



“ANATOMY OF A SIGNIFICANT INDUSTRIAL USER PERMIT”

NC Pretreatment Consortium Industry Day
December 6, 2023 - Greensboro NC

“Why Does My Facility Have to Get a SIU Permit?”

- $\geq 25,000$ gallons per day process wastewater discharged to POTW
- Subject to a Federal Categorical Pretreatment Standard
- $\geq 5\%$ of POTW's hydraulic or organic Maximum Allowable Headworks Loading (MAHL)
- Designated as SIU by POTW



“ANATOMY OF A SIGNIFICANT INDUSTRIAL USER PERMIT”

Cover Page

Part I – Specific Conditions

Part II – General Conditions

Part III – Special Conditions

SIU Permit Issuance Administrative Process

“ANATOMY OF SIU PERMIT”

Cover Page

- SIU Permit Number
- Permittee (SIU) Name and Address
- POTW That Receives your Wastewater
 - *POTW Name and Address*
 - *NPDES Permit # of POTW*
- Important Permit Dates
 - *Permit Effective Date, Expiration Date and Signature Date*
- Legal Authority under which permit is issued
- Any Applicable Federal Categorical Standard

Greenville Utilities Commission

hereafter in this permit referred to by
name or as the Control Authority

INDUSTRIAL USER PRETREATMENT PERMIT (IUP)
To Discharge Wastewater Under the
Industrial Pretreatment Program

MX 01 IUP Number	40 CFR Part 421-X 40 CFR Category
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In compliance with the requirements and provisions of the Greenville Utilities Commission's Sanitary Sewer Use Regulations, adopted effective July 1, 1987, or as amended; North Carolina General Statute 143-215.1; any applicable federal categorical pretreatment regulations, all other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission; and other applicable rules and regulations of the Greenville Utilities Commission, and subsequent revisions thereof. The following industry, hereafter referred to by name or as the permittee:

Metallix Refining, Inc.
251 Industrial Blvd.
Greenville, NC 27835

is hereby authorized to discharge wastewater from the facility located at the above listed address into the sanitary sewer collection system and the wastewater treatment facility of the Control Authority listed below:

Greenville Utilities Commission WWTP
S. R. 1534
P.O. Box 1847
Greenville, NC 27835-1847
NPDES Number: NC0023931

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III of this Industrial User Pretreatment Permit (IUP).

Effective date, this permit and the authorization to discharge shall become effective at midnight on this date:

January 1, 2018

Expiration date, this permit and the authorization to discharge shall expire at midnight on this date:

December 31, 2022

Signed this the ____ day of ____, 2017.

Mr. Randall D. Emory, P.E.
Director of Water Resources

Mr. Tony Cannon
General Manager/CEO



“ANATOMY OF SIU PERMIT”

PART I – SPECIFIC CONDITIONS

- A. SIU Permit Basic Information
- B. Permit History
- C. Authorization Statement
- D. Description of Discharges
- E. Schematic and Monitoring Locations
- F. Effluent Limits and Monitoring Requirements
- G. Definitions and Limit Page(s) notes

Part I – Specific Conditions

A. SIU Permit Basic Information

- Municipality or Control Authority Name
- POTW Name/NPDES Permit #NC00XXXXX
- SIU Permit Number
- Pipe Number [001, 002, etc.]
 - Applicable Federal Categorical Standards
- Permit Effective and Expiration Dates

Part I – Specific Conditions

B. Permit History

- Required by NC DWR-History of Permit
 - Does not start over with SIU Permit renewal or name change

- Tracks History of Permit - Example Entries:

<u>Effective Date</u>	<u>Action/Changes Made</u>
• 1/1/2002	Permit Renewal: No changes from previous permit
• 7/1/2005	Permit modification: Added mercury limit (monitoring showed detections), and requirement to submit Slug Control Plan
• 1/1/2007	Permit renewal: Increased flow self-monitoring to daily, added phosphorus limit (new NPDES limit), used new SIU permit format
• 1/1/2012	Permit renewal: No changes
• 1/1/2017	Permit renewal: No changes

Part I – Specific Conditions

C. Authorization Statement

- Permittee Authorized to:
 - Discharge wastewater to POTW in accordance with conditions set forth in the permit
 - Continue operation of and discharge from any existing pretreatment facilities
 - *List of treatment units [same as application form]*
 - Construct and operate additional pretreatment units to meet permit limits after receiving Authorization to Construct from POTW

