IUP Writing Workshop Agenda

9:00 Welcome/Introductions

Step 1 – Who needs a permit

Step 2 - Review application for completeness

Step 3 – Inspect the industry

- Step 5A Determine what pollutants are present
- 10:15 10:30 Break
- 10:30 Step 5B Determine which pollutants need a limit
 Step 5C Determine what the limits should be
 Step 6 Complete allocation table
 Step 7 Solutions for over allocation
- 11:30 12:30 Lunch
- 12:30 Step 8 Write the permit Cover page
 - IB Permit History
 - ID Description of Discharge
 - IF Limit Page
 - II General Conditions
 - III Special Conditions

- IA Basic Information
- IC Authorization Statements
- IE Schematic and Monitoring Location
- IG Definitions

- 2:00 2:15 Break
- 2:15 Step 9 Prepare Rationale for Limits, Other IUP Discussion
 Step 10 Prepare Transmittal Letter to SIU
 Step 11 Submit IUP to SIU and Division

IUP Modifications

Categorical

3:30 Wrap-up: comments, questions, suggestions

Handouts:

- The Division's Streamlined IUP Review Process and Submittal Form
- IUP Writing Steps
- Guidance for Completing IWS/IUP Application
- Slugem's Application
- Slugem's Inspection
- Slugem's Data Summary
- Typicalville's Allocation Table
- Slugem's IUP, including Transmittal Letter to SIU and Rationale for Limits
- Example IUP Modification #1 for WillPlate-it, including letters and Allocation Table
- Categorical Issues Slides
- Blank Industrial User Wastewater Survey and Discharge Permit Application
- PERCS... Pretreatment... Permit Writing Webpage
- PERCS... Pretreatment... Categorical User Information Webpage
- IUP Workshop Evaluation Form

Streamlined Industrial User Permit (IUP) Review Process

After meeting criteria outlined below, a permit writer will be approved to submit permits for the Streamlined IUP Review Process. Programs employing at least one approved permit writer and meeting all of the other specified requirements will be considered "Approved". If staffing changes occur the Program may be required to go through the approval process again.

In order for a permit writer to be approved, he/she must attend the Division Industrial User Permit Writing Workshop. After successful completion of the class, the permit writer must submit at least 3 permits for Division review. If no major errors are identified then the permit writer and the program are approved for the streamlined IUP review process. All permit writers are encouraged to attend the workshop, however participation in the streamlined IUP review process are voluntary.

Approved programs may issue permits and submit them to the Division as follows:

<u>New Permits</u>: Submittal must include the IUP application, allocation table, copies of the most recent on-site inspection, the written permit and IU transmittal letter. All new permits will receive a full review by Division staff. The submission may be made electronically in PDF form or by mail.

<u>Renewed Permits</u>: Submittal must include the IUP along with a checklist indicating the date the IUP application was received, the date the allocation table was updated, and the date of the most recent on-site inspection. These items do not have to be included in the submittal. The checklist will also ask if there have been any changes to the SIU name, IUP number, pipe number, limits or treatment units and if the permit deviates significantly from the State model. The checklist must be signed by the approved permit writer. The submission may be made electronically in PDF form or by mail.

<u>Modifications</u>: Submittal must include all modified permit pages along with a checklist indicating if there have been any changes to the SIU name, IUP number, pipe number, limits or treatment units. The checklist must be signed by the approved permit writer. The submission may be made electronically in PDF form or by mail.

The permit writer's approval to submit permits through the streamlined permit review process will not expire. If new regulations or language are implemented which require the permit writer to update their knowledge or skills, the Division will inform the permit writers and provide an appropriate period of time for the permit writers to attend a refresher workshop.

The Division reserves the right to review any IUP submitted by an approved program at any time. If this review indicates there are concerns with any of the items in .0917 (f), the program will be notified at the time of the review and will be expected to make any needed corrections within the specified time frame. This review may take place outside the typical 30 day review period.

The Division may revoke a permit writer's and Program's approval for cause.

Streamlined IUP Review: Version 1.1 Revision Dates: 4/4/2011

Streamlined Industrial User Permit Review Submittal Form

One form may cover multiple IUPs submitted together.	
Program Name:	
WWTP Name:	
Permit Renewals	
Date application(s) received	
Date of most recent on-site inspection(s)	
Date allocation table updated	
Are any changes to SIU name, IUP number, pipe number, limit (Changes do not have to be listed here)	s or treatment units?
Permit Modifications:	
Are any changes to SIU name, IUP number, pipe number, limited (Changes do not have to be listed here)	ts or treatment units?
I certify that the attached permit(s) has been prepared under my direct meets the requirements of all applicable Federal and State Rules and r	ct supervision and that the permit requirements.
Signature of approved permit writer	Date
Email Address: you will receive an email confirmation of receipt	Approval number

Streamlined IUP Review Submittal Form: Version 1.0 Revision Dates: 2/16/2011

Step 1. Determine who needs an IUP:

Complete or update your Industrial Waste Survey (IWS, see chapter 3 of the *Comprehensive Guidance*).

Have the Industry complete the IU Wastewater Survey & Application Form (see Appendix 6-A of the *Comprehensive Guidance* or PERCS web site).

Make SIU determination. Includes category determination.

Step 2. Review application for completeness and accuracy:

- Failure of the facility to submit a completed, signed application should be followed up with another letter, phone call, an on site inspection or a Notice of Violation as provided for in the Sewer Use Ordinance (SUO Model Section 8).
- The application is not considered complete unless the certification statement is signed, and each question is answered clearly, completely, and accurately. The POTW must review the entire form to ensure the form is complete, and to address any local concerns and conditions. Tips for evaluating responses to each question on the long form are provided in the Guidance for Completing the Industrial User Wastewater Application. If the response to any question is incomplete or unclear, the POTW should contact the facility by phone or email, send the application back, or perform an inspection to clarify the answer.
- A complete application should give the POTW a good basis for continuing with the permit writing process.
- Step 3. Inspect the Industry:

Complete an Industrial User Inspection Form (See Appendix 7-D of the *Comprehensive Guidance*)

Step 4. Determine if the Headworks Analysis (HWA) should be updated:

See Section 5-D of the *Comprehensive Guidance*.

Step 5. Decide what pollutant limits to include in the IUP:

Three parts:

Step 5-A - Determine what pollutants are present at the IU's facility, in the IU's discharge or otherwise need to be considered for a limit: Just because a pollutant is present in an IU's wastewater doesn't mean the POTW automatically has to assign a limit for that pollutant. Likewise, just because a pollutant is not present at the facility or is not in the discharge doesn't mean the POTW cannot assign a limit, eg. uniform or categorical limits, pollutants removed by pretreatment, pollutants hauled away, potential spill/slug POCs, POTW POCs.

<u>IUP Writing Steps</u> Workshop Outline

- 1) <u>Use the following resources to determine what pollutants are present at the IU's facility,</u> whether each pollutant will be in the discharge or not, and evaluate how the IU made these determinations. Also include any pollutants that may be of concern to the POTW in general or just for this IU.
 - a) wastewater pollutant checklist Application Section F.
 - b) data summary from IU Application Question F2.
 - c) any monitoring you may already have for IU
 - d) Categorical parameters

Other suggested resources:

- e) Application Question Section B schematic and D2 raw materials and process additives [old app Part I, 3]
- f) Application Question F3 Toxic Release Inventory
- g) Application Question F4 biocides [old app Part I, 4]
- h) Application Question F5 above/below ground storage tanks [old app Part I, 18]
- i) Application Question F6 waste haulers, i.e., what pollutants are they hauling away [old app Part I, 9]
- j) Application Question F7 hazardous wastes
- k) Application Section G wastewater pretreatment units, i.e., what pollutants are they removing, and what pollutants are added in the treatment process [old app Part III]
- Application Section E2 potable water treatment of water prior to use in process, i.e., what pollutants are they removing, what pollutants are added in the treatment process, where are removed wastestreams discharged (eg. RO reject, deminerlizer backwash, etc.)
- m) observations during an inspection
 - i) Odors
 - ii) Leaking tanks or storage drums
 - iii) Unlabeled barrels
 - iv) Chemicals not addressed in the IU application
- n) Parameters limited or monitored in NPDES, Non-Discharge, sludge, air quality permits
- o) L/STMP POCs

Now you should know what pollutants are actually being discharged from each Industry or are otherwise of concern for you at this SIU. Examine and summarize the information to find the average and maximum flow and concentration values for each pollutant.

Step 5.B. Determine which of above POCs actually need an IUP limit

Just because a pollutant is present in an IU's wastewater doesn't mean the POTW automatically has to assign a limit for that pollutant.

1) <u>Requirements</u> (also see Appendix 6-E of the *Comprehensive Guidance*, Local Limits Procedure)

NOTE – This Appendix requires revision to correct the flow limit requirements and to address the new 5 % MAHL SIU criteria.

- a) <u>Flow</u>:
 - i) IUP must have flow limit where the IUP has concentration based limits (eg. mg/l or ug/l) for <u>at least one</u> IUP pollutant limit for which there is a mass based MAHL. See

Step 8, Part I, Section F 3 & 6 for other requirements for flow measurement methods and frequency.

