THE IMPORTANCE OF READING YOUR NPDES PERMIT

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ALLOWAY



NPDES AUTHORITY?

- AUTHORIZED BY CLEAN WATER ACT SECTION 402, OHIO REVISED CODE 6111.03
- REGULATED UNDER 40 CFR, OAC 3745

WHO IS AFFECTED BY THE PROGRAM?

- FACILITY DESIGNATION
 - MAJOR (MUNI ≥ 1MGD, NON-MUNI RATING SHEET)
 - MINOR
- TYPES OF NPDES PERMITS
 - INDIVIDUAL
 - GENERAL
 - STREAMLINED PERMITTING PROCESS FOR SPECIFIC CLASSES OR CATEGORIES OF DISCHARGES

NPDES PERMIT - 5 BASIC SECTIONS

- TITLE PAGE PERMITTEE NAME AND LOCATION, PERMIT PERIOD, AUTHORIZING STATEMENT,
 DISCHARGE LOCATION.
- **EFFLUENT LIMITS PART I.A -** APPLICABLE TECHNOLOGY-BASED AND WATER QUALITY-BASED STANDARDS.
- MONITORING AND REPORTING REQUIREMENTS PART I.B & I.C OTHER MONITORING
 POINTS SLUDGE, INFLUENT, STREAMS, CSO ETC. AND COMPLIANCE SCHEDULES
- SPECIAL CONDITIONS PART II OPERATOR OF RECORD, STAFFING, OTHER REQUIREMENTS
- **STANDARD CONDITIONS PART III** (AKA "BOILERPLATE") LEGAL, ADMINISTRATIVE, AND PROCEDURAL REQUIREMENTS OF THE PERMIT.



- HEADER: EFFECTIVE DATES
- PARAMETERS AND REPORTING CODES
- LIMITS
- MONITORING FREQUENCIES
- MONITORING MONTHS
- SAMPLE TYPE (GRAB, COMPOSITE, 24 HOUR COMPOSITE...)
- FOOTNOTES



| Effluent Characteristic | <u>Discharge Limitations</u> | | | | | | | Monitoring Requirements | | |
|--|------------------------------|-------------------------|-----|-----|-------------|-----------------------|----------------|-------------------------|------------------|----------------------|
| Parameter | Conc Maximum | centration S Minimum | | | Lo Daily | oading* kg/ Weekly | day Monthly | Measuring Frequency | Sampling Type | Monitoring Months |
| 01220 - Chromium, Dissolved Hexavalent | | - | - | - | - | - | - | 1/Month | Grab | A11 |
| ug/l 31648 - E. coli - #/100 ml | - | - | 284 | 126 | - | - | - | 1/Day | Grab | Summer |
| 50050 - Flow Rate - MGD | - | - | - | - | - | - | - | 1/Day | Continuous | All |
| 50060 - Chlorine, Total Residual - mg/l | 0.021 | - | - | - | - | - | - | 1/Day | Multiple Grab | Summer |
| 50060 - Chlorine, Total Residual - mg/l | 0.021 | - | - | - | - | - | - | When Disch. | Multiple Grab | Winter |
| 50092 - Mercury, Total (Low Level) - ng/l | 1700 | - | - | 3.1 | 1.13 | - | 0.00205 | 1/2 Weeks | Grab | All |
| 61425 - Acute Toxicity, Ceriodaphnia dubia - TUa | - | - | - | - | - | - | - | 2/Year | 24hr Composite | June and Oct. |
| 61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc | - | - | - | - | - | - | - | 2/Year | 24hr Composite | June and Oct. |
| 61427 - Acute Toxicity, Pimephales promelas - TUa | - | - | - | - | - | - | - | 2/Year | 24hr Composite | June and Oct. |
| 61428 - Chronic Toxicity, Pimephales promelas - TUc | - | - | - | - | - | - | - | 2/Year | 24hr Composite | June and Oct. |
| 61941 - pH, Maximum - S.U. | 9.0 | - | - | - | - | - | - | 1/Day | Continuous | All |
| 61942 - pH, Minimum - S.U. | - | 6.0 | - | - | - | - | - | 1/Day | Continuous | All |
| 70300 - Residue, Total Filterable - mg/l | - | - | - | - | - | - | - | 1/Week | 24hr Composite | All |
| 80082 - CBOD 5 day - mg/l | - | - | 15 | 10 | - | 9936 | 6620 | 5/Week | 24hr Composite | Summer |
| 80082 - CBOD 5 day - mg/l | - | - | 24 | 16 | - | 15897 | 10598 | 5/Week | 24hr Composite | Winter |

Notes for Station Number 3PF00002001:

- * Effluent loadings based on average design flow of 175 MGD. Winter-1: November, March and April
- Winter-2: December, January and February
- Total residual chlorine See Part II, Item J.
- Total residual chlorine, winter months "When discharging" means monitoring and reporting are required on days when the facility is chlorinating.
- Mercury See Part II, Items S, W, X and Y.
 Free cyanide See Part II, Item R.
 Whole effluent toxicity See Part II, Item U.