Part I – Specific Conditions

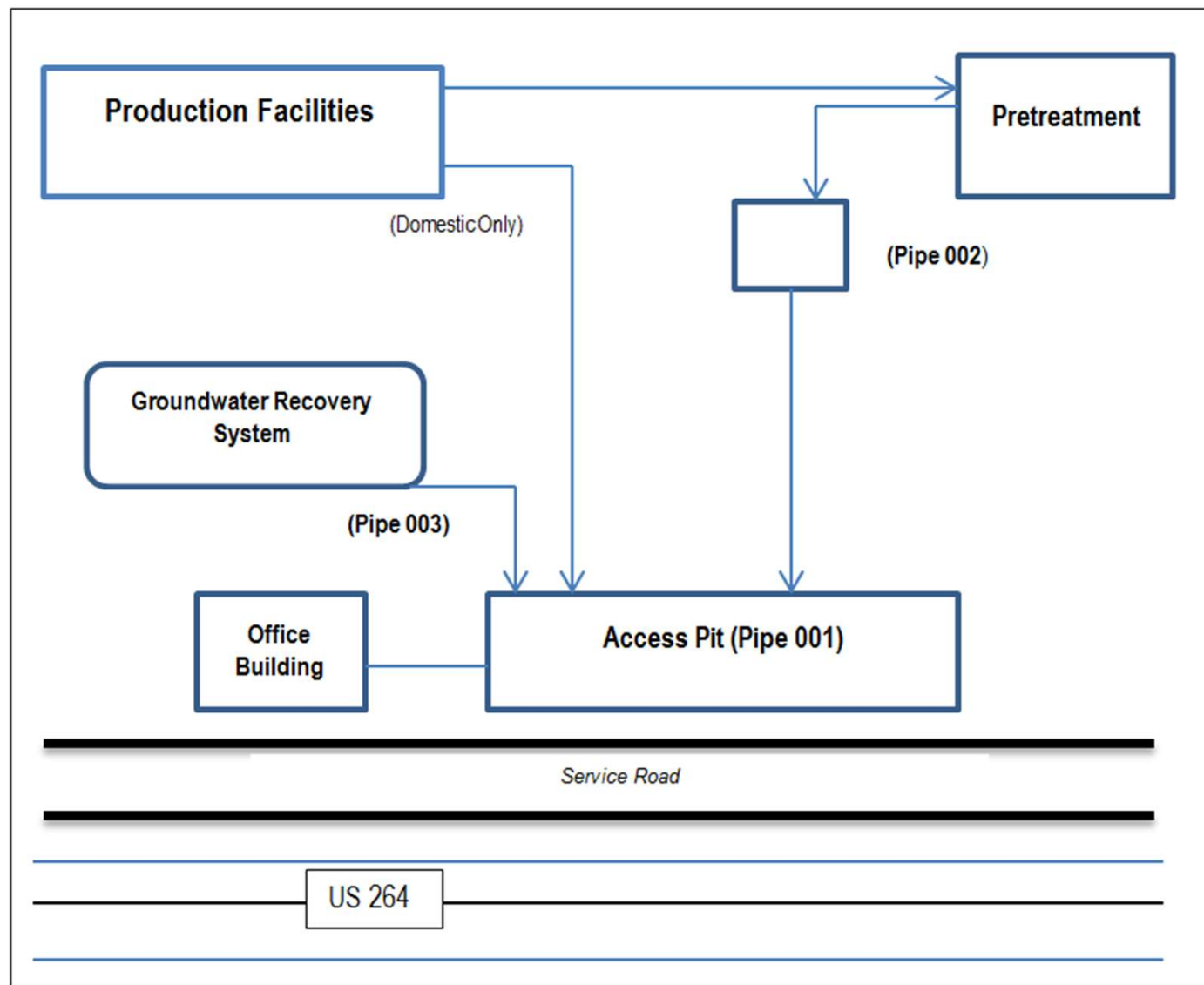
D. Description of Discharge(s)

- Description of discharge from all regulated pipes
(Pipe 001, Pipe 002, etc.):
 - Pipe 001 All process wastewaters from chemical blending operations in Buildings 1 & 2, pH adjustment provided, no domestic wastewater flows
 - Pipe 002 All process wastewaters from hand cream manufacturing process in Building 5, no pretreatment provided, no domestic wastewater flows

Part I – Specific Conditions

E. Schematic & Monitoring Location(s)

- Must show enough detail that someone unfamiliar with the facility could readily find and identify the monitoring location(s) and connection(s) to the sanitary sewer
- All regulated discharges/pipes should be included and identified
- Some POTWs include photograph or CAD drawing of sampling/monitoring location



Part I – Specific Conditions

F. Effluent Limitations Page

- Pipe Number
- Effluent Discharge Limits
 - *Specific Parameters will be listed*
- Monitoring
 - *SIU or POTW*
 - *Sample Type (Grab or Composite)*
 - *Frequency*
- Footnotes for terms and abbreviations on limits page (*Make sure you read them!*)

IUP, Part 1 Section F:
Effluent Limits and Monitoring Requirements

The Permittee may discharge from this specific Pipe number according to these specific dates, effluent limits, and monitoring requirements

Receiving POTW name =>	Typicalville	IU name =>	Will Plateit
Receiving POTW NPDES # =>	NC0012345	IUP # =>	006
Effective date for these Limits =>	1/1/2004	Pipe # =>	001
Expiration date for these Limits =>	12/31/2008	40 CFR # =>	433.17
THE LIMITS ON THIS PAGE ARE, (Check one below):		if not applicable put N/A	
LIMITS for ENTIRE permit period =>		Yes	