- ii) IUP is not required to have flow limit where the IUP has mass based limits (eg. lbs/day) for <u>all</u> pollutants for which there is a mass based MAHL. IUP still must require adequate flow measurement for compliance judgment for lbs/day limits.
- b) <u>HWA POCs (including organics)</u>: IUP must have IUP limit if SIU discharges greater than 5% of MAHL for BOD, TSS, and NH3 (15A NCAC 02H .0903(b)(33)(B)).
 - i) unless POTW has significant available capacity (defined as influent mass load of less than 75 % MAHL for BOD and 50% MAHL for TSS and NH3). See Appendix 6-E of the *Comprehensive Guidance* for more details.
 NOTE NC POTWs may be more stringent than the state or federal definitions. If your POTW elects to establish a "5% MAHL" SIU criterion for any additional POCs, the POTW must apply the same criteria above to all those POCs using the 50%

MAHL significant available capacity.

- c) <u>Categorical POCs</u>: IUPs for categorical IUs must have IUP limits for all pollutants regulated by the applicable categorical standard, even if CIU's actual average is <5% MAHL or data is all below detection.
 - i) unless a waiver allowed under 40 CFR 403.12(e)(2) and 403.8(f)(2)(v)(A) is approved.
 - ii) if categorical limits cause over allocation, assign lower IUP limits to resolve.
- d) <u>Non-HWA POCs</u>: Contact PERCS to discuss <u>before IUP is issued</u>. PERCS may be able to provide a water quality protection value from our Planning Section, literature removal rate, contact info from other POTWs who have addressed the pollutant, or other methods for evaluation of the pollutant.
- 2) <u>Suggestions</u>:
 - a) even if an IUP limit is not required, consider if you want to assign a limit and/or monitoring anyway. For example:
 - i) the SIU has had problems before
 - ii) the SIU discharges are higher than SUO local limits (not applicable if the "Industrial Waste Survey" wording is in your SUO)
 - iii) the SIU has a pretreatment unit that removes a pollutant
 - iv) the SIU has potential for slugs or spills of a pollutant
 - v) to confirm a pollutant at IU that IU says will be absent from discharge is really absent
 - b) NPDES, sludge, and L/STMP POCs, especially new ones:
 - i) It is recommended that you monitor every Industry once a year for all pollutants in your LTMP or NPDES permit.
 - ii) However, if you have good recent data showing that a pollutant is not present at the facility and has not been detected in their discharge, this once a year monitoring may be replaced by monitoring once every 5 years when they reapply for a new IUP.

Now you should know which pollutants you plan to assign IUP Limits to this SIU.

Step 5.C. Determine what the limit should be

Just because a SIU wants 20 mg/l zinc doesn't mean the POTW automatically has to assign that limit for that pollutant, even if you have the MAHL to do it.

Likewise, just because a pollutant is not present at the facility or is not in the discharge doesn't mean the POTW cannot assign a limit, eg. uniform or categorical limits, pollutants removed by pretreatment, pollutants hauled away, potential spill/slug POCs, POTW POCs

- 1) Requirements:
 - a) IUP limits cannot cause over allocation.
 - b) IUP limits cannot exceed categorical limits.
 - i) If categorical limits cause over allocation, POTW must assign lower IUP limit to resolve.
- 2) Suggestions:
 - a) consider setting IUP limits based on SIU actual data:
 - i) Determine what limits are needed by each industry in order to be in compliance every time they are sampled.
 - ii) Set IUP limit slightly higher than the highest value from last five years' data.
 - iii) Try putting these limits in your Allocation Table and check for over allocations.
 - iv) IUP limits set too high can encourage sloppiness, inefficient pretreatment unit operation, etc.
 - v) Exclude obvious "outlier" data, especially where it is known the SIU had a problem that day (upset pretreatment unit, spill, etc.)
 - vi) Applies to categorical limits, too. Even if Allocation Table shows categorical limits do not cause over allocation, if actual IU data is significantly lower than categorical limits, consider IUP limits based on actual data.
 - vii) If limits are greater than necessary, it may be difficult to take the "extra" allocation away at a later date for a new IU.
 - viii) If IU has no data, consider setting limits based on:
 - (1) estimates by IU production process designers;
 - (2) data from similar IUs (with justification of IU's predicted differences);
 - (3) literature;
 - (4) consultants;
 - (5) talk to Pretreatment Coordinators at other POTWs at with similar IUs;
 - (6) issue short-term IUP
 - b) Some POTWs report they prefer to give all SIUs the same limit for a given parameter, regardless of whether each SIU even needs a limit for that parameter. They see it as "fair" and it's very easy to remember.
 - c) Some POTWs report they prefer to give all SIUs that need a limit for a particular parameter the same limit for that parameter. They see it as "fair," it's still fairly easy to remember, but does not give up MAHL to SIUs that do not need it.
 - d) Generally, most limited parameters should have a daily max limit or both a daily max and a monthly average. For alternatives, contact PERCS to discuss <u>before IUP is issued</u>.

Step 6. Complete Allocation Table:

An Allocation Table (AT) is a spreadsheet that summarizes IUP limits for each pollutant and for flow. These total permitted loadings are compared with the MAHL and MAIL results calculated with the Headworks Analysis (HWA). POTWs are not allowed by the Division to issue IUPs

with IUP limits that exceed the MAIL (NCGS 143-215.67(a)). This situation is called "Over Allocation".

The Division prefers POTWs use the AT worksheet that is part of the HWA/AT spreadsheet that is currently approved for your POTW. The AT worksheet is linked to the HWA worksheet, and thus will ensure that the current MAHLs and MAILs are always used.

POTWs must submit an updated AT with any new or modified IUP that changes limits. It would be helpful if changes, corrections or modifications could be highlighted. The AT includes:

- 1) SIU names; IUP # / pipe number; SIU General Type (i.e., textile, food, etc) please do list description in words, even if also list SIC codes; and 40 CFR if applicable
- 2) IUP renewal effective date for current IUP 5 year cycle, most recent IUP modification date (if applicable), and expiration date
- 3) IUP Flow Limit and Pollutant Concentration Limits:
 - a) If IUPs have monthly average limits, enter them into AT. If IUPs have only daily maximum limits, enter them into AT.
 - b) AT worksheet will calculate the lbs/day.
 - c) If IUP itself has mass limits (lbs/day), enter them directly in the applicable lbs/day column, over-writing the lbs/day formula already in the lbs/day cell.
 - i) NOTE: Must unprotect worksheet to do this. Make sure you re-protect it when you are done.
- 4) AT worksheet calculates the sum of SIU permitted load for flow and each pollutant.
- 5) AT worksheet shows following from linked HWA worksheet:
 - a) Maximum Allowable Headworks Loading (MAHL)
 - b) Basis for the MAHL (i.e. WQ Std, or Inhib)
 - c) Uncontrollable Domestic Loading
 - d) Maximum Allowable Industrial Loading (MAIL)
- 6) Spreadsheet calculates MAHL and MAIL remaining.
- 7) No over allocation!
- 8) Spreadsheet also shows 5% MAHL for IUP limit decision purposes.

NOTE: Spreadsheet Instructions: Applicable Values should be entered in the Heavy Bordered cells. Rest of worksheet is protected, password is "2".

You must unprotect the worksheet to enter anything into any non-blue cells, and also to do formatting changes, such as highlighting, changing decimal points, adding rows, etc. To add rows, add in the middle so that all formulas will automatically adjust. [[Do not add them at the top or the bottom.]] <u>Make sure you **re-protect** the worksheet right after you are done with your changes. DO NOT leave the spreadsheet un-protected.</u>

Step 7. Solutions for Over Allocations:

- 1) Lower the IUP limits for the over allocated pollutants. Lower limits may need to be given to one, several, or all Industries.
- 2) Check the Headworks Analysis (HWA).
 - a) If you have a new SIU, adding their anticipated average flow (not their flow limit) to the POTW average flow in the HWA will likely increase the MAHL/MAIL.
 - b) Newer L/STMP and DMR data may increase the MAHL/MAIL.

- c) Making different assumptions, choices, or decisions in selecting values for your HWA may increase your MAHL/MAIL.
- d) Ask PERCS for help.
- 3) If your HWA is based on realistic assumptions and you must give an Industry a new or more stringent IUP Limit that they may have trouble meeting, put a compliance schedule in the IUP to allow them time to take actions necessary to comply with the IUP Limit. (see Chapter 6, Section D, of the *Comprehensive Guidance*).

Step 8. Write the IUP Itself

PARTS OF AN SIU IUP

IUP Cover page:

All IUPs must have a new IUP cover page with a new effective date, and a new Official signature and signature date.

