAD A REASONABLE PERSON TO BELIEVE THAT THE STORM WATER RUNOFF WAS POLLUTED.
- EXAMPLES:
  - EXCESSIVE TRASH (ILLEGAL DUMPING);
  - EXCESSIVE SURFACE SCUM;
  - DISCOLORED OUTFALLS; OR
  - FISH KILLS.

ADVERSE WEATHER CONDITIONS

- WHEN ADVERSE WEATHER CONDITIONS PREVENT THE COLLECTION OF SAMPLES DURING A CALENDAR QUARTER, YOU MUST TAKE A SUBSTITUTE SAMPLE DURING THE NEXT QUALIFYING EVENT.
- ADVERSE CONDITIONS POTENTIALLY CREATING A DANGEROUS SITUATION, INACCESSIBILITY, OR IMPRACTICABILITY:
  - LOCAL FLOODING
  - HIGH WINDS
  - ELECTRICAL STORMS
  - HAIL
  - TORNADO
  - EXTENDED FROZEN CONDITIONS
  - DROUGHT

- YOU MUST DOCUMENT ANY FAILURE TO MONITOR, AND INDICATE THE REASON.

*REPRESENTATIVE OUTFALLS



- IF YOUR FACILITY HAS TWO OR MORE OUTFALLS AND THE FOLLOWING APPLY:
  - DISCHARGES CONSIST OF SUBSTANTIALLY IDENTICAL EFFLUENTS (THEY LOOK THE SAME), AND
  - SIMILAR INDUSTRIAL ACTIVITIES AND CONTROL MEASURES EXIST IN THE AREAS BEING COMPARED (SIMILAR ACTIVITIES IN EACH AREA), AND
  - SIMILAR EXPOSED MATERIALS MAY CONTRIBUTE POLLUTANTS TO STORM WATER RUNOFF IN THE AREAS BEING COMPARED (SIMILAR MATERIALS IN EACH AREA), AND
  - SIMILAR RUNOFF COEFFICIENTS OF THE OUTFALLS' DRAINAGE AREAS.
    - NOTE: "RUNOFF COEFFICIENT MEANS THE FRACTION OF TOTAL RAINFALL THAT WILL APPEAR AT THE CONVEYANCE (OUTFALL) AS RUNOFF." (I.E.: SIMILAR AREA IN SIZE)
- IF EACH OF THE ABOVE SITUATIONS IS TRUE, AND YOU HAVE SHOWN THROUGH PREVIOUS QUARTERLY VISUAL MONITORING RESULTS THAT THE ABOVE IS TRUE, THEN YOU MAY APPLY FOR AN ALLOWANCE TO MONITOR THE OUTFALLS ON A ROTATING BASIS FOR QUARTERLY VISUAL MONITORING.
- BE AWARE: IF CONTAMINATION IS FOUND AT THE REPRESENTATIVE SAMPLING POINT, CONTROL MEASURES MUST BE ASSESSED AND MODIFIED FOR EACH OUTFALL REPRESENTED BY THE MONITORED ONE.

REPRESENTATIVE OUTFALLS & ANALYTICAL MONITORING

- WITH ANY REQUIRED ANALYTICAL MONITORING, **ALL** OUTFALLS MUST BE SAMPLED.
- CANNOT "SKIP" AN OUTFALL DUE TO REPRESENTATIVE OUTFALLS BEING UTILIZED.
- PERTAINS TO:
  - NELMS (ANNUAL ANALYTICAL MONITORING FOR CERTAIN BUSINESS TYPES)
  - IMPAIRED WATERS MONITORING (TMDLS, 303(D) LISTED STREAMS)
  - HIGH RISK RUNOFF MONITORING (5-YEAR ANALYTICAL MONITORING FOR CERTAIN OKC FACILITIES)
  - ANY OTHER REQUIRED ANALYTICAL MONITORING.

SECTOR-SPECIFIC ANALYTICAL MONITORING

OKR05 SECTORS: A, C, D, E, J, K, L, O, S

EFFLUENT LIMITATIONS SAMPLING

- ANALYTICALS ARE IN ADDITION TO QUARTERLY VISUAL MONITORING FOR THE AFFECTED BUSINESS TYPES.
  - IN SOME CASES, NOT ALL SIC CODES INCLUDED IN SECTOR MUST PERFORM ANALYTICALS. SEE OKR05 FOR MORE INFORMATION.
- MUST SAMPLE ALL OUTFALLS, REGARDLESS OF "REPRESENTATIVE" OUTFALL STATUS.
- ANALYTICALS ARE TO BE PERFORMED ONCE PER CALENDAR YEAR.
- REPORT RESULTS BY JANUARY 15 OF THE FOLLOWING YEAR, ON THE E-DMR FORM (TO DEQ).
- PROVIDE A COPY TO YOUR OKC IND SWQ INSPECTOR.