		Concentration Limits			Mass Limits			Monitoring Frequency		Sample Collection Method (C or G)	Required Laboratory Detection Level
		Daily Max	Monthly Average	Units	Daily Max	Monthly Average	Units	By Industry	By POTW		
1	Flow*	0.098		MGD				Continuous/Daily *	Every sample *	Meter	
2	BOD			mg/l							
3	TSS							Monthly			2
4	Temperature										
5	PH	6.0-9.0						Every sample	Every sample	G	0.1 SU
OTHER PARAMETERS: Please List Alphabetically											
6	Cadmium	0.07		mg/l				Monthly	Once/6 Months	C	0.002
7	Chromium	1.71		mg/l				Monthly	Once/6 Months	C	0.005
8	Copper	2.07		mg/l				Monthly	Once/6 Months	C	0.002
9	Cyanide	0.01		mg/l				Monthly	Once/6 Months	G	0.01
10	Lead	0.43		mg/l				Monthly	Once/6 Months	C	0.01
11	Mercury **			mg/l				Once/6 months	Once/6 Months	Grab**	1 ng/l **
12	Nickel	2.38		mg/l				Monthly	Once/6 Months	C	0.01
13	Phosphorous	30		mg/l				Monthly	Once/6 Months	C	0.05
14	Silver	0.24		mg/l				Monthly	Once/6 Months	C	0.005
15	Zinc	1.48		mg/l				Monthly	Once/6 Months	C	0.01
16	TTO ***	2.13 ***		mg/l				Once/6 Months ***	Once/year ***	G	0.01
17											
18											
19											
20											

* See Part I, G, 3 and 4, and III, 3

** See Part I, G, 7

*** See Part III, 6-8

Effluent Limits Sources

- EPA General and Specific Discharge Prohibitions
 - *e.g. pH >5.0 units*
- Federal Categorical Pretreatment Standards
 - *Pretreatment Standards for Existing Sources [PSES]*
 - *Pretreatment Standards for New Sources [PSNS]*
- Local Limits
 - *Developed by POTW based on site-specific Maximum Allowable Headworks Loadings [MAHL]*
- Best Professional Judgment by POTW
 - *e.g. Flow limits, Special Circumstances*
- Sewer Use Ordinance
 - *May contain other limits*

Part I – Specific Conditions

F. Effluent Limitations (Units)

- Concentration Based [mg/l (ppm)]
 - *Federal Categorical Standards with concentration limits: Metal Finishing, Centralized Waste Treatment, Pharmaceutical, etc.*
 - *Most Local Limits*
- Concentration Based Limits Example:
 - Zinc Daily Maximum = 2.5 mg/l
 - Zinc Monthly Average = 1.0 mg/l

Part I – Specific Conditions

F. Effluent Limitations (Units)

- Mass Based [pounds]
 - *Pounds/day = mg/l * 8.34 * Flow (in MGD)*
 - *Federal Categorical Standards with mass based limits: Organic Chemicals, Plastics and Synthetic Fibers (OCPSF)*
 - *Some POTWs have mass local limits*
- Mass Based Limits Example
 - Toluene Daily Maximum
 - $0.074 \text{ mg/l} * 8.34 * 0.1 \text{ MGD} = 0.062 \text{ pounds/day}$
 - Toluene Monthly Average
 - $0.028 \text{ mg/l} * 8.34 * 0.1 \text{ MGD} = 0.023 \text{ pounds/day}$

Part I – Specific Conditions

F. Effluent Limitations (Units)

- Production Based [e.g., lbs/1000 pounds raw material]
 - *Federal Categorical Standards with Production Based Standards: Battery Manufacturing, Aluminum Forming, Copper Forming, Iron and Steel, etc.*
- Production Based Limits Example
 - Cadmium Limitations [Cadmium Anode Batteries]
 - Daily Maximum: 11.95 lbs. cadmium can be discharged per 1,000,000 lbs. cadmium used
 - Monthly Average: 5.25 lbs. cadmium can be discharged per 1,000,000 lbs cadmium used

Part I – Specific Conditions

F. Effluent Limitations

- Types of Effluent Limitations
 - Daily Maximum
 - Daily Minimum [pH]
 - 4-Day Average
 - [40 CFR Part 413-Electroplating]
 - Weekly Average
 - Monthly Average
 - Remember: One sample can be a monthly average!