- 1) Pretreatment Control Authority Name
- 2) IUP number.
 - a) When assigning an IUP number to a new SIU, choose a number that has not been used by for any User before.
 - b) Once an IUP number has been assigned, generally it will not ever be changed.
 - i) Even when a name change occurs the POTW usually will not change the IUP number. However, in some cases either the POTW or the SIU wish to use a new IUP number. In this case, PERCS requests the IUP permit history entry refers to the previous SIU name and IUP number. Call PERCS to discuss.
- 3) Categorical number, including section with limits, eg. 433.17; 464.35 a, b, c, f, and i. Application Question H2 [old app IV].
- 4) SIU name and address. Application Question A1.
- 5) POTW name and address.
- 6) Effective date, and expiration date.
 - a) "IUP effective date" is date IUP or IUP modification comes into effect.
 - b) "IUP expiration date" is date IUP or IUP modification expires.
 - c) IUP expiration date cannot be more than 5 years from effective date of IUP renewal.
 - d) The IUP must be transmitted to the SIU on or before the effective date.
 - e) All listings of the effective and expiration dates must be consistent throughout the IUP package.
- 7) Legal authority under which IUP is issued.
- 8) POTW Official Signature, date signed.
 - a) The IUP must be signed by the authorized signing official, i.e., an executive officer, elected official in highest level of elected office or other authorized employee.
 - i) If signatory authority has been delegated to another employee, ensure that PERCS has a copy of the delegation letter.
 - b) "IUP signature date" is date IUP is signed. May or may not be same as IUP effective date.
 - c) Signature date cannot be later than effective date, i.e., effective date and modification effective date cannot be retroactive (15A NCAC 02H .0916(c)(7))

Part I, Section A: Basic Information

Repeats some of the basic information on the cover page in a more readable format. Can be deleted if POTW wishes.

Part I, Section B: Permit History:

All IUPs must have a new Permit History entry each time the permit is reissued, modified or issued for the first time.

- 1) A history of the IUP activity.
- 2) Previously called Modification History.
- 3) Entry for each IUP event, i.e., when it was issued and each time it is reissued, or modified.
- 4) Each entry is identified as an IUP first issuance, renewal or IUP modification
- 5) Each entry is identified by the Effective date (not date signed or date printed, etc.).
- 6) List of changes made.
 - a) Can be brief: For example, "changed limits" or "Revised Part III 1, added Part III, 8."
 - b) Can be more detailed: For example, "raised zinc limit to 1.5 mg/l" or "added copper limit because of new copper based dyes."
- 7) Is on-going, i.e., does not start over with IUP renewal, even for name changes.
- 8) Can be inside IUP at any location or attached to IUP.

Part I, Section C: Authorization Statements:

C, 1 and C, 3, must be used verbatim in all IUPs.

Alternatively, POTW may request PERCS approval of alternative wording <u>prior to</u> issuing the <u>IUP</u>.

- C, 2, authorizes use of and discharge from existing treatment units.
- 1) Clearly list treatment units, using terms SIU and POTW recognize.
 - a) If doesn't match Application Question G1, explain in synopsis or notes in application.
 - b) List units in order of wastewater flow.
 - c) If IUP addresses more than one pipe, identify which units are at which pipe.

Part I, Section D: Description of Discharge

- 1) First objective: Clearly list which wastestreams are in sample point.
 - a) If doesn't match Application Question E4, explain in synopsis or notes in application.
 - b) Extra requirements for categorical SIUs.
- 2) Second objective Optional: Clearly list which wastestreams are not in sample point and any wastestreams that are prohibited from discharge altogether.

Part I, Section E: Schematic and Monitoring Locations:

- 1) First objective: Clearly locate sample point, so that someone unfamiliar with SIU could locate correct sample point. Application Section B.
 - a) POTW and SIU must sample at same spot.
 - i) In rare cases, having different locations make good sense. The IUP must show both locations, and the IUP submission must document how it is known that the two sample points have the same exact wastewater characteristic. Call PERCS to discuss.
- 2) Second objective Optional: Show pipes to document which wastestreams are in sample point and which are not. Especially helpful for categorical SIUs.

Part I, Section F: Effluent Limits and Monitoring Requirements: The "Limits Page(s)"

- 1) Effective and Expiration Dates, Pipe Number, etc.:
 - a) Update the effective and expiration dates as needed.
 - b) If more than one Pipe, either have separate limits page for each pipe, or make sure your single limits page is very clear about what limits, frequencies, etc. apply to which Pipe.
 - c) The Division Generic IUP lists various POTW and SIU info on the limits page. Make sure to update it as needed.
- 2) <u>IUP Limits Themselves</u>: See Step 5
- 3) <u>IUP Monitoring Frequencies</u>:
 - a) <u>Requirements for POTW Sampling</u>: Minimum Frequencies for POTW are established in 15A NCAC 02H .0908(e).
 - i) A minimum of once each year for all pretreatment permit-limited parameters including flow.
 - ii) "Every Sample" for flow, even when there is no flow limit.
 - b) <u>Requirements for SIU self-monitoring sampling</u>: Minimum Frequencies for SIUs are established in 40 CFR 403.12(e) and (h).
 - i) A minimum of once each six month period for all pretreatment permit-limited parameters including flow.
 - ii) "Every Sample" for flow, even when there is no flow limit.
 - c) Effective April 1, 2011, where the POTW elects to perform the SIU self-monitoring sampling required in 40 CFR 403.12(e) and (h) in lieu of the SIU, the minimum frequency for the POTW will be a minimum of once each six month period for all pretreatment permit-limited parameters including flow.
 - d) <u>Suggestions on Additional Sampling above the minimum requirements</u>:
 - i) POTWs may require more frequent monitoring for themselves, and/or can require SIU self monitoring.
 - (1) Some POTWs report they prefer to do all the sampling themselves, so they do not require self-monitoring.
 - (a) In many cases, the POTW will recover the cost of the lab analysis and sample collection from the SIU.
 - (2) Other POTWs report they prefer to have any additional sampling done by the SIU.
 - ii) Typical criteria used to determine frequencies:
 - (1) High flow and/or pollutant load more frequently than small flow/pollutant load.
 - (2) Adequacy of pretreatment.
 - (3) Compliance history.
 - (4) Potential for spills/slugs.
 - (5) Potential for harm if something goes wrong. For example, an SIU is very close to WWTP.
 - (6) Infrequent or periodic discharges, for example emptying a phosphating bath once every six months.
 - (7) Daily or even hourly variations, weekday versus weekend variations, or seasonal variations.
 - iii) Start out with high frequencies, and then reduce later after data shows consistent

levels that are not "of concern."

- 4) <u>Sample Type</u>: For flow, see I, F, 6) Flow Requirements (below). For pollutants, "C" means composite and "G" means grab; see Part I, G, Definitions & Limits Page Notes.
- 5) Practical Quantitation Levels (PQLs) in IUP [formerly called "Detection Levels (DLs)"].
 - a) POTWs are not required to list detection levels in an IUP at all. In this case, the only "requirement" for PQLs is that they be low enough to judge compliance with the IUP limit.
 - b) If POTW wishes to list PQLs in IUP, may designate as "Recommended" or "Required."
 - c) If POTW designates as "Required," POTW must judge compliance and take enforcement as outlined in your Division approved ERP.
 - i) Example: IUP requires silver PQL of 0.005 mg/l.
 - (1) Result reported as "< 0.01 mg/l" would be a sampling/reporting violation.
 - (2) Result reported as 0.015 mg/l would not be a sampling/reporting violation, even if the lab sheet shows the lab's PQL was 0.01 mg/l.
 - d) PQLs in IUP do not have to match L/STMP. Generally, the concern with PQLs is about wanting to get the most "valuable" result for the money. Labs usually charge more for a lower PQL.
 - i) Assuming no issues with accuracy, a specific mg/l result is always "more valuable" than a "less than" result. For example, zinc of 0.076 mg/l versus <0.5 mg/l.
 - ii) A "less than" with a lower PQL is more valuable that a "less than" with a higher PQL. For example, <0.01 tells you more than <0.1. This is especially true when the PQL is at or near an environmental criterion. A good example of this is cadmium NC WQS is 0.002 mg/l, the same as the typical PQL of 0.002 mg/l.
 - iii) If IUP required PQLs are higher than L/STMP, PERCS recommends at least once per year or once per HWA cycle testing at each SIU at the L/STMP PQL for HWA mass balance purposes. Not using the same PQLs can make the mass balance difficult and less meaningful.
- 6) <u>Flow Requirements</u>: 4 distinct issues Methods, Measurement Frequency, Reporting Frequency, and Limits.
 - a) Flow Measurement <u>Methods</u>: Application Question G2 and G3.
 - i) First objective: Clearly specify flow measurement method; both SIU and POTW use it.
 - (1) IUP limits page
 - (2) Definitions section (usually with references from the limits page).
 - (3) Special Conditions section of the IUP (again usually with references from the limits page).
 - ii) Second objective: Flow measurement method is adequate. "Adequate" means "good enough" for SIU/POTW specifics. Typical methods available:
 - (1) Effluent (discharge) meter at IUP sample point.
 - (2) Flow calculated by adequate method. eg., discharge time + pump gpm, tank size + depth discharged, etc.
 - (3) Water supply meter (WSM) that serves all wastestreams in the sample point, and only those wastestreams.
 - (4) Water supply meter (WSM) that serves all wastestreams in sample point, plus

some other wastestreams that are not in sample point.