EFFLUENT LIMITATIONS GUIDELINES

Table 1-1 Stormwater-Specific Effluent Limitation Guidelines

Regulated Discharges	40 CFR Section	MSGP Sector & SIC Code
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429 Subpart I	A 2411
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products	Part 418 Subpart A	C 2874
Runoff from asphalt emulsion facilities	Part 443 Subpart A	D 2951 & 2952
Runoff from material storage piles at cement manufacturing facilities	Part 411 Subpart C	E 3241
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436 Subparts B, C, & D	J 1422-1429, 1442, & 1446
Runoff from hazardous waste and non-hazardous waste landfills	Part 445 Subpart A & B	K & L
Runoff from coal storage piles at steam electric generating facilities	Part 423	O
Runoff from airfield pavement areas where deicing/anti-icing activities occur at existing and new airports	Part 449 [1]	S 4512-4581

[1] 40 CFR Part 449 applies only to the airports with 1,000 or more annual non-propeller aircraft departures. However, this effluent limitation requirement is extended based on BPJ to all existing and new airports based on the 2011 OKR05 general permit and anti-backsliding provisions of 40 CFR § 122.44(l)(1).

SECTOR C – CHEMICAL AND ALLIED PRODUCTS MANUFACTURING

Sector Table C-1 Chemical and Allied Products Manufacturing Sector-Specific Effluent Limitations

Industrial Activity	Parameter	Numeric Limitation
Runoff from Phosphate Fertilizer Manufacturing facilities that comes into contact with any raw materials, intermediate product, finished product, by-products or waste product (SIC Code 2874)	Total Phosphorus (as P)	105 mg/L, daily max.
		35 mg/L, 30-day avg.
	Fluoride	75 mg/L, daily max.
		25 mg/L, 30-day avg.

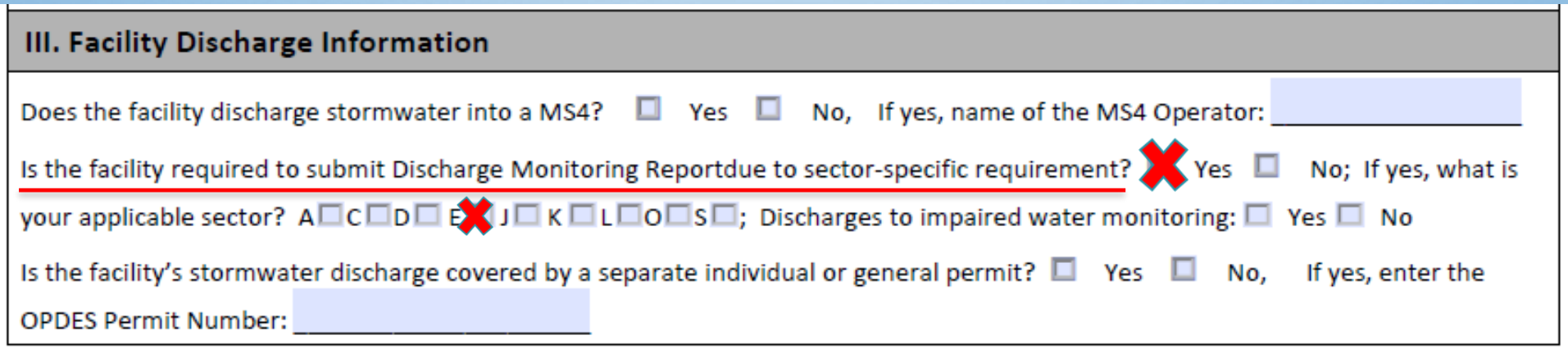
SECTOR D - ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANT MANUFACTURERS

Sector Table D-1 Asphalt Paving and Roofing Materials and Lubricant Manufacturers Sector-Specific Effluent Limitations

Industrial Activity	Parameter	Numeric Limitations
Discharges from asphalt emulsion facilities	Total Suspended Solids (TSS)	23.0 mg/L, daily max. 15.0 mg/L, 30-day avg.
	Oil & Grease	15.0 mg/L, daily max. 10.0 mg/L, 30-day avg.
	pH	6.5 - 9.0 s.u.

INDICATE ON NOI

- IF THESE MONITORING REQUIREMENTS APPLY TO YOU, BE SURE TO INDICATE THE FACT ON YOUR NOTICE OF INTENT (NOI).
- MARK YOUR CORRECT SECTOR.



III. Facility Discharge Information

Does the facility discharge stormwater into a MS4? ☐ Yes ☐ No, If yes, name of the MS4 Operator: _____

Is the facility required to submit Discharge Monitoring Reportdue to sector-specific requirement? ☒ Yes ☐ No; If yes, what is your applicable sector? A☐ C☐ D☐ E☒ J☐ K☐ L☐ O☐ S☐; Discharges to impaired water monitoring: ☐ Yes ☐ No

Is the facility's stormwater discharge covered by a separate individual or general permit? ☐ Yes ☐ No, If yes, enter the OPDES Permit Number: _____