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** See Part I, G, 7

*** See Part III, 6-8

Part I – Specific Conditions

F. Effluent Monitoring

- Effluent Monitoring Frequency
 - Continuous [e.g., pH, flow]
 - Daily
 - Weekly
 - Monthly
 - Quarterly
 - Annually
 - Once per permit cycle



Part I – Specific Conditions

F. Effluent Monitoring

- Effluent Sample Types
 - Grab
 - *For Cyanide, Volatile Organics, pH*
 - Manual Composite
 - *Grab samples manually composited*
 - Automatic Composite
 - *Time Composite*
 - *Flow Proportional Composite*



Part I – Specific Conditions

G. Definitions/Limits Page Notes

- Site-Specific Definitions/Descriptions
 - Composite Sample
 - Monitoring Location
 - Continuous Monitoring
 - “Daily”
- Limits Page Notes (footnotes, etc.)
 - Site Specific Sampling Methods
 - “Every Sample”
 - Mercury Monitoring by Method 1631



SIU PERMIT GENERAL CONDITIONS

Part II

Sections 1-30

PERMIT GENERAL CONDITIONS

1	Representative Sampling	9	Upset Conditions
2	Reporting	10	Right of Entry
3	Test Procedures	11	Availability of Records
4	Additional Monitoring by Permittee	12	Duty to provide information
5	Duty to Comply	13	Signatory Requirements
6	Duty to Mitigate	14	Toxic Pollutants
7	Facilities Operation, Bypass	15	Civil and Criminal Liability
8	Removed Substances	16	Federal and/or State Laws

PERMIT GENERAL CONDITIONS

17	Penalties	24	Dilution Prohibition
18	Need to Halt or Reduce	25	Reports of Changed Conditions
19	Transferability	26	Construction of Pretreatment Facilities
20	Property Rights	27	Reopener
21	Severability	28	Categorical Reopener
22	Modification, Revocation, Termination	29	General Prohibitive Standards
23	Reapplication	30	Reports of Potential Problems

General Permit Condition 1:

Representative Sampling

- All compliance samples shall be representative of volume and nature of discharge
 - *Not taken on day when production is shut down*
- All compliance samples must be taken from monitoring point(s) specified in permit
 - *Before effluent joins or is diluted by any other waste stream, body of water or substance*
- Monitoring Point cannot be changed without notification to and approval by POTW

General Permit Condition 2:

Reporting

- Monitoring results must be reported on forms specified by POTW
- If no discharge occurs during a reporting period, a form with the phrase “no discharge” shall be submitted



General Permit Condition 2:

Reporting (continued)



- Copies of all correspondence shall be sent to:
 - *Name, address of POTW will be here*
- Monitoring results are due/must be postmarked by:
 - *Due date will be here*
 - *Some POTWs allow faxed/emailed reports*
 - *If due date falls on weekend or holiday some POTWs allow extension to next business day*

General Permit Condition 2:

Reporting (continued)

- If sampling performed by the permittee indicates a violation the permittee shall:
 - *Notify the POTW within 24 hours of becoming aware of the violation*
 - *Repeat the sampling and analysis and submit the results of the repeat analysis to the POTW within 30 days after becoming aware of the violation [Federal EPA Requirement]*
 - Unless SIU samples every month or POTW sampled within 30 days after non-compliant sample

General Permit Condition 2:

Reporting (continued)

- If no SIU self-monitoring required by the permit, but sampling performed by the POTW indicates a violation:
 - *POTW must repeat the sampling & analysis & receive the results within 30 days after becoming aware of the violation -OR-*
 - *POTW must notify the permittee within 24 hrs. of becoming aware of the violation and the permittee must repeat sampling & analysis and submit the results to the POTW within 30 days after the POTW became aware*

General Permit Condition 3:

Test Procedures

- Test Procedures for analysis of pollutants shall be performed in accordance with:
 - 40 CFR Part 136
 - Holding Time
 - Container Type
 - Preservation
 - Approved Methods for Laboratory Analysis
 - Unless specified otherwise in the permit



General Permit Condition 4:

Additional Monitoring

- If you monitor more frequently than permit requires and you use approved analytical methods, *you must turn in all data*
 - *You cannot pick and choose data!*
- POTW may require additional monitoring [more frequent or for additional pollutants] by written notification
 - e.g. Noncompliance with limits or new pollutant of concern

General Permit Condition 5:

Duty to Comply



- Permittee must comply with all conditions of the permit
 - All discharges shall be in compliance with all terms and conditions of permit
- Any permit noncompliance constitutes violation of POTW Sewer Use Ordinance
- Any permit noncompliance is grounds for possible enforcement action

General Permit Condition 6:

Duty to Mitigate

- Prevention of Adverse Impact
- Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health, the POTW, the POTW receiving waters or the environment

General Permit Condition 7:

Facilities Operation & By-Pass

- Permittee shall maintain in good working order and operate as efficiently as possible, all control facilities or systems installed or used to achieve compliance with terms and conditions of permit
- Bypass of treatment facilities is prohibited unless approved by POTW in advance
 - Bypass approval shall be given only when such bypass is in compliance with 40 CFR Part 403.17

General Permit Condition 8:

Removed Substances

- Solids, sludges, filter backwash or other pollutants removed during treatment or control of wastewater must be disposed of in manner to prevent substances from entering sanitary sewer
- Permittee responsible for compliance with requirements for generation, storage, and/or disposal of “Hazardous Waste” as defined by Federal Resource Conservation and Recovery Act (RCRA) regulations

General Permit Condition 9:

Upset Conditions

- UPSET

- An exceptional incident where there is an unintentional and temporary noncompliance with the effluent limitations of permit because of factors beyond the reasonable control of the permittee
- *Upset does NOT include: operational error, improperly designed or inadequate treatment facilities, lack of preventive maintenance or careless or improper operation*
- Upset may constitute an affirmative defense for action brought for the noncompliance.