- (5) Water supply meter that serves wastestreams that have significant water losses (into product or evaporation).
 - (a) deductions for losses OK
- b) Flow Measurement **<u>Frequency</u>**:
 - i) <u>Requirements</u>: At a minimum, "every sample" meaning "every time the POTW or SIU collects a composite sample of the designated sample point."
- c) Flow Measurement **<u>Reporting</u>** Frequencies:
 - i) All flow readings submitted with report required by Part II, 2 of IUP, typically, monthly.
- d) Flow <u>Limits</u>:
 - i) <u>Required</u> where the IUP has concentration based limits (eg. mg/l or ug/l) for <u>at least</u> <u>one</u> IUP pollutant limit for which there is a mass based MAHL.
 - ii) Not required where the IUP has mass based limits (eg. lbs/day) for <u>all</u> pollutants for which there is a mass based MAHL.
 - (1) <u>NOTE:</u> compliance judgment for lbs/day limits still requires representative flow readings, so <u>all</u> IUPs must have adequate flow measurement requirements.
- e) Flow and <u>Surcharges</u>:
 - i) The above requirements are only for <u>SIU IUP</u> related matters. They do not apply to flows used for surcharges, which may be based on whatever the POTW wishes.

7) <u>RE-CHECK THE LIMITS PAGE FOR COMMON TYPOS</u>: Especially:

- a) Dates
- b) Units
- c) Decimal Places
- d) Sample Types

Part I, Section G: Definitions & Limits Page Notes:

- <u>Grab Samples</u>: Certain analytical methods require grabs. These include but may not be limited to, mercury using Method 1631, pH, cyanide, total phenols, oil & grease, sulfide, volatile organic compounds, chlorine residual, etc. See 40 CFR 403.12(g)(3) and 40 CFR 136 or check with your lab.
- 2) <u>Composite Sample Definition</u>: For all other pollutants, 40 CFR 403.12(g)(3) requires 24 hour composites.
 - a) 403.12(g)(3) requires flow proportional composite sampling techniques, but it does allow the Control Authority to authorize time-proportional sampling provided such samples will be representative. The POTW must document their decision in the IUP Rationale.
 - b) Division PERCS Generic IUP Part I, G, 3, is written to require grabs at least hourly over the entire discharge period. The grab samples may be collected manually or by an automatic sampler.
 - i) IUPs with less frequent grabs must include discussion in the IUP Rationale of how the definition ensures a representative sample.
- 3) Grab versus Composite Sampling
 - a) Grab samples may be appropriate for certain kinds of batch dischargers:
 - i) Single grab may be truly representative when batch tank is well mixed after treatment and after removal of any sludge.

IUP Writing Steps Workshop Outline

- ii) If pollutant concentrations are stratified throughout tank, eg., higher concentrations lower in tank, especially if near sludge blanket at bottom, must collect a series of grabs as tank is drained, one at beginning, one at end, and as many in middle as may be needed. Document your findings in the IUP Rationale.
- b) Dischargers with very large equalization basins: If EQ basin holds more than one day of SIU flow, and basin does not have any short circuiting, a single grab may be acceptable, or at least a composite with only a few grabs over 24 hours period.

IUP PART II: General Conditions

Applies to all SIUs, regardless of SIU type.

Must be used verbatim in all IUPs.

Alternatively, POTW may request PERCS approval of alternative wording <u>prior to issuing</u> the IUP.

Many limits violation caused by underlying violation of general condition, for example:

changed process chemicals - IUP Part II, 25.

increased production - IUP Part II, 25.

slug load - IUP Part II, 30, 5, 6, 7, and 8. Also Part III, 1, maybe III, 2 and 5

pretreatment unit failure or overload - IUP Part II, 7, 8, 6, 25. Also maybe Part III, 2, 5

IUP PART III: Special Conditions

The Division Model includes 10 plus common "special conditions."

POTW must review these, decide which ones are applicable to the individual SIU based on application, inspection, knowledge of SIU and special circumstances.

Fill in any blanks. If the Division wording is edited, consult PERCS <u>prior to issuing the IUP</u>. <u>Delete the rest</u>.

Add any other Special Conditions.

Step 9. Prepare IUP Rationale:

Required for all first time IUPs and IUP renewals. May need update with IUP modification.

- 1) Copy of completed IU Wastewater Survey & Application Form
- 2) Copy of completed SIU Inspection Form
- 3) Rationale for Limits: Explains how IUP limits were developed.
 - a) For any IUP Local Limit that is an HWA POC, all that is required is a statement similar to "Historical data and HWA," along with Allocation Table showing no over allocation.
 - i) In this context, a "Local Limit" is defined as any limit assigned to a non-categorical SIU, or assigned to a CIU but for a non-categorical parameter.
 - b) For any categorical limits: List specific categorical citation for limits, show or attach any calculations, etc.
 - c) Other possible Rationales:
 - i) "pH limit from SUO"
 - ii) "Oil & Grease limit from BPJ"
- 4) Rationale for <u>No Limits</u>: Explains why all remaining pollutants listed in the application as known present in the discharge were not limited in IUP.

IUP Writing Steps Workshop Outline

- a) <u>HWA Parameters, including Organics HWA parameters</u>: Show these parameters are less than 5 % of the MAHL, or that WWTP has significant available capacity. See page 5 of Appendix 6-E of the *Comprehensive Guidance*. Also see example IUP on PERCS website.
- b) <u>CIUs with TTO Limits</u>:
 - i) Verify compound is included in the applicable TTO definition.
 - ii) Verify any TTO sampling confirms compliance.
 - iii) Verify CIU's Total Organics Management Plan (TOMP) has adequate explanation of the use and location of compounds as well as methods/procedures CIU implements to keep discharge in compliance with TTO limit.
- iv) Verify implementation during normal inspections/TOMP reviews.
- c) <u>For any remaining parameters</u> not covered in the HWA or TTO:
 - i) Contact SIU to determine status:
 - (1) confirm parameter is present in the discharge;
 - (2) where it is used in the factory;
 - (3) is there any sampling data;
 - (4) if no sampling data, what concentrations are expected in the discharge.
 - ii) Contact PERCS for assistance in developing a MAHL or to determine special IUP conditions or sampling requirements.
- d) <u>Optional</u>: Parameters checked as present at facility but absent in discharge can still sometimes be of concern.
 - i) Confirm SIU's method for ensuring these parameters are not discharged. You may consider requiring modifications to the SIU's slug/Spill Control Plan to document the methods, or even consider sampling to demonstrate their absence in the discharge.
 - ii) Organic Compounds:
 - (1) Verify compound in applicable TTO definition
 - (2) Verify any TTO sampling confirms below detection.
 - (3) Verify CIU's Total Organics Management Plan (TOMP) has adequate explanation use/location of compounds as well as methods/procedures CIU implements to keeps these pollutants out of discharge altogether.
 - (4) Verify implementation during normal inspections/TOMP reviews.

Step 10. Prepare IUP Transmittal Letter to SIU:

Required for all IUPs.

Letter transmitting the IUP renewal to the SIU.

- 1) It must inform the SIU of their right to adjudicate the IUP.
- 2) Example in Appendix 6-D of the *Comprehensive Guidance* and on PERCS web-site.
- 3) Send letter and IUP certified mail, return receipt requested. Or hand deliver and have SIU sign and date your copy of transmittal letter to document when they received it.
- 4) Consider other persons to cc: Staff member at SIU that actually does day-to-day work or POTW staff such as WWTP ORC, lab, Pretreatment staff.

Step 11. Submit IUP to SIU and to the Division:

- 1) What to submit to the Division for IUP <u>renewals</u>:
 - a) Copy of the letter transmitting the IUP renewal to the SIU.
 - b) IUP itself
 - c) IUP Rationale.
 - d) SIU's application.
 - e) POTW's latest inspection.
 - f) Updated Allocation Table.
 - g) If any item is or has been submitted to the Division under separate cover, please identify this in the IUP submission.
- 2) What to submit to the Division for IUP <u>modifications</u>:
 - a) Copy of the letter transmitting the IUP modification to the SIU.
 - i) Do not instruct the SIU to remove and <u>discard</u> the replaced pages. You may either tell them to move them to the end of the IUP, or mark them as "void" on the effective date of this new IUP modification. Some POTWs list the effective date at the bottom of each IUP page so there will be no confusion.
 - b) New IUP cover page with a new effective date and new signature date.
 - c) New permit history page with an entry for that modification that uses the IUP modification effective date and the phrase "IUP modification" and lists all changes the IUP modification made over the previous IUP or IUP modification. See Step 8 for more on Permit Histories.
 - d) Any other pages of the IUP that are modified. If the limits page itself is changed, don't forget to change the effective date on this page.
 - e) Updated Allocation Table, if limits were changed.
 - f) IUP Rationale, if changed.
 - g) Copy of letter from the SIU requesting the change, if applicable.
 - h) If any item is or has been submitted to the Division under separate cover, please identify this in the IUP submission.
- 3) <u>Name Change/New Owner</u>: IUPs are not transferable (Model SUO, Section 4.2(k); Generic IUP, Part II, 19). New SIU owners must get a new IUP with the correct name before the change becomes effective, or the new SIU is discharging without a valid IUP.
 - a) This applies to a sale of the company as well as a general SIU name change where there is no ownership change.
 - b) Prior to a sale/name change, the SIU must advise the POTW as to the name change and the relationship of the old and new company or division, including when the name change for the facility will actually occur at this SIU.
 - i) In some cases, the local SIU staff does not find out about the name change or sale until after it has already happened.
 - c) At the POTW's discretion, the new company/owner/name must either:
 - i) complete a new application

OR

ii) review the "old" company's and accept it in writing to the POTW, stating that there will be no changes, or if there will be a few production/pretreatment/discharge changes not requiring a full new application, describe them Also, state who the new

contact people are, including the official with signatory authority.