EXCEEDANCE – WHAT TO DO

- YOU MUST CONDUCT FOLLOW-UP MONITORING WITHIN 30 CALENDAR DAYS, OR DURING THE NEXT QUALIFYING RUNOFF EVENT, OF IMPLEMENTING CORRECTIVE ACTIONS TAKEN IN RESPONSE TO AN EXCEEDANCE OF A NUMERIC EFFLUENT LIMIT.
- FOLLOW-UP MONITORING MUST BE PERFORMED FOR ANY AND ALL POLLUTANT(S) THAT EXCEED THE EFFLUENT LIMITS LISTED IN THE OKR05.
- YOU MUST CONTINUE TO MONITOR, AT LEAST QUARTERLY, UNTIL YOUR DISCHARGE IS IN COMPLIANCE WITH THE EFFLUENT LIMIT OR UNTIL THE ODEQ WAIVES THE REQUIREMENT FOR ADDITIONAL MONITORING.
- YOU MUST INCLUDE THE RESULTS OF FOLLOW-UP MONITORING IN YOUR REPORT.

IMPAIRED WATERS MONITORING

- ANALYTICAL MONITORING IS REQUIRED IF OUTFALL (AFTER MS4) IS WITHIN ONE STREAM MILE OF AN IMPAIRED WATERWAY ON STATE'S 303(D) IMPAIRED WATERS LISTING.
- TMDL

Definitions

- **Impaired Waters**

  Section 303(d) of the Clean Water Act requires states to develop lists of impaired waters, those that do not meet water quality standards that states have set for them.

- **Total Maximum Daily Load**

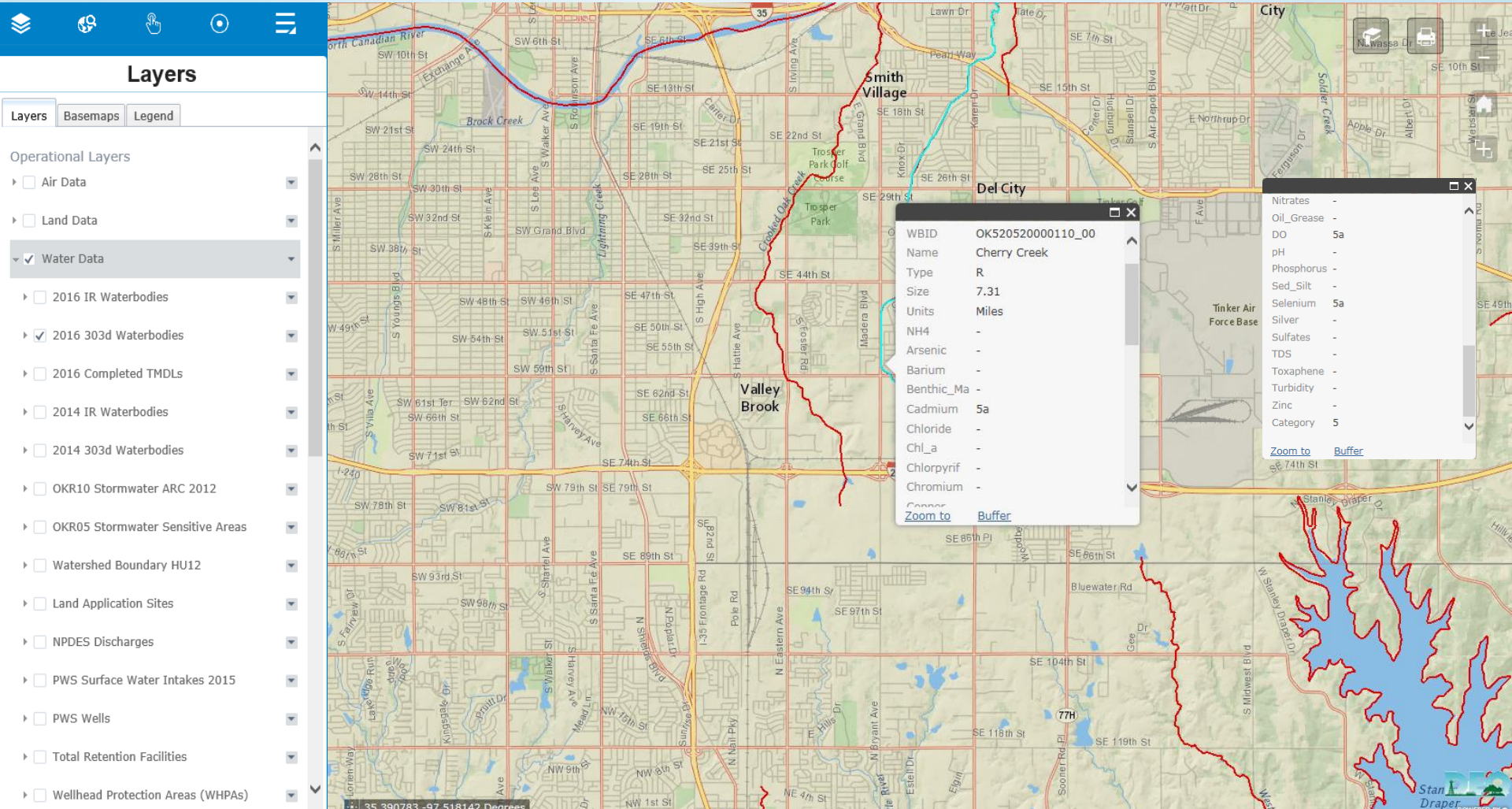
  The law requires that states establish priority rankings for impaired waters and develop total maximum daily loads (TMDLs) for them. A TMDL specifies the maximum amount of a pollutant that a body of water can receive and still meet water quality standards.