General Permit Condition 10:

Right of Entry

- Who:
 - *US EPA, State of NC, POTW*
- What:
 - *Enter premises where real or potential discharge is located or in which records are required to be kept for permit*
 - *At reasonable times, have access to and copy records required by permit, inspect monitoring equipment or monitoring method and to sample any discharge of pollutants*



General Permit Condition 11:

Availability of Records & Reports

- You Must Keep the Following Records for at Least 3 Years:
 - *Monitoring Information*
 - *Calibration Records*
 - *Maintenance Records*
 - *Permit Application Information*
- Must keep longer than 3 years if enforcement action is on-going
- Reports prepared in accordance with terms of permit are available to public. Effluent data shall not be considered confidential.



General Permit Condition 12:

Duty to Provide Information

- Permittee shall provide information requested by POTW (or NC-DWR) within a reasonable time, to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit
- Permittee shall also furnish, upon request, copies of records required to be kept by this permit

General Permit Condition 13:

Signatory Requirements

- All reports and information submitted for the permit must be signed and certified by “Authorized Representative” as defined in SUO
- If Authorized Representative designation is no longer accurate [change in individual or position], a new authorization must be submitted to POTW prior to or together with any reports to be signed by the Authorized Representative.

Required EPA Signatory Statement

“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 gather and evaluate 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.”

General Permit Condition 14:

Toxic Pollutants



- If a (new) toxic standard or prohibition is established under Section 307(a) of the Federal Clean Water Act for a toxic pollutant that is present in the discharge and such standard is more stringent than the limitation for that pollutant in this permit, this permit may be revised or modified in accordance with the new standard or prohibition and the permittee so notified.
 - *Note: Section 307(a) of the CWA includes the Priority Pollutant list and list of Categorical Industries*

General Permit Condition 15:

Civil and Criminal Liability

- Nothing in permit shall be construed to relieve permittee from civil or criminal penalties for noncompliance
 - e.g. *Third party suits from environmental groups*



"The Canoes"

General Permit Condition 16:

Federal and/or State Law

- Nothing in permit shall preclude the institution of any legal action
- Nothing in permit shall be construed to relieve permittee from responsibilities, liabilities or penalties in any applicable Federal or State law



General Permit Condition 17:

Penalties



- POTW Sewer Use Ordinance provides that any person who violates a permit condition is subject to:
 - *Civil Penalty of up to \$25,000 per day per violation*
- Specific penalties/actions are outlined in EPA required Enforcement Response Plan

General Permit Condition 17:

Penalties (continued)



- NC Law (NCGS 143.215.6B) states that under certain circumstances *it is a crime to violate terms, conditions or requirements of pretreatment permits*:
 - Knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance
 - *Enforced at discretion of local District Attorney*

General Permit Condition 18:

Need to Halt or Reduce

- It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of the permit.



General Permit Condition 19:

Transferability

- Permit is NOT Transferable without written approval of POTW
- Permit cannot be reassigned or transferred or sold to new owner, new user, different premises or a new or changed operation



General Permit Condition 20:

Property Rights

- Permit Does Not Convey:
 - Any property rights
 - Real or personal
 - Any exclusive privileges
- Permit Does Not Authorize:
 - Injury to private property
 - Invasion of person rights
 - Infringement of Federal, State or local laws

General Permit Condition 21:

Severability

- Provisions of permit are severable
- If any provision of permit or application of provisions to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this permit shall not be affected

General Permit Condition 22:

Permit Changes

- The SIU permit may be:
 - *Modified*
 - *Revoked and Re-Issued*
 - *Terminated for Cause*
- In accordance to the requirements of:
 - *POTW Sewer User Ordinance*
 - *North Carolina General Statute or implementing regulations*



General Permit Condition 23:

Permit Renewal

- Permittee responsible for filing an application for reissuance of permit at least 180 days prior to expiration date of permit
 - *Some POTWs have shorter time period [e.g. 120 days or 90 days]*



General Permit Condition 24:

Dilution Prohibition



- Permittee shall not increase the use of potable process water or in any other way attempt to dilute the discharge as a partial or complete substitute for adequate treatment to achieve compliance with limits and conditions in permit
 - *Some POTWs allow exception for wastewater that meets every ordinance, permit, and allocation limitations except pH*

General Permit Condition 25:

Reports of Changed Conditions

- Permittee shall give notice to POTW of any planned significant changes to the permittee's operations or system which might alter the nature, quality, or volume of its wastewater *at least 180 days before the change.*
- The Permittee shall not begin the changes until receiving written approval from the POTW.