- d) In response, the POTW
 - i) modifies the IUP, using the date of the sale/name change as the IUP modification effective date new cover page, history page, and any other pages with SIU name.
 - ii) Alternatively, if a new application is submitted, the POTW may renew the IUP, with a new 5 year effective period.
 - iii) Do not delete permit history events for the previous owner.
 - iv) If the SIU notified the POTW after the sale/name change, use the date of IUP signature as the effective date.
- e) In most cases, the IUP number is not changed.
 - i) However, in some cases the POTW and/or SIU wish to assign a new IUP number. In this case, it is requested that the IUP permit history entry refers to the previous SIU name and IUP number. Call PERCS to discuss.
- 4) <u>Correction of Typographical Errors</u>: If a typographical error is discovered after an IUP is issued, how to handle it depends on how the error has affected compliance judgment of that IUP condition, and how the POTW and SIU have been interpreting the IUP condition with the error up until it was discovered.
 - a) If both the POTW and SIU had been interpreting the IUP as it would have been without the error, this can be "corrected" in the following manner:
 - i) Prepare a corrected IUP page with the corrected part highlighted, a notation something like "errors corrected on <u>(list date of transmittal letter)</u>." Prepare a transmittal letter to the SIU explaining the typographical corrections, signed by the party who signed the original IUP. Send these pages to the SIU, or hand deliver them. Forward copies of these pages to PERCS for our files.
 - b) Otherwise, contact PERCS to discuss.

The Industrial User Wastewater Survey and Discharge Application is completed by facilities wishing to discharge non-domestic wastewater into a Publicly Owned Treatment Works, or POTW. The POTW will use the information in this survey to determine the potential of the proposed wastewater discharges to adversely affect the operation of their POTW and their ability to comply with all their environmental permits. If the POTW agrees to accept the wastewater, the information will also be used to determine if the discharge represents a Significant Industrial User (SIU), if a permit is needed, which discharges need to sampled, which discharges need to be prohibited, etc.

How to fill out the permit application:

All questions must be answered. DO NOT LEAVE BLANKS. DO NOT use entries such as "same as previous," unchanged," etc., unless allowed by the POTW. If allowed by the POTW, make copy of page from previous application, date and initial it and include it with the new application.

If a question is not applicable, indicate so on the form (enter N/A or "not applicable"). Please attach additional pages for information if insufficient space is provided for your answer.

INSTRUCTIONS TO POTW Only allow entries such as "same as previous," unchanged," etc., if the previous application included the same question and a complete answer was provided in that application. In this case, SIU must make copy of the applicable page from previous application, date and initial it to document the Authorized Representative's review, and include it with the new application.

STATUS of APPLICANT / APPLICATION

New Permit for Proposed Discharge

This is a new facility that has never discharged wastewater to the sanitary sewer system.

- If specific information required in this application is not yet be available, there are several appropriate options: 1) answer "not yet available" with a date indicating when the information may become available, 2) provide estimates based on best professional judgment, or 3) provide estimates based on operations at a similar facility. In either of the last two options, be sure to note the origin of the information, such as "tentative", "BPJ" or "based upon similar operations at {city, state}.
- Enter the projected date of the first discharge of wastewater generated by the manufacturing, production or service operation conducted at this facility.
- **NOTE TO POTW**: You may wish the applicant to also give the date of first discharge of non-process wastewaters such as domestic or non-contact cooling.

Existing Unpermitted Discharge

- This is an existing facility that is currently discharging wastewater to the sanitary sewer system but has never been issued a SIU permit, non-SIU permit or other written permission to discharge. This facility may be responding to a request from the POTW to complete an industrial user wastewater survey.
- This status can overlap with the "New Permit for Proposed Discharge" status. For example, an existing non-SIU discharging 10,000 gpd from X process is now planning to increase production of the same process X and will now discharge 100,000 gpd. Or an existing non-SIU discharging from process X is now completing this application to address a new process Y. Contact your POTW to discuss which status is appropriate for you.

Permit Renewal for Existing SIU Permit, or an existing Local IUP, or other written permission from the POTW

- This facility currently has a valid SIU Permit, existing non-SIU permit, or other written permission for discharge and wishes to renew the permit.
- If this application requests an increase in any previously assigned permit limit OR addresses any change in the manufacturing, production, or service conducted at this site, please describe the request in Question A8, and any other applicable questions, or attach a description. Include a justification for the increase. See Guidance for Question A8 for more details.

APPLICANT SIGNATURE:

The statement appearing at the bottom of the page must be signed by an Authorized Representative of the company identified in Question A1. [Model SUO Section 1.2 (a) (3)].

Section A – General Information

<u>Question A1</u>: Information for the actual facility with the operations for which this application is being completed **NOTE TO POTW**: This information is required on p. 1 of IUP.

- <u>Question A2</u>: Information on any corporate office, headquarters, parent company, etc. If the information for Question 2 is the same as in question 1, check N/A.
- <u>Question A3</u>: Official "Authorized Representative" for the facility. This person is authorized to sign the application and other official document such as monitoring reports.

Question A4: Secondary contact for when Authorized Representative is not available.

<u>Question A5</u>: On-site contact if the primary work locations for both the official Authorized Representative in A3 and the Secondary Contact in A4 are <u>not</u> at the production or manufacturing facility for which this application is being completed. This on-site contact person is available to answer questions regarding statements made on this survey as well as conduct a walkthrough of the facility:

<u>Question A6</u>: Describe the general type of manufacturing, production, or served conducted at this site in as few words as possible. One or two words may be sufficient.

<u>Question A7</u>: Provide a more detailed description of activities.

NOTE TO POTW: You may allow industry to answer Question 7 as "see diagram" if the diagram indeed has everything you need. These answers can be useful in category determination in Section H.

<u>Question A8</u> is for the facility to describe any manufacturing, processing or service operation changes or expansions planned for the next five years. For existing facilities, the change may mean the facility needs to request for a higher limit for flow or pollutants.

Important: As the facility answers the rest of the questions throughout the application, note whether the answer is for current operations or for the proposed change, or for both. For example:

- In Section C, distinguish between no 3rd shift currently but plan to add 3rd shift in XX year.
- In Section E, 4 10,000 gpd process current, 30,000 gpd by Jan 2011.
- In Section H copper 0.05 mg/l current, projected 1.0 mg/l by Jan 2011.
- **NOTE TO POTW**: This question can help you identify any changes needed to an existing permit. If an industry is close to the permitting thresholds, this question can indicate if the industry will need to be further monitored or permitted in the future.
- <u>Question A9</u>: The Standard Industrial Classification (SIC) or the North American Industry Classification System (NAICS) codes for your facility may be found on tax documents, some Human Resources documents, or in publications at the POTW's offices. Also see <u>http://www.census.gov/eos/www/naics/</u>.
- These codes are evaluated for insight into the type of business conducted, processes used and potential wastewaters or pollutants the facility might have and for the possibility of being subject to categorical standards.
- Questions A10 and A11 are intended to provide the POTW with a history of the site for which this application is being completed: When and under what name were operations begun, and when and under what name has the ownership changed. List the date(s) of all ownership changes from the date noted in question A. 10 to present day:
- **NOTE TO POTW**: You can allow an existing facility to answer "same as before" or "no changes" if the previous application included the same question and a complete answer was provided in that application. In this case, SIU must make copy of the applicable page from previous application, date and initial it to document the Authorized Representative's review, and include it with the new application.

Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram

The following diagrams and/or flow schematics are required as part of the application. They are primarily used to define where process and other waste streams enter the collection system, to identify potential categorical processes to determine the applicability of the combined waste stream formula and to establish the sampling point. The diagrams or flow schematics can be separate or combined, can be hand drawn and do not necessarily have to be drawn to scale. Submit each diagram on 8 ½ x 11 inch paper, if possible. If a larger size is needed, the diagram(s) should be no larger than 11 x 17 inches.