http://www.epa.gov/owow/tmdl/overviewfs.html

IMPAIRED WATERS MONITORING, 303(D) LISTED STREAMS

- DETERMINE IF YOUR FACILITY DISCHARGES TO A REGULATED MS4, SUCH AS OKLAHOMA CITY.
- FIND OUT WHERE YOUR STORM WATER OUTFALLS DISCHARGE TO.
- IF YOU'RE WITHIN ONE STREAM MILE OF A 303(D) IMPAIRED WATERBODY, YOU MUST PERFORM ANALYTICAL MONITORING FOR THE IMPAIRED CONSTITUENT(S) THAT A STANDARD ANALYTICAL METHOD EXISTS (40 CFR PART 136).
  - LOOK FOR 303(D) IMPAIRMENTS AT HTTP://GIS.DEQ.OK.GOV/MAPS/
  - MONITOR FOR TSS (TOTAL SUSPENDED SOLIDS) IF IMPAIRMENT IS LISTED AS:
    - SUSPENDED SOLIDS
    - TURBIDITY
    - SEDIMENT/SEDIMENTATION
  - NO MONITORING REQUIRED FOR BIOLOGICAL COMMUNITY IMPAIRMENTS
- ANALYTICAL MONITORING IS TO BE PERFORMED ONCE PER CALENDAR YEAR.
- REPORT RESULTS BY JANUARY 15 OF THE FOLLOWING YEAR, ON THE E-DMR FORM (TO DEQ).
- PROVIDE A COPY TO YOUR OKC IND SWQ INSPECTOR.

IMPAIRED WATERS MONITORING, 303(D) LISTED STREAMS



303(D) STREAM CATEGORIES

- Category 4 - Impaired or threatened for one or more designated uses but does not require the development of a TMDL.
  - 4a - TMDL has been completed.
  - 4b - Other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future.
  - 4c - Impairment is not caused by a pollutant.
- Category 5 - The water quality standard is not attained. The waterbody is impaired or threatened for one or more designated uses by a pollutant(s), and requires a TMDL. This category constitutes the Section 303(d) list of waters impaired or threatened by a pollutant(s) for which one or more TMDL(s) are needed.
  - 5a - TMDL is underway or will be scheduled.
  - 5b - A review of the water quality standards will be conducted before a TMDL is scheduled.
  - 5c - Additional data and information will be collected before a TMDL or review of the water quality standards is scheduled.

DISCONTINUING MONITORING, 303(D) LISTED STREAMS

- YOU MAY DISCONTINUE MONITORING FOR A POLLUTANT IF:
  - THE POLLUTANT OF CONCERN IS NOT DETECTED AND ISN'T EXPECTED TO BE PRESENT IN YOUR DISCHARGE, OR
  - IF THE POLLUTANT OF CONCERN IS DETECTED BUT YOU HAVE DETERMINED THAT ITS PRESENCE IS CAUSED SOLELY BY NATURAL BACKGROUND SOURCES.
- PROVIDE DOCUMENTATION TO DEQ (AND OKC) TO REQUEST DISCONTINUANCE OF MONITORING.
  - STATE EXPLANATION AND REASONS FOR THE REQUEST
  - INCLUDE DATA/STUDIES TO TIE THE POLLUTANT TO NATURAL BACKGROUND SOURCES
- SEE OKR05 AND OKR05 FACTSHEET FOR MORE INFORMATION

BACTERIAL MONITORING EXEMPTION

- IF THE RECEIVING WATERS ARE ON THE 303(D) LIST AS IMPAIRED FOR BACTERIA:
  - E. COLI
  - ENTEROCOCCI
- IF YOU DO NOT HAVE ANY PORTABLE TOILETS ONSITE AND YOU DO NOT DISCHARGE WASTEWATER TO A SEPTIC SYSTEM, YOU DO NOT HAVE TO PERFORM BACTERIAL MONITORING
- YOU MUST DOCUMENT THIS TO OKC/DEQ AND IN YOUR SWP3

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- FOR DISCHARGES TO AN IMPAIRED WATER WHERE A TMDL EXISTS, PERMITTEE MUST FOLLOW GUIDELINES, RESTRICTIONS, AND SAMPLING REQUIREMENTS LISTED WITHIN THE TMDL.
- FOR DISCHARGES TO AN IMPAIRED WATER WHERE A TMDL IS ESTABLISHED AFTER YOU'VE SUBMITTED YOUR NOI, PERMITTEE MUST IMPLEMENT AND FOLLOW GUIDELINES, RESTRICTIONS, AND SAMPLING REQUIREMENTS LISTED WITHIN THE TMDL – WITHIN THE ESTABLISHED TIMEFRAME.