- pH minimum See Part II, Item Q.

MONITORING TABLE DETAILS

- POLLUTANT PARAMETERS
 - WG/L, UG/L sss
 - CONTRACT LAB MAY NOT REPORT IN THE SAME UNITS; VERIFY THEY CAN MEET DETECTION LEVEL REQUIREMENTS
- SAMPLE TYPE
 - COMPOSITE IS NOT THE SAME AS 24 HOUR COMPOSITE

MONITORING TABLE DETAILS

- MONITORING MONTHS
 - MONITORING FREQUENCY CHANGES?
- FOOTNOTES
 - BIS-2-ETHYLHEXYL PHTHALATE
 - LOW LEVEL MERCURY
 - FREE CYANIDE NEW METHOD AND DETECTION LEVEL MUST BE UTILIZED!
 - BIOMONITORING REQUIREMENTS

MONITORING TABLES FOOTNOTES

- REFER TO PARAGRAPHS IN PART II
- YOU CANNOT USE THE MONITORING TABLES
 CORRECTLY WITHOUT READING PART II



INFORMATION FROM FOOTNOTES:

- BIS-2-ETHYLHEXYL PHTHALATE
 - 3 GRAB COMPOSITE, AT LEAST 30 MINUTES APART BUT NO MORE THAN 2 HOURS APART, INTO A GLASS CONTAINER; REPRESENTATIVE OF A NORMAL DAY FLOW. THIS SHOULD BE REFRIGERATED BETWEEN GRABS.
 - OR 24 HOUR COMPOSITE ENSURE YOU ARE USING APPROPRIATE TUBING IN YOUR SAMPLER.
- FREE CYANIDE
 - MUST UTILIZE ONE OF THE NEW METHODS (ASTM D7237-10 OR OIA-1677-09)
 - NEW LOWER DETECTION / REPORTING LEVELS



INFORMATION FROM FOOTNOTES:

- LOW LEVEL MERCURY
 - ONE DETENTION TIME LATER FROM 006 TO 001 SAMPLING STATIONS
 - METHOD 1631 PERFORMANCE BASED METHOD
- BIOMONITORING
 - ENSURE YOU ARE MONITORING ON THE PROPER MONTHS.
 - SHOULD CONSIDER PERMIT MOD IF NOT IN ROUTINE QUARTERLY MONTHS OR PULL OTHER MONTHLY PARAMETERS IN CONJUNCTION WITH BIOASSAY
 - ACCORDING TO THE BIOMONITORING GUIDANCE DOCUMENT, YOU ARE REQUIRED TO RUN CHEMISTRY IN CONJUNCTION WITH YOUR BIOASSAY.

SAMPLING ACCORDING TO DETENTION TIME

40 CFR APPENDIX E - PART 403

THE COLLECTION OF INFLUENT GRAB SAMPLES SHOULD PRECEDE THE COLLECTION OF EFFLUENT SAMPLES BY APPROXIMATELY ONE DETENTION PERIOD EXCEPT THAT WHERE THE DETENTION PERIOD IS GREATER THAN 24 HOURS SUCH STAGGERING OF THE SAMPLE COLLECTION MAY NOT BE NECESSARY OR APPROPRIATE. THE DETENTION PERIOD SHOULD BE BASED ON A 24-HOUR AVERAGE DAILY FLOW VALUE. THE AVERAGE DAILY FLOW SHOULD IN TURN BE BASED UPON THE AVERAGE OF THE DAILY FLOWS DURING THE SAME MONTH OF THE PREVIOUS YEAR.



WHAT DOES THIS REALLY MEAN?