PRODUCTION/PROCESS SCHEMATIC FLOW DIAGRAM (REQUIRED)

The schematic flow diagram is a simple line drawing that illustrates the nature and flow of your plant's processes, placing particular emphasis on the processes that generate wastewater. It also includes any associated wastewater pre-treatment processes/systems. At a minimum, the schematic flow diagram should include the following:

Each plant process that generates wastewater

Include all process steps and tanks (with volumes)

Identify the chemicals/raw materials used in each step/tank/vessel

- Each process and waste stream should be labelled, named, or have a unique identifying number
- Include operation names used in any applicable categorical regulation
- Each process step related to the manufacturing/process but that <u>do not</u> actually contact the process (for example, water circulated through jackets or piping in a process operation where the water is kept from contacting the item/object)

Discharge points for each process/waste stream (including non-monitored industrial wastewater) Non-process lines/operations

EXAMPLE FLOW DIAGRAM



PLANT SITE LAYOUT (REQUIRED)

The site layout locates each activity included in the schematic flow diagrams in a geographical setting. At a minimum the site layout should include the following: building outlines, property lines, water lines and meters, sewer lines (including floor drains) and all connections to sewer, storm drains, production, office and warehouse areas, process wastewater lines leaving the facility, cooling towers, boilers, storage tanks, chemical and waste storage areas, Pretreatment areas, compliance sampling and flow measurement locations. Please note on site layout if generated wastewater requires pumping to reach sewer system

EXAMPLE PLANT SITE LAYOUT



WASTEWATER PRETREATMENT SYSTEM FLOW DIAGRAM (IF APPLICABLE)

At a minimum, this schematic flow diagram should include the following:

Flow schematic showing order of treatment units

Include all treatment process tanks

Identify the chemicals/additives in each tank/vessel

Identify wastewater flows going into pretreatment, especially if some treated separately

Each treatment process and waste stream should be labelled, named, or have a unique identifying number Piping and control Features

Compliance sampling point

EXAMPLE WASTEWATER PRETREATMENT SYSTEM FLOW DIAGRAM



Section C – Facility Operation Characteristics

For Office/Admin and Production Staff Tables:

List number of employees and shift times as applicable: If production shifts are twelve hour, only use spaces for shifts 1 and 2. For example: Monday - 1st – 7am-3pm, 2nd 3pm-11 pm, 3rd 11 pm to 3 am Monday - 1st shift 7 am to 7 pm, 2nd shift 7 pm-7 am Sunday – 1st and 2nd closed, 3rd shift 11pm-7am Sunday – 1st shift closed, 2nd shift 7pm-7am

Shift Activities Table:

Describe in general terms the type(s) of activities (administrative/office, full manufacturing, limited manufacturing, clean-up of manufacturing areas, equipment maintenance, janitorial, etc.) that are conducted on each shift on each workday. For instance, some facilities conduct manufacturing on 1st and 2nd shifts and conduct only "manufacturing area clean-up" and "equipment maintenance" activities on 3rd shift. Others may conduct "full manufacturing" Monday through Friday but only "limited manufacturing" on Saturday and Sunday. Still other facilities that only operate one shift conduct manufacturing and administrative activities Monday through Friday and conduct janitorial and maintenance on Saturday and Sunday. Please complete each row. If the facility does not conduct any activities during a particular shift, please write "Closed".

NOTE TO POTW:

The production schedule gives an indication of peak industry water use periods. Many POTWs have experienced difficulties during industry high flow periods or when certain industries shut down or start up such as on weekends. This may be due to peak load hydraulic capacity, adverse affects from swings in hydraulic load, or the WWTP "bugs" becoming acclimated to a certain make up of influent.

Section D – Process Information

Any request for confidentiality under 40 CFR 403.14 must be made at the time of the initial submission of the application.

- Information is this section can help with identifying and understanding the nature of the SIU's product, processes, pollutants, and process wastewater generation schedule. The POTW uses this in their evaluation of the facility's adverse impact potential. It can also be helpful in addressing categorical issues.
- **NOTE TO POTW**: You may allow industry to answer some of the questions in this section by referring to another Section/Question if that Section indeed has everything required, especially if there is only one product line to be addressed by Section D. For example, Question D2 may already be answered in the diagrams required by Section B. Questions D5 and D6 may already be answered in the Tables in Section C.

Question D3 - Special Instructions for processes covered by a production based categorical regulation:

If the applicable categorical regulation includes multiple operations, each with their own limits, expand this question to list each categorical operation individually, and provide production data for each operation in the units specified in the applicable regulation for that categorical operation. For example, if your facility is covered by 40 CFR 464, and utilizes the operations described in 464.25(a). (b), and (f), report the production rate of operations (a) and (b) in lbs per million lbs poured and the operation (f) in lbs per billion SCF of air scrubbed.

Questions D4, D5, D6, and D7:

NOTE TO POTW: Batch production can create difficulties for some POTWs. Some industries have high levels of pollutants in the first part of a batch discharge. Also, the surge flow can present a problem both in the ability to sample and treat industry effluent. Also during the peak season, the Industry may exceed the criterion for required permitting. May need higher IUP limits or require installation of flow equalization. Also, the batch discharge schedule can affect how "24 hour composite" is defined.

Section E – Water Use and Wastewater Discharge Information

NOTE TO POTW: See Part I, Section D of the IUP

<u>Question E, 1</u>: The facility may obtain water from several different sources that may not have been registered on POTW water billing records.

Be sure to include water use from these sources in Question E3.

 Question E2
 allows the facility to distinguish between treatment of potable or other source water before use in the facility versus treatment of wastewater, i.e., water after it has been used in the facility. Water treatment may be a source of chemicals that do not contact the manufacturing processes but that may be of concern to the POTW. Also, the source water may contain non-toxic levels of various pollutants. Water treatment may remove these pollutants, which may then be greatly concentrated into the WTP wastewater (eg. RO reject, filter backwash, column regeneration, etc.), possibly to toxic levels.

Questions E3 and E4:

POTWs need to know all uses of water at the facility and all discharges so they can evaluate each use and discharge to see which ones could possibly have an adverse impact on their wastewater treatment plant.

- Question E3 is about <u>water used</u> in the facility versus Question E4 which is about <u>water (wastewater) discharged</u> to the POTW. Consider the following when completing these questions:
- Often, volumes of water used in each category generally match the volumes discharged from that category. However, sometimes they will not, for example due to water into the product and evaporation. Differences should be adequately explained.
- If you do not have actual volume-measurements, you may use past water bills (or other water consumption readings) to estimate the use and disposal volumes. Use the highest water bill from the previous 12-month period for the maximum volumes and the average of the 12-month period for the average volumes.
 - NOTE TO POTW: Example specific language is provided. Replace with your own language here as needed.
 - Water is typically billed in the units of cubic feet. Multiply the number of units used by 7.5 to convert to gallons. Then divide this number by the number of operating days to get the average gallons per day (gpd). For example:
 - The water bill states that 91950 units were used. There were 30 operating days in the month.
 - 91,950 multiplied by 7.5 equals 689,625 gallons used during the month.
 - 689,625 divided by the 30 operating days equals a daily average of 22,988 gallons.
 - Other applicable methods that may be useful are:
- \rightarrow measuring the volume of a batch tank.
 - > for constant flow rate discharges, measuring the flow rate and multiplying times the hours of operation.
 - Of course, a five-gallon bucket and a stopwatch are also acceptable means of estimating discharge volumes.
- Maximum flows that are substantially higher than average flows should be explained. For example, a high flow procedure (slug load) such as flushing tanks on an irregular basis. Some facilities will require permitting because of these peak flows even when their average is below the permit threshold.
- The different types of water uses and wastewater discharges include:
 - Process water includes any water, which, during manufacturing or processing, comes in direct contact with or result from the production or use of any raw material, intermediate product, finished product, by-product, or waste product (40 CFR 401.11(q)).
 - In some cases, it may be beneficial to list each process separately.
 - Water into Product is water used to dilute or process goods and is shipped out with the product.
 - Process Related Washdown water includes any water used to clean the production area or any other area where it may contact the raw materials, product or the process, including cleaning machinery and floors in production area, waste treatment, chemical storage, etc.

- Process Related Contact Cooling or Warming water is water that comes into contact with process materials that is used to warm or cool the object/part, thereby becoming contaminated with process related pollutants. The contact is typically by spray or immersion.
 - This DOES NOT include water circulated through jackets or piping in a process operation where the water is kept from contacting the object/part.
- Process Related Air Pollution Control Units are scrubbers and other air treatment devices generally installed to prevent/reduce release of air toxicants from the manufacturing process into the environment. Often they function by transferring a pollutant from the air to a water stream that will be discharged to the POTW. Water from these devices may contain the toxicant in amounts that may be harmful to the WWTP or to worker safety and health.
 - <u>NOTE TO POTW</u>: See application Section I, Question 2 for TOMP, Section H, Categorical Status and Section J, Other Permits. Air scrubber units may be included in the calculation of limits for some production based categorical standards
- Process Related Employee Showers. In some industries, employees shower before leaving work to remove significant amounts of process pollutants from their bodies.
- Lab wastes: This category refers to wastes from a facility's laboratory where they perform various testing, usually related to product/process quality control, or product development (as compared to facilities that are themselves labs). Such labs vary widely among facilities in terms of chemicals, volumes, discharge, etc.
 - Some have "lab quantities" of chemicals used in the testing, eg., solvents, acids, bases, strong cleaners, etc., whereas others have significant amounts of these same chemicals/pollutants.
 - Some may have significant amounts of process or other pollutants.
 - Some have no discharge, however many at least discharge from cleaning lab equipment. These
 wastewaters could potentially have process or lab pollutants in varying amounts.
 - <u>NOTE TO POTW</u>: Due the extreme variability between labs, each POTW must evaluate each lab for the potential for adverse impact on a case-by case basis.
- Maintenance Shop: Many facilities have a maintenance shop to repair equipment, vehicles, etc., or for product development. These shops vary widely as to chemicals, volumes, and discharges.
- <u>Backwash/Reject Water</u>: The "wastewaters" from treatment of potable and other water <u>before</u> it is used in the facility. See Question E2 for more details.
- <u>Pump Sealant Water</u>: Water that lubricates the pump seal to prevent mechanical failure and entry of air and dust particles. These wastewaters can contain pollutants from the solution the pump is pumping. These can be of concern to the POTW.
- General (non-process related) Washdown water includes any water used to clean areas within the facility where it will not contact the product or the process, including cleaning restrooms, break rooms/food prep, office floors, etc.
- Other non-contact water uses: These include a variety of wastestreams such as non-contact cooling/warming wastewater; wastewaters associated with general air conditioning, cooling towers, chillers, HVAC, boilers, etc.
 - These wastewaters do not come into contact with process materials, and so are unlikely to include any process related pollutants. However, some of them may contain other pollutants such as corrosion inhibitors or biocides. This water cannot be completely ignored because it may contribute to a toxicity problem or to the levels of certain metals such as chromium and molybdenum.
 - <u>NOTE TO POTW</u>: The Biocide/Chemical Pretreatment Worksheet Form PT101 is available on the PERCS web-site to evaluate treatment chemicals for the potential for impact on the POTW and environment. Also see application Section F, Question 4.
- <u>Domestic wastewater</u> is water used only in restrooms or breakroom/lunchroom facilities. If domestic flow is not metered, provide an estimate based on 25 gallons per employee per shift. More than this could be process wastewater that is unaccounted for. For facilities with shower facilities or cooking may have as high as 35 gallons per employee per shift. [Source: 15A NCAC 02T .0114 Wastewater Design Flow Rates]