LAKE THUNDERBIRD TMDL

- EXAMPLE FOR SE OKC

The City of
OKLAHOMA CITY
Department of Public Works
Storm Water Quality Management

LAKE THUNDERBIRD WATERSHED TOTAL MAXIMUM DAILY LOAD (TMDL) SPECIFIC REQUIREMENTS FOR MULTI-SECTOR GENERAL PERMIT (INDUSTRIAL) STORMWATER PERMITS

In addition to the general provisions of the OKR05 General Permit (General Permit for Storm Water Discharges from Industrial Facilities under the Multi-Sector Industrial General Permit [MSGP] within the State of Oklahoma), specific requirements will be added to existing and future permits for MSGP permittees in the Lake Thunderbird watershed engaged in activities specified by the Standard Industrial Classification (SIC) Code or Activity Code as:

- ☐ 2951,2952: Asphalt Paving and Roofing Materials (production).
- ☐ 3271-3275: Concrete, Gypsum and Plaster Products (production).
- ☐ 1442,1446: Sand and Gravel (mineralmining and dressing).
- ☐ Other activities deemed to be potential sources of nutrients and sediment to the Lake as determined by the DEQ on a case-by-case basis.

The following provisions will be included as site-specific requirements in existing and future authorizations under OKR05 and the City of Oklahoma City:

A. Revise the Storm Water Pollution Prevention Plan (SWP3) for additional Total Suspended Solids and nutrient reduction measures and submit the SWP3 for DEQ review.

B. Perform monthly inspection and maintenance of stormwater management devices, facility equipment and systems to avoid breakdowns or failures.

C. If the permit is for an activity that includes numeric effluent limits (see Table 1-3 of the MSGP), monitoring and reporting of the discharge is required once per month rather than once per year.

D. Comply with any additional pollutant prevention or discharge monitoring requirements established by the local MS4 municipalities. Compliance with these specific requirements must be reflected in the permittee's Annual Comprehensive Site Compliance Evaluation Report (ACSCER), in addition to documents within the SWP3.

If you have any questions, contact Storm Water Quality at 297-1774.

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- ANALYTICAL MONITORING IS TO BE PERFORMED AS DESCRIBED IN THE TMDL.
- REPORT ANALYTICAL RESULTS BY THE 15TH OF THE FOLLOWING MONTH – AFTER EACH REPORTING PERIOD, ON THE E-DMR FORM (TO DEQ).
- PROVIDE A COPY TO YOUR OKC IND SWQ INSPECTOR.

INDICATE ON NOI

- IF THESE MONITORING REQUIREMENTS APPLY TO YOU, BE SURE TO INDICATE THE FACT ON YOUR NOTICE OF INTENT (NOI).

III. Facility Discharge Information

Does the facility discharge stormwater into a MS4? ☐ Yes ☐ No, If yes, name of the MS4 Operator: _____

Is the facility required to submit Discharge Monitoring Reportdue to sector-specific requirement? ☐ Yes ☐ No; If yes, what is your applicable sector? A☐ C☐ D☐ E☐ J☐ K☐ L☐ O☐ S☐; Discharges to impaired water monitoring: ☒ Yes ☐ No

Is the facility's stormwater discharge covered by a separate individual or general permit? ☐ Yes ☐ No, If yes, enter the OPDES Permit Number: _____

Outfall and Receiving Water Information

Outfall ID	Latitude/ Longitude	Name of the Receiving Waterbody	Is this waterbody impaired? If so, what are its impairments?	Is there a TMDL for that impairment?
001	35.123489 -97.987654	NORTH CANADIAN RIVER	☒ Yes ☐ No D.O., E. Coli	☒ Yes ☐ No Enterococci
002			☐ Yes ☐ No	☐ Yes ☐ No