- PERFORMED FOR HEXAVALENT CHROMIUM, LL HG, CYANIDES (TOTAL AND FREE)
- LOOK AT THE AVERAGE FLOW FOR THE PREVIOUS YEAR IN THE SAME MONTH AND USE THAT TO CALCULATE THE DETENTION TIME THROUGH THE PLANT. NEED TOTAL VOLUME OF THE LIQUID STREAM OF YOUR FACILITY USE IT AND THE AVERAGE FLOW TO CALCULATE THE DETENTION TIME (DT).
- COLLECT THE INFLUENT SAMPLE AND THEN WAIT THE DT AND COLLECT THE EFFLUENT.
- DT (IN HOURS) = TOTAL FLOW IN GPD / TOTAL VOLUME OF PLANT IN GALLONS = PORTION OF DAY X 24 HOURS/DAY
- EXCEPTION IS IF DT > 24 HOURS; THEN IT MAY NOT BE APPROPRIATE TO WAIT A FULL DT

NPDES PERMIT SECTIONS

COMPLIANCE SCHEDULES ARE GIVEN (PART I.C):

- PRETREATMENT PROGRAM
 - LOCAL LIMITS DEVELOPMENT AND IMPLEMENTATION
- CONSTRUCTION
 - E.G. REQUIREMENT FOR BYPASSES AND/OR OVERFLOWS
 - OTHER CONSTRUCTION PROJECTS IN ORDER TO MEET PERMIT REQUIREMENTS

NPDES PERMIT SECTIONS

COMPLIANCE SCHEDULES (CONT.)

- E. COLI WHEN WE SWITCHED FROM FECAL COLIFORM TO E. COLI
- PREVIOUS PERMIT VIOLATIONS (NUTRIENTS)
- NEW LIMITATION IMPOSED TOTAL PHOSPHORUS

PART I.C. DETAILS

- COMPLIANCE MILESTONES REQUIRED REPORT TO OHIO EPA
 - MAKE SURE YOU TRACK THOSE
 - CAN YOU WEET THEM?
 - CAN LEAD TO SNC
- DUE DATES BASED ON NPDES PERMIT EFFECTIVE
 DATE MAKE A CALENDAR FOR YOURSELF

NPDES PERMIT SECTIONS: PART II

OTHER CONDITIONS

- OPERATOR OF RECORD
 - MUST BE <u>DESIGNATED IN WRITING</u>
- DESCRIPTION OF OUTFALLS AND MONITORING STATIONS – MAKE SURE YOU VERIFY THESE ARE ACCURATE



NPDES PERMIT SECTIONS: PART II

- 300 STATION (SSO) REPORTING REQUIREMENTS
 - 24-HOUR CALL FOLLOWED BY 5-DAY REPORT.
- SLUDGE STATION(S) REQUIREMENTS
 - ANNUAL REPORT (JANUARY 31)



PART II.

MONITORING TABLE FOOTNOTES

- SAMPLES AND DETENTION TIMES
- BIS-2 SPECIAL SAMPLE REQUIREMENTS
- LOW LEVEL MERCURY METHODS
- YOU CANNOT USE THE MONITORING TABLES
 CORRECTLY WITHOUT READING PART II



PART II SPECIAL CONDITIONS

- PRETREATMENT
- BIOASSAY
- MERCURY VARIANCE

- THESE USUALLY CONTAIN COMPLIANCE MILESTONES OR REPORTING REQUIREMENTS
 - ADD THEM TO YOUR CALENDAR



READ YOUR DRAFT PERMIT AND FACT SHEET

- INTERIM AND FINAL TABLES
 - NOTE NEW/DIFFERENT PERMIT LIMITS EXPLAINED IN FACT SHEET DON'T BE AFRAID TO ASK WHY?
 - COORDINATE WITH COMPLIANCE SCHEDULE

READ YOUR DRAFT PERMIT AND FACT SHEET

- NEW NUMERIC LIMIT? INCREASED
 FREQUENCY? WHAT DOES THIS COST?
- COMPLIANCE SCHEDULE
 - EVERYTHING IN LOGICAL ORDER?
 - TIME ALLOTTED FOR TASKS?



REVIEW BY OTHERS:

 COMMUNICATE WITH CITY HALL THAT YOU NEED IT IMMEDIATELY!!

- CONTRACT LABORATORY
- ENVIRONMENTAL LAWYER
- OTHERS?



COMMENT IN WRITING BEFORE PUBLIC COMMENT PERIOD ENDS

- LETTER TO CENTRAL OFFICE
 - COURTESY COPY TO DISTRICT CONTACT
- ASK FOR EXTENSION BEFORE THE LAST DAY!



QUESTIONS?

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ALLOWAY

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