Question E4 - "Where Discharged" Column:

- In many cases, POTWs and industries prefer that all process related wastewaters are directed to one point of entry into the sewer, with flow measurement and sampling equipment at this location. In this case, all nonprocess wastewaters enter the sewer at another location(s), which may or may not have their own flow measurement and sampling.
- Other POTWs and/or industries prefer that all process and non-process wastewaters combine together before entering the sewer at a single location, with flow measurement and sampling at this "combined" location.
- Sometimes the piping at an industry is already in place, and process and non process wastewaters are comingled to various degrees.
- Finally, some wastewaters are not discharged to the POTW sewer at all, but instead are lost through evaporation, hauled away, or discharged to the ground, surface waters, or a storm water system.
- Generally, new facilities completing this application should contact the POTW prior to completing this Question to discuss their requirements and/or preferences on this issue.
- Existing facilities should be aware the POTW can require re-piping as they determine is needed to properly protect their WWTP, or to otherwise comply with their sampling and/or permitting procedures.
- **NOTE TO POTW**: You may wish to modify the wording in this question to use POTW specific terms for the facility completing the application to choose from.
- <u>Question E5</u>: The facility may wish to request a flow limit higher than the average and maximum flow values listed in Question E4. For example, to address production/process changes from Question A8.

SECTION F - CHEMICALS, POLLUTANTS, WASTES

- <u>Question F1</u>: <u>Pollutant Checklist</u>: The United States Environmental Protection Agency published the list of "Priority Pollutants" in the Table. This list contains pollutants that this POTW considers to be generally incompatible with conventional wastewater treatment processes when discharged in certain quantities.
- Does your facility purchase, store on-site, use, generate or have the potential to discharge in measurable quantities, any of the compounds on the "EPA Priority Pollutant" List?
- * This section MUST be completed with 2 check marks for each chemical.
 - If the chemical is <u>not present</u> at the facility [i.e. <u>not</u> purchased, <u>not</u> stored on-site, <u>not</u> used and <u>not</u> generated in any of the processes], check "Absent at Facility" and "Absent in Discharge to POTW".
 - If the chemical is purchased, stored on-site, used or generated at the facility BUT is not present in the wastewater discharged to the POTW, check "Present at Facility" and "Absent in Discharge to POTW". Be prepared to provide the POTW with documentation of how the facility keeps the chemical out of the discharge. One example may be to document this in a Slug/Spill Control Plan see Section I, Slug/Spill Prevention.
 - If the chemical is checked "Present in Discharge to POTW," list concentration in discharge, if available. Distinguish between values from sampling and analysis compliant with 40 CFR 136, and other sources such as calculations, estimates, predictions, pretreatment unit performance documentation, etc. The POTW may require sampling as part of the application.
- Small Quantities Of Chemicals: If the chemical is purchased, stored on-site or used at the facility but is present only in laboratory quantities, please indicate by the use of an asterisk (*) next to the check in "Present at Facility" column.
 - NOTE TO POTW: Please be aware that some chemicals may still adversely affect the POTW even if they are only discharged in "laboratory quantities."

- Some possible methods for facilities to determine presence or absence are:
 - Material Safety Data Sheets [MSDS]: A review of MSDSs for chemicals/products purchased, stored on-site or used at your facility may assist you in the completion of this section. Usually Section 2 of the MSDS is called "Hazardous Ingredients" or "Composition/Information on Ingredients". This section lists the chemical ingredients [usually by percent (%)]. The Chemical Abstract Number [CAS#] will often be listed in addition to the name of the chemical. The same chemical may have more than one "brand name", but the CAS# is unique to a specific chemical formula regardless of the name. [CAS Numbers are included on this Priority Pollutant Checklist to assist you.] However, MSDS sheets do not always list all ingredients for the product. For example:
 - chemical may be present but below threshold level that requires it to be listed on MSDS sheet. This is
 of critical importance when the threshold level is near or above the concentration at which the chemical
 can cause impacts at the POTW.
 - chemical may not be present in the product covered by the MSDS, but may be created through interaction with other chemicals, or as a result of the manufacturing or pretreatment process.
 - MSDS sheets usually do not list inactive ingredients or contaminants.
 - In some cases, the manufacturer will provide this extra information on request. The POTW may require the facility may have the product tested.
 - > Toxics Release Inventory Also see notes on Question F3 below:
 - However, TRI reports do not always cover all chemicals/products used. For example:
 - chemical may be present but below threshold level that requires it to be listed in TRI Report. This is of critical importance when the threshold level is near or above the concentration at which the chemical can cause impacts at the POTW.
 - chemical may not be present in the product covered by the TRI, but may be created through interaction with other chemicals, or as a result of the manufacturing or pretreatment process.
 - In some cases, the manufacturer will provide this extra information on request. The POTW may require the facility may have the product tested.
 - > Thorough, detailed knowledge of all aspects of facility operation:
 - This includes raw materials, process chemicals, process chemical reactions and by-products, final
 products, pretreatment unit processes, pretreatment unit chemical additives and reactions and byproducts. Also included are cleaning chemicals, and cooling tower/chiller/HVAC/boiler chemicals. This
 applies to active ingredients, inactive ingredients, and contaminants.
 - > Sampling: Please note that sampling may not provide complete results due to the following:
 - chemical may be present but below detection level. This is of critical importance when the detection level is near or above the concentration at which the chemical can cause impacts at the POTW.
 - chemical may not be present at the time of sampling, but may in fact be present under other discharge conditions.
 - chemical may be present before pretreatment, but not after. Consider also sampling the facility discharge before treatment.
 - > OTHER CONSIDERATIONS
 - The SIU might use or generate chemicals not on the list.
 - POTWs could choose to allow an industry to complete the checklist based on knowledge of their operation but still reserve the right to require sampling for confirmation later.
- NOTE TO POTW: All chemicals checked as "Present in Discharge to POTW" must be evaluated to determine if an IUP limit or monitoring is needed, with appropriate documentation in the IUP Rationale. Questions F2 and D2 are also used to determine pollutants of concern and need for limits.

<u>Question F2</u>: Sampling data will assist in determining if a permit needs to be issued, aid in setting permit limits and may save time and money on a baseline monitoring report if a categorical determination was made.

- POTW may already have all available data, especially for permit renewals and other existing IU.
- If data will be submitted and facility already has data in spreadsheet, contact POTW to see if it has all required details and formatting. Minimum requirement is usually individual data points, average, max and min, with data from multiple sample points separated. POTW may want additional info such as lbs/day, monthly averages, etc., as well as lab reports, field sampling sheets, chain of custody, QA/QC, etc
- POTW may require use of its own specific spreadsheet.
- For new or changing users, data may be provided from another, similar facility. Identify where the data came from and discuss any expected differences.
- **NOTE TO POTW**: If the SIU's application will not have a data summary, the POTW must attach a data summary to the application when submitting the application and IUP to the Division PERCS for approval. At minimum, this should list the average, max, and min.

<u>Question F3</u>: All pollutants and discharges identified in the facility's Toxic Release Inventory (TRI) must be addressed in the application, typically in the pollutant checklist.

NOTE TO POTW:

Municipalities have the option of looking up this information themselves online at EPA's TRI website http://www.epa.gov/tri/, or using EPA's ECHO database at

http://www.epa.gov/compliance/data/systems/multimedia/echo.html.. Most of the needed information is public and can be accessed via the internet. If you find that is not the case, you can always go back and request copies directly from the industry.

- <u>Question F4</u>: These treatment additives can sometimes be very toxic to the bacteria at the POTW's wastewater treatment plant. This can be especially of concern if these chemicals are used in excess, or if large batches are discharged. Specific biocide treatability should be reviewed.
- **NOTE TO POTW**: You may want the facility to complete a Biocide/Chemical Treatment Worksheet Form PT101 to verify discharges of these products will not harm the WWTP or its receiving environments. See the PERCS web-site for details.
- Question F5: POTWs are especially concerned with chemicals a User has on-site in bulk as they are likely to be present in the wastewater. Also, the potential for adverse impact to the POTW of bulk amounts of chemicals from a leaking tank, mis-opened valve or spilled drum are of concern. POTWs have been completely knocked out by spills from chemical or fuel tanks.
- An industry may not need to be a SIU or LIU, but still need to prepare a Slug and Spill Control Plan to protect the POTW. An inspection may be necessary to determine if measures taken are adequate.
- Also see Section I about slug/spill prevention requirements.