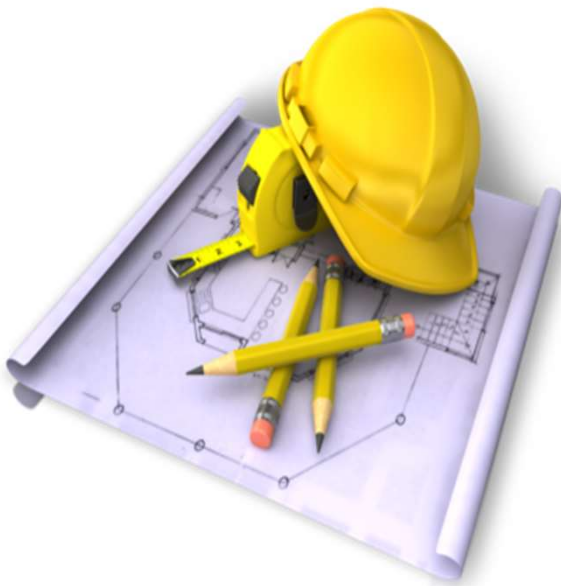
General Permit Condition 25:

Reports of Changed Conditions

- Optional Language from DWR
- Significant changes may include but are not limited to:
 - *Increases or decreases to production;*
 - *Increases in discharge of previously reported pollutants;*
 - *Discharge of pollutants not previously reported to the POTW;*
 - *New or changed product lines;*
 - *New or changed manufacturing processes and/or chemicals; or*
 - *New or changed customers*

General Permit Condition 26:

Construction



- No construction of pretreatment facilities or additions to the pretreatment facilities shall be begun until Final Plans and Specifications have been submitted to the POTW and written approval and an Authorization to Construct (A to C) have been issued.

General Permit Condition 27:

Reopener

- The permit shall be modified or, alternatively, revoked and reissued to comply with:
 - Any applicable effluent standard or limitation for the control of:
 - *Any pollutant shown to contribute to toxicity of the POTW effluent*
 - *Any pollutant that is otherwise limited by the POTW NPDES permit*
- The permit as modified or reissued under the paragraph may also contain any other requirements of State or Federal pretreatment regulations then applicable

General Permit Condition 28:

Categorical Reopener

- The permit shall be modified or, alternatively, revoked and reissued to comply with:
 - Any applicable effluent standard or limitation issues or approved under *[various sections]* the Clean Water Act, if the effluent standard or limitation:
 - *Contains different conditions or is otherwise more stringent than any effluent limitation in this permit;*
 - *Controls any pollutant not limited in this permit*
 - Permit as modified or reissued under this paragraph shall also contain any other requirements of the Act (Clean Water Act) then applicable.

General Permit Condition 29: *General Prohibitive Standards*

- The permittee shall comply with the general prohibitive discharge standard in 40 CFR 403.5 (a) and (b) of the Federal pretreatment regulations.
- *What the heck is that????*

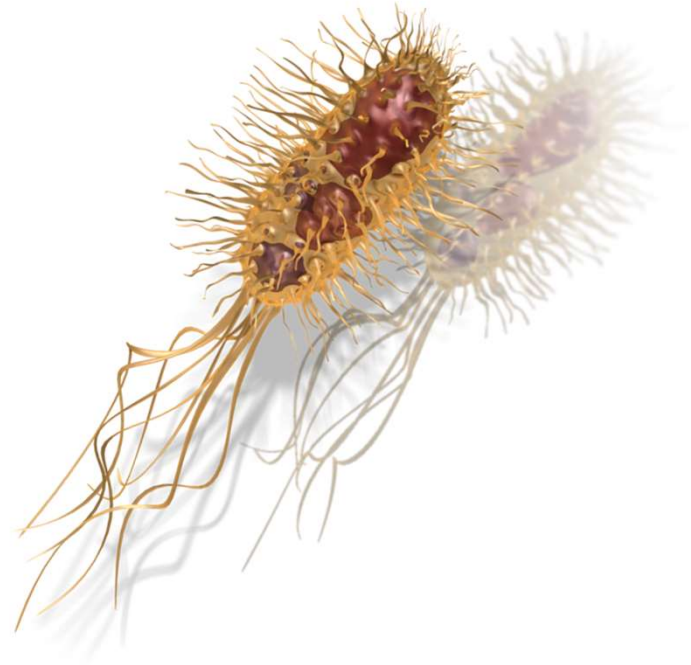


General Permit Condition 29:

Prohibitive Discharge Standards

40 CFR Part 403.5 (a)

- No user shall discharge:
 - Any pollutants(s) which cause Pass Through or Interference



General Permit Condition 29:

Prohibitive Discharge Standards

40 CFR Part 403.5 (b)

- The following pollutants **shall not** be introduced into a POTW:
 - *Pollutants which create a fire or explosion hazard including...waste-streams with a closed cup flashpoint of less than 140 degrees Fahrenheit*
 - *Pollutants which will cause corrosive damage but in no case discharges with pH <5.0 pH units*
 - *Solid or viscous pollutants which cause obstruction*