E-DMR

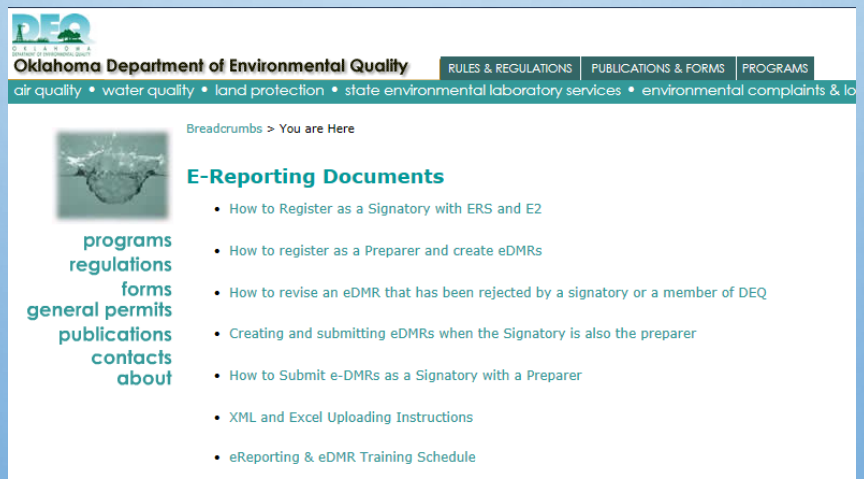
- E-DMR REPORTING:
  - SECTOR-SPECIFIC ELG'S
  - IMPAIRED WATERS MONITORING

ONLINE DMR REPORTING

- DEQ REQUIRES ONLINE DMR REPORTING FOR ALL ANALYTICAL LAB TESTING PERFORMED
  - OTHER PARAMETERS AS REQUIRED (EX: FLOW RATE)
  - DOES NOT INCLUDE QUARTERLY VISUAL MONITORING
- ALL MONITORING DATA COLLECTED MUST BE SUBMITTED TO DEQ USING THE DISCHARGE MONITORING REPORT (DMR) FORM NO LATER THAN 15TH DAY OF THE MONTH AFTER THE END OF THE REPORTING PERIOD.
  - IF YOUR FACILITY DOESN'T HAVE ANY DISCHARGE DURING THE YEAR, YOU ARE STILL REQUIRED TO SUBMIT DMRS TO DEQ STATING NO DISCHARGE EACH YEAR BY JANUARY 15.
- YOU MUST ALSO SUBMIT YOUR DMR FORMS TO THE CITY OF OKLAHOMA CITY.
  - PROVIDE A PHOTOCOPY TO YOUR INSPECTOR DURING YOUR AUDIT.

ONLINE DMR REPORTING

- INSTRUCTIONS ON HOW TO REGISTER AS A PREPARER OR SIGNATORY FOR ELECTRONIC DMR (EDMR), AS WELL AS HOW TO PREPARE AND SUBMITS EDMR, CAN BE FOUND ON DEQ'S WEBSITE:
  - HTTP://WWW.DEQ.STATE.OK.US/WQDNEW/EREPORTING/INDEX.HTML
  - ASSISTANCE IS ALSO AVAILABLE BY CONTACTING DEQ AT (405) 702-1000 OR 1-800-869-1400 OR DEQREPORTING@DEQ.OK.GOV .
- E-DMR IS REQUIRED FOR ALL ANALYTICAL MONITORING BEING REPORTED TO THE STATE, INCLUDING WASTEWATER MONITORING.



HIGH RISK ANALYTICALS

CERTAIN OKC PERMITTEES:

- MUNICIPAL LANDFILLS
- OTHER TREATMENT, STORAGE, DISPOSAL AND RECOVERY FACILITIES
- TRI REPORTERS
- OTHERS AS REQUIRED BY THE MANAGER

HIGH RISK ANALYTICAL MONITORING

- ONLY APPLIES TO CERTAIN OKC PERMITTEES:
  - LANDFILLS
  - OTHER TREATMENT, STORAGE, DISPOSAL AND RECOVERY FACILITIES
  - TRI REPORTERS
  - OTHERS AS REQUIRED BY THE MANAGER (YOU WILL BE NOTIFIED)
- PERFORMED EVERY 5 YEARS
  - LAST REQUESTED 2015
  - NEXT REQUEST TO BE SENT OUT IN 2020
- SUBMIT RESULTS TO YOUR OKC SWQ INSPECTOR
  - FAX, EMAIL, MAIL, HAND-DELIVER
  - DMR FORM NOT REQUIRED

HIGH RISK ANALYTICAL MONITORING

Parameter	Standard Methods (Editions)	Sample Container	Volume	Preservative	Max. Holding Time
Oil and Grease	5520B (18th, 19th, 20th)	Amber Glass	1000 ml	pH<2 with HCL or H2SO4, Ice	28 Days
Chemical Oxygen Demand (COD)	5220C (18th, 19th, 20th); 5220D (19th, 19th, 20th)	HDPE	125 ml	pH<2 with H2SO4, Ice	48 Hours
pH	4500 H B (18th, 19th, 20th)	Glass or Plastic	Variable	Not Applicable	Analyze Immediately
Biochemical Oxygen Demand (BOD)	5210B (18th, 19th, 20th Edition)	HDPE	1000 ml	No Preservative, Ice	48 hours
Total Suspended Solids (residue - nonfilterable)	2540 D (18th, 19th, 20th)	HDPE	250 ml	No Preservative, Ice	7 Days
Total Phosphorus	4500 P-B, 5 (18th, 19th, 20th); 4500 P E (18th, 19th, 20th); 4500 P F (18th, 19th, 20th)	HDPE	125 ml	pH<2 H2SO4, Ice	28 Days
Total Kjeldahl Nitrogen (TKN)	4500-Norg B or C and 4500-NH3B (18th, 19th, 20th); 4500-NH3 C (18th); 4500-NH3 E (18th)	HDPE	1000 ml	pH<2 H2SO4, Ice	28 Days
Nitrate plus Nitrite Nitrogen	4500-NO3-E (18th, 19th, 20th); 4500-NO3-F (18th, 19th, 20th); 4500-NO3-H (18th, 19th, 20th)	HDPE	250 ml	pH<2 H2SO4, Ice	28 Days

HIGH RISK - INDICATE ON OKC NOI

- IF THESE MONITORING REQUIREMENTS APPLY TO YOU, BE SURE TO INDICATE THE FACT ON YOUR NOTICE OF INTENT (NOI).
- ONLY APPLIES TO OKC NOI.

III. Facility Discharge Information

Does the facility discharge stormwater into a MS4? X Yes The name of the MS4 Operator: **The City of Oklahoma City**

Is the facility required to submit Discharge Monitoring Reportdue to sector-specific requirement? ☐ Yes ☐ No; If yes, what is your applicable sector? A☐ C☐ D☐ E☐ J☐ K☐ L☐ O☐ S☐; Discharges to impaired water monitoring: ☐ Yes ☐ No

Is the facility's storm water discharge covered by a separate individual or general permit? ☐ Yes ☐ No, If yes, enter the OPDES Permit Number: _____ Is the facility required to perform "High Risk" monitoring every 5 years? ✖ Yes ☐ No

ANALYTICAL MONITORING

TIPS, TRICKS, AND REQUIREMENTS

ALL ANALYTICAL MONITORING

- MUST USE CERTIFIED LAB, OR CALIBRATED METERS
  - 40 CFR PART 136 METHODS
- OBTAIN SAMPLING KIT BEFORE-HAND:
  - GLASS/PLASTIC BOTTLES
  - CLEAR/AMBER BOTTLES
  - MAY REQUIRED ADDITIVE FOR PRESERVATION
- PROPERLY LABEL BOTTLES
- BOTTLES INTO ICE CHEST FOR TRANSPORTATION TO LAB ASAP
- COMPLETE CHAIN-OF-CUSTODY FORM
- CONTACT DEQ'S LAB FOR FORMS, TESTING SERVICES & ADDITIONAL INFORMATION:
  - WWW.DEQ.STATE.OK.US/CSDNEW/SEL.HTM
  - 866-412-3057

DEQ ENVIRONMENTAL LAB WEBPAGE

http://www.deq.state.ok.us/csdnew/sel.htm

State Environmental Labora...

Skip to Main Content

Oklahoma Department of Environmental Quality

RULES & REGULATIONS | PUBLICATIONS & FORMS | PROGRAMS

air quality • water quality • land protection • state environmental laboratory services • environmental complaints & local services • office of external affairs

Effective immediately, all lab samples must be sent to:
State Environmental Laboratory Services
PO Box 1677
Oklahoma City, OK 73101

State Environmental Laboratory Services Division

The organic and inorganic laboratories provide analytical support to various programs within DEQ, to other state agencies, to the state's 1,700 public water supply systems and to citizens who request services.

Mailing Address
Oklahoma Department of Environmental Quality
State Environmental Lab Services Division
P.O. Box 1677
707 North Robinson
Oklahoma City, OK 73102
General Phone Number (405) 702-1000
Fax Number (405) 702-1001
Toll Free 1-866-412-3057
E-mail selsd@deq.ok.gov

Business Hours 8:00 a.m. to 4:30 p.m.

Laboratory Services Rule Chapter 305

State Environmental Laboratory Analytical Fees

Synthetic Organic Compounds (SOCs)- Information and Pricing - **New!**

Sample Collection and Submittal Forms

- Customer Profile
- Chain of Custody

State Environmental Laboratory Services Division Quality Assurance Plan (Effective 01/2018 – 12/2018)

This page last updated on February 16, 2018

Need to find an accredited environmental lab?
Do you want your lab to get certification? Click here to go to the Laboratory Accreditation Page

SELS Toll-Free: 1-866-412-3057 or 1-405-702-1000

Back to SELSD Main Page | Back to DEQ Main Page

DISSOLVED OXYGEN

- MUST BE EXAMINED "IMMEDIATELY" ONSITE.
  - SAMPLE MUST BE ANALYZED WITHIN 15 MINUTES OF COLLECTION.
- DEQ HAS STATED THAT "[THE] PERMIT DOESN'T REQUIRE OR RESTRICT TO USE THEIR OWN DO METER. HOWEVER, THE PERMITTEE IS REQUIRED TO FOLLOW THE SAMPLING AND TESTING PROCEDURES OF 40 CFR PART 136…."
- 40 CFR PART 136 STATES THAT THE ACCEPTABLE METHODS INCLUDE ELECTRODE METHOD AND LUMINESCENCE BASED SENSOR METHOD.

PH

- MUST BE EXAMINED "IMMEDIATELY" ONSITE.
  - SAMPLE MUST BE ANALYZED WITHIN 15 MINUTES OF COLLECTION.
- DEQ HAS STATED THAT "[THE] PERMIT DOESN'T REQUIRE OR RESTRICT TO USE THEIR OWN DO METER. HOWEVER, THE PERMITTEE IS REQUIRED TO FOLLOW THE SAMPLING AND TESTING PROCEDURES OF 40 CFR PART 136…."
- 40 CFR PART 136 STATES THAT THE ACCEPTABLE METHODS INCLUDE ELECTROMETRIC MEASUREMENT AND AUTOMATED ELECTRODE.

QUESTIONS?