General Permit Condition 29: *General Prohibitive Standards*

40 CFR Part 403.5 (b) [continued]

- *Any pollutant [including BOD/oxygen demanding pollutants] which will cause interference*
- *Heat which will inhibit biological activities*
- *Petroleum oil/mineral oil/cutting oil in amounts to cause interference*
- *Pollutants which result in toxic gases/vapor or fumes within the collection system/POTW*
- *Trucked or hauled wastes except at discharge points designated by the POTW*

General Permit Condition 30:

Potential Problems

- Permittee shall provide protection from accidental and slug discharges
 - *Shall notify the POTW immediately of any changes at the facility affecting the potential for spills/accidental discharges or slug loads*
- Permittee shall notify the POTW by telephone of all discharges that could cause problems to the POTW including any slug loads:
 - *Inform POTW immediately upon first awareness*
 - *Location of discharge, type of waste, concentration and volume if known and corrective actions taken*
 - Submit written report within 5 days [unless waived by POTW]



SIU PERMIT SPECIAL CONDITIONS [SITE-SPECIFIC]

Slug/Spill Control Measures

Sludge Management Plan

Flow Measurement Requirements [including CWF]

Certified Laboratory Analysis

Certified Operator

Total Toxic Organics [Definition, TOMP, Certification]

Production Records

Special Permit Conditions:

Slug/Spill Control Measures



- POTW may require the development and implementation Spill/Slug Control Plan
 - *Based on potential to have slug discharge to POTW*
 - *POTW will determine if potential exists*
- Special Permit Condition would include language to require development of plan and include submittal date
- Requirements to comply with the provisions of the slug control plan (if needed) must be incorporated into the SIU's control mechanism

Special Permit Conditions:

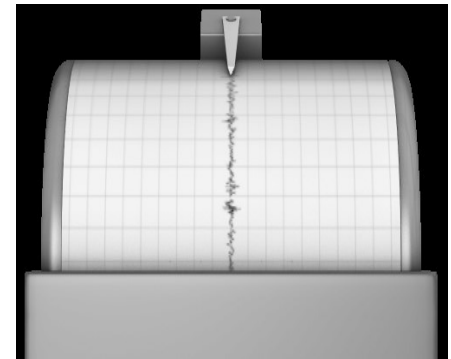
Sludge Management Plan

- If sludge is generated by any of the pretreatment processes used by the SIU, then the POTW can require the submittal of a Sludge Management Plan
- Special Condition would include requirement to develop plan, the submittal date and the requirement to submit a revised Sludge Management prior to any changes being made to the sludge disposal options.

Special Permit Conditions:

Flow Measurement Requirements

- Flow measured and reported from:
 - *Effluent Flow Meter readings/calculations*
 - *Incoming City Water Meter readings*
- Flow Measurement Frequency
 - *Daily*
 - *Only on days that sampling occurs*
- Flow Meter Calibration Requirements
- Other Flows [to be used for Combined Wastestream Formula calculations]
 - *Dilution Wastestreams, Unregulated Wastestreams*



SIU Special Permit Conditions:

Certified Laboratory Analysis



- All analyses required by the permit shall be performed by a laboratory certified by the State of North Carolina DWR to conduct the analysis on wastewater
- Wastewater Laboratory Certification regulations are found at 15A NCAC 2H .0800

SIU Special Permit Conditions:

Certified Operator



- If and when pretreatment facility is “classified” by the State Certification Commission, the permittee must employ a certified wastewater treatment plant operator
 - *Operator must hold certificate level equal to or greater than classification of the facility*
- Some POTWs currently require certified wastewater operator be employed

SIU Special Permit Conditions:

Total Toxic Organics (TTOs)

- **Definition:**
 - Total Toxic Organics (TTO) is the sum of each of the applicable toxic organic compounds found at a concentration greater than 0.01 mg/l in a regulated wastestream
- Different categorical standards list a different subset of organic compounds from the “EPA Priority Pollutant List”
- Special Condition would include the SIU specific list of regulated organics

SIU Permit Special Conditions:

Toxic Organic Management Plan

- Some Federal categorical standards allow the development and implementation of a TOMP in lieu of sampling for TTOs
- Special Condition would outline that a plan must be developed and include submittal date
- Plan must include:
 - *Specific toxic organic compounds used*
 - *Method of disposal used*
 - *Procedures for assuring that toxic organics do not routinely spill or leak into the sanitary sewer system*
- Also must certify that plan is being implemented

SIU Special Permit Conditions:

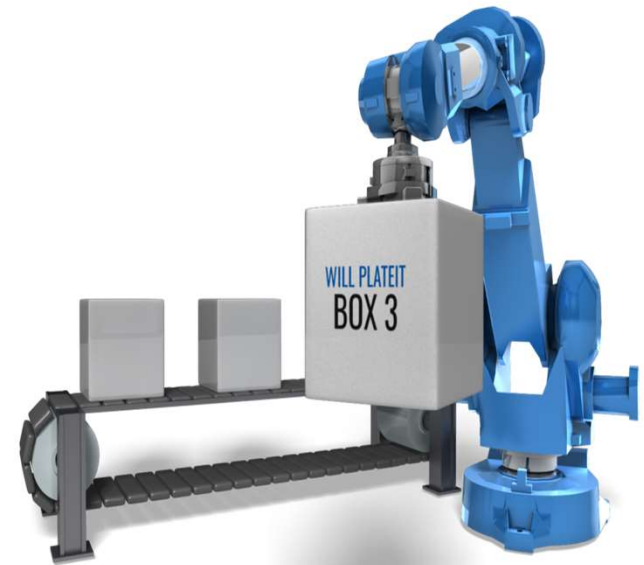
Total Toxic Organics Certification

- Alternative to TTO Sampling/Monitoring:
 - Certification: *“Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing of the last semi-annual report. I further certify that this facility is implementing the solvent management plan submitted to the Control Authority (POTW).”*
- Special Condition would include required language and how often certification must be submitted

SIU Special Permit Conditions:

Production Records

- Any SIU subject to a Federal Categorical standard that includes production based standards must provide production records to the POTW
 - Examples:
 - *Aluminum Forming [40 CFR Part 467]*
 - *Battery Manufacturing [40 CFR Part 461]*
 - *Copper Forming [40 CFR Part 468]*
 - *Iron and Steel [40 CFR Part 420]*



SIU Special Permit Conditions:

Other Examples

- Unique Laboratory Methods
- In-House Laboratory Certification Requirement
- Site-Specific Self-Monitoring Instructions
 - *Within certain timeframe*
 - *To include certain batch discharges*
- Categorical Specific Requirements
 - *“Pollutant Management Plan” for 40 CFR Part 442 – Transportation Equipment Cleaning*
- Site Specific Special Studies, Sampling or Reports
 - *Whole Effluent Toxicity*



SIU PERMIT SPECIAL CONDITIONS

Optional Pretreatment Streamlining
Regulation Special Conditions

Monitoring Waiver for Categorical Parameters
Equivalent Concentration Limits
Equivalent Mass Limits

Monitoring Waiver for Categorical Parameters

- For Federal Categorical Standards Only
 - *Monitoring Waiver for “Pollutants not Present” in CIU process waste stream (or is present only in background levels in incoming water)*
- “Waiver” is valid only for one permit cycle
 - *CIU must reapply with each permit renewal*
 - *Waiver must be included in permit language*
- POTW must monitor parameter once every permit cycle (maximum of 5 years)
- SIU must submit certification statement with each monitoring report

Equivalent Concentration Limits

- For Federal Categorical Standards Only
- Categorical Limits that were required to be mass-based can now also be issued in permit as concentration limits
 - Applicable to: Organic Chemicals, Plastics and Synthetic Fibers [40 CFR Part 414], Pesticide Chemicals [40 CFR Part 455] and Petroleum Refining [40 CFR Part 419]
 - *Can go back to concentration limits listed in the regulation*

Equivalent Mass Limits

- For Federal Categorical Standards Only
- Categorical Limits that were promulgated as concentration can now also be issued in permit as mass-based limits [pounds]
 - *Particularly useful if CIU is practicing water conservation*
 - *CIU must install effluent flow meter*
 - *POTW must determine appropriate flow to be used in calculation*
- POTW can set equivalent mass limits *as an alternative to* concentration limits where CIU has:
 - *Installed treatment equivalent to model technology,*
 - *Is employing water conservation*
 - *Jumped through lots of other hoops in regulation!*



SIU PERMIT ISSUANCE ADMINISTRATIVE PROCESS

SIU Permit Review Package to DWR

Time Table for Permit Issuance

Administrative Appeals Process

SIU Permit Package Sent to DWR Pretreatment Unit

- POTW Must Send the following to DWR:
 - Permit Issuance Cover Letter to SIU
 - SIU Permit
 - SIU Permit Synopsis (Fact Sheet)
 - SIU Permit Application
 - Latest SIU Inspection by POTW
 - Updated Headworks Allocation Table
- Streamlined IUP Review Submittal



SIU PERMIT SYNOPSIS

[Permit Fact Sheet]

- Required by State of North Carolina
 - *Must be Submitted to DWR Along with SIU draft permit*
 - *Gives the Source of All Permit Limits [e.g., Federal Categorical Standard, local limit]*
- SIU may ask POTW for a copy
 - *Not all POTWs send copy to SIU*

Time Table for Permit Issuance



- 30-Day Permit Comment Period
 - *SIU and State of NC get same 30-Day period*
- All comments/objections must be submitted *in writing to POTW*
- If no written comments/objections are received during the 30 days, then the permit is final and binding

Administrative Appeals Process

- Varies by Municipality
- Informal Administrative Appeal
 - *Ask for meeting with PT Coordinator during 30 day comment period to “reconsider” the limits and/or conditions in the permit*
- Formal Administrative Appeal
 - Adjudicatory Hearing
 - *Hearing Officer Selected by the POTW*
 - *May be staff within POTW structure or an “outside” person [e.g. PT Coordinator from another town]*
 - *Final Administrative Action*
- Appeal to Court System [Judicial Appeal]