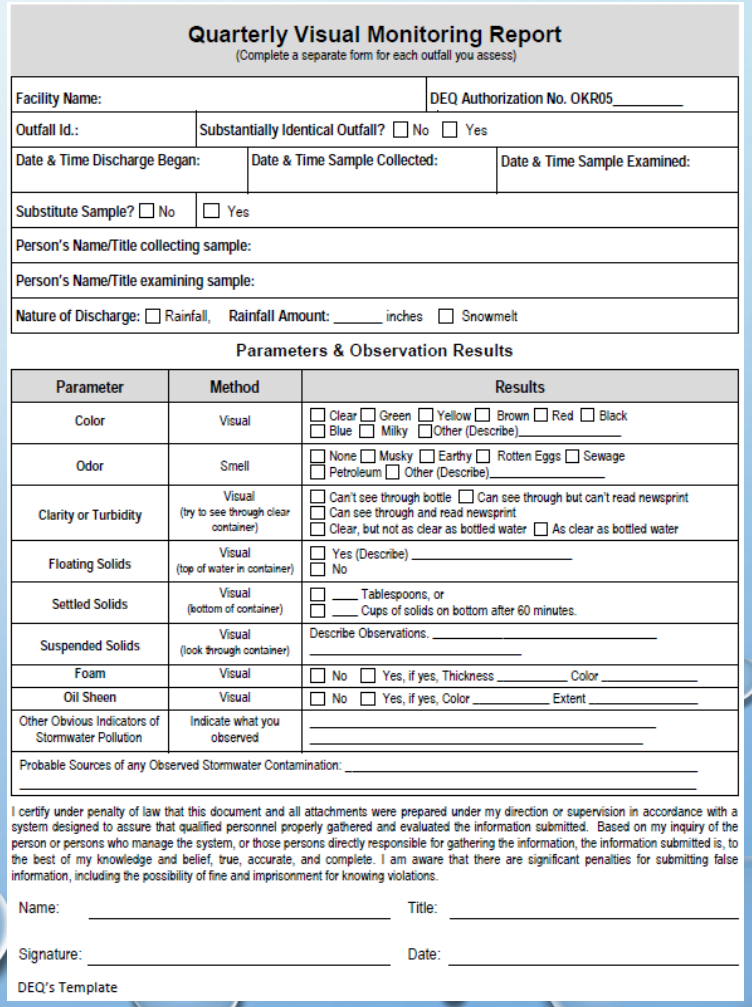
FOR ADDITIONAL INFORMATION:

WWW.OKC.GOV/SWQ

HTTP://WWW.DEQ.STATE.OK.US/WQDNEW/STORMWATER/INDUSTRIALSW/INDEX.HTML

VIDEO – QUARTERLY VISUAL MONITORING, CHANGES:

- KEEP ALL RECORDS FOR AT LEAST THREE (3) YEARS FROM THE DATE THAT YOUR COVERAGE UNDER THE OKR05 PERMIT EXPIRES OR IS TERMINATED.
- FORM HAS CHANGED, USE NEW FORM AS DESCRIBED IN THIS PRESENTATION.
- SETTLED SOLIDS TO BE MEASURED AFTER "AT LEAST 60 MINUTES"
- USE ONE FORM PER OUTFALL



Quarterly Visual Monitoring Report
(Complete a separate form for each outfall you assess)

Facility Name:		DEQ Authorization No. OKR05_____
Outfall Id.:	Substantially Identical Outfall? ☐ No ☐ Yes	
Date & Time Discharge Began:	Date & Time Sample Collected:	Date & Time Sample Examined:
Substitute Sample? ☐ No	☐ Yes	
Person's Name/Title collecting sample:		
Person's Name/Title examining sample:		
Nature of Discharge: ☐ Rainfall,	Rainfall Amount: _____ inches	☐ Snowmelt

Parameters & Observation Results

Parameter	Method	Results
Color	Visual	☐ Clear ☐ Green ☐ Yellow ☐ Brown ☐ Red ☐ Black ☐ Blue ☐ Milky ☐ Other (Describe)_____
Odor	Smell	☐ None ☐ Musky ☐ Earthy ☐ Rotten Eggs ☐ Sewage ☐ Petroleum ☐ Other (Describe)_____
Clarity or Turbidity	Visual (try to see through clear container)	☐ Can't see through bottle ☐ Can see through but can't read newsprint ☐ Can see through and read newsprint ☐ Clear, but not as clear as bottled water ☐ As clear as bottled water
Floating Solids	Visual (top of water in container)	☐ Yes (Describe) _____ ☐ No
Settled Solids	Visual (bottom of container)	☐ ___ Tablespoons, or ☐ ___ Cups of solids on bottom after 60 minutes.
Suspended Solids	Visual (look through container)	Describe Observations. _____
Foam	Visual	☐ No ☐ Yes, if yes, Thickness _____ Color _____
Oil Sheen	Visual	☐ No ☐ Yes, if yes, Color _____ Extent _____
Other Obvious Indicators of Stormwater Pollution	Indicate what you observed	_____
Probable Sources of any Observed Stormwater Contamination: _____		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

DEQ's Template