<u>Question F6</u>: Like stored chemicals in question F5, wastes that are hauled off also represent concentrated pollutants. Example hauled wastes include spent batch tanks, spent chemicals, process chemicals, raw materials, pretreatment wastes, oils and sludges, off-spec product, etc.

<u>Question F7</u>: Indicate if the facility is a Hazardous Waste Generator. If possible, note in Question F5 and F6 which storage tanks and hauled wastes are Hazardous Wastes.

NOTE TO POTW: The information in Questions F5, F6, and F7 should be carefully evaluated fort the need for new/updated slug/spill control measures, sample point monitoring to document levels in the discharge, etc. See Application Section I, Question 2.

- Hazardous and/or hauled wastes:
 - How are chemicals/wastes segregated/removed from the wastewater discharge to the POTW?
 - How are they stored so that they will not enter back into the process and/or the POTW?
 - Is the "hauled waste" really hauled away, or discharged by the facility without your knowledge?

- Where is it hauled to? Do you wish to contact that POTW to see if they are aware?
- o Is the hauler simply taking the wastes and discharging them into the sewer at another location?
- Some POTWs require documentation of hauling and verification of receipt and treatment at the waste's final destination.

Section I includes more detailed discussion on slug/spill prevention requirements.

SECTION G – WASTEWATER TREATMENT, FLOW, AND SAMPLING EQUIPMENT

NOTE TO POTW: See part I, C of IUP.

<u>Question G1</u> refers to the treatment of <u>waste</u>water, not the treatment of water prior to its use in the facility (see Question E2).

• The use of a pretreatment device does not automatically require that the facility have an SIU permit; however, a permit of some type is required per NCGS 143-215.1. This North Carolina Law requires that plans for all wastewater treatment systems must be submitted to the POTW for the issuance of an "Authorization to Construct" (A2C). An A2C must be obtained from the POTW prior to the initiation of construction. This also applies to significant revisions to existing treatment units.

NOTE TO POTW: You may allow industry to answer this question with "see diagram" if the diagram indeed has everything required.

NOTE TO POTW: Knowing what pollutants are being removed by a facility's treatment, and what the pollutant concentrations to the POTW would be if the pretreatment system fails, can be an important factor in SIU determination, sampling and limits, slug/spill control issues, etc.

<u>Questions G2-G4</u>: Accurate measurement of flow and pollutant concentrations are critical to proper assessment of a facility's potential to adversely impact the POTW.

- Whether these activities will be carried out by a facility employee or contract laboratory, the facility must demonstrate to satisfaction of POTW that personnel are properly trained on operation of the flow and sampling equipment, techniques, calibration, type samples/measurement required, equipment pre-cleaning, sample preservation, chain-of-custodies, required detection levels, etc. Even if it is a contract sampler, the facility is still responsible for all aspects of the flow and/or sampling quality.
- **NOTE TO POTW**: See IUP Writing Steps for more information on how to evaluate the accuracy of flow measurement and pollutant sampling equipment and procedures.

SECTION H – CATEGORICAL STATUS

- <u>Question H1</u>: Check any activities that are performed at this facility. Most category names are a product. In this case, that categorical operation applies to facilities that manufacture that product. For example, Soap and Detergent Manufacturing (40 CFR 417) applies to facilities that manufacture soap and detergents, but not to facilities that use soap and detergents. For the more information and/or assistance with these regulations, review the Categorical User Information page of the PERCS web-site at: <u>http://portal.ncdenr.org/web/wq/swp/ps/pret/catuserinfo</u>. You may wish to contact the POTW's Pretreatment staff to get assistance, or contact the PERCS Unit directly.
- <u>Question H2</u>: If there is no discharge to the POTW at all from any categorical operations, the facility may still meet one of the other SIU criteria. Even if the IU is not an SIU at all, some POTWs may still want to issue a Local IUP, or require the company to submit periodic certifications of no discharge, or some other level of oversight.
- Most categories have different Subparts, each with their own limits. For example, 439-Pharmaceutical has 5 subparts. In some cases, the Subparts themselves have lists of specific operations, each with their own limits. For example, 467-Aluminum Forming has 6 Subparts, and each Subpart in turn lists the core operation for that Subpart, plus several related operations.

Categorical facilities whose start-up date or "commence construction/installation of a categorical process" before the regulation is promulgated (called the New Source Date) is considered an Existing Source (PSES). Any facility that commences construction/installation after that date would be considered a New Source (PSNS). This includes the construction/installation of significant changes and/or additions to an Existing operation. New Source Dates for each category are available in Appendix 3-D of the *Comprehensive Guide*.

For more details, please review the EPA Guidance on New Source Determinations and New Source Dates, located on the Categorical User Information page of the PERCS web-site.

NOTE TO POTW: If a facility has a categorical operation but there is no discharge to the POTW at all from any of those categorical operations, then the IU is not a CIU for the purposes of the SIU definition.

- If such a facility does meet any of the other SIU criteria, the POTW should include a condition prohibiting discharge from the categorical process in the SIU IUP Description of Discharge, or elsewhere in the IUP, and explain the situation in the Categorical Section of the IUP synopsis. Even if the IU is not an SIU at all, some POTWs may still want to issue a Local IUP, or require the company to submit periodic certifications of no discharge, or some other level of oversight.
- <u>Question H3</u>: Categorical Standards apply only to those operations and wastestreams described in the categorical regulation. If any "dilution" wastestreams flow through the current or proposed monitoring point, the categorical limits may need to be adjusted.
- 40 CFR 403.6(e) defines dilution wastestreams as (a) boiler blowdown streams, non-contact cooling streams, stormwater streams, and demineralizer backwash systems; (b) sanitary wastestreams; and any process wastestreams that are exempt from an applicable categorical standard. "Dilution wastestreams" can sometimes be defined more broadly as any wastewaters that are not related to and/or contact the categorical process, or that otherwise do not have significant quantities of pollutants that are regulated by the categorical regulation. This information is needed to evaluate the need for the Combined Wastestream Formula (CWF). Refer to 40 CFR 403.6(e), in the definition of "dilution flow," designated as "Fd."

SECTION I – SLUG/SPILL PREVENTION and WASTE MINIMIZATION

Questions I1 and I2:

- POTWs perform best when receiving a consistent quality and quantity of wastewater. Slugs of flow or pollutant levels can be a problem, sometimes serious.
- Manufacturing and service facilities often have many different chemicals at their location. In most cases, these chemicals are not a problem for the WWTP at their "normal" discharge levels. However, most of them could be a serious problem if discharged in higher concentrations.
- Slug/Spill Discharges are defined in the Federal Pretreatment regulation in 40 CFR 403.8(f)(2)(vi) as: any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge which has a reasonable potential to cause adverse impact to the POTW. This includes discharges that can cause harm to the collection system, the WWTP, sludge disposal, worker health and safety, cause the POTW to violate any of its applicable environmental permits, or in any other way violate the POTW's regulations, local limits, or IUP Permit conditions.
- These regulations also require all Significant Industrial Users to notify the POTW immediately of any changes at its facility affecting potential for a Slug Discharge.
- POTWs themselves are required to evaluate each SIU to see if they need actions or a plan to control Slug/Spill Discharges to protect the POTW, and then require the SIU to perform these activities.
- The most basic component of Slug/Spill Prevention is communication. Are there staff at the facility that know when to call the POTW? If the POTW knows a Slug/Spill is coming, there may be measures they can take to mitigate the problem. In some cases, POTWs must require a facility to immediately cease discharge to ensure protection of the POTW and/or the environment. Who at the facility can execute this order? Equally as important, how do the facility's workers know who these persons are, and how to get in touch with them?
- Question 11 is designed to cover these most basic levels of communication about Slug/Spill Prevention. Almost every facility that discharges non-domestic wastewater into a POTW should have these basic designations. If the facility does not currently have them, list "none" and be aware the POTW may require them as a condition of (continued) discharge.
- <u>Question 12</u> is about evaluating each facility to identify their particular areas of concern to the POTW, and determining if additional action is needed to prevent Slug/Spills.

- In many instances, a facility may have other written plans to respond to any number of emergency situations not directly related to protecting the POTW, such as employee protection, fire department notification, etc. These plans can have many names: Emergency Action Plans; (Fuel Oil) Spill Prevention Control and Countermeasure Plan; Hazardous Waste Plan; Waste Minimization Plan, etc.
 - In some cases, these plans include measures to protect the POTW from spills, slugs, or other inappropriate discharges. If so, list the plans and describe the measures to be taken to prevent direct or indirect introduction of spill or other inappropriate discharges into the sewer. The POTW may request copies of the identified plans.
 - In other cases, these plans are silent about protecting the POTW, or worse, the plan may include a
 prevention/countermeasure "solution" to that plan's type of "problem" that could itself create problems for the
 POTW. For example, an OSHA plan to protect employee health and safety is likely to focus on eliminating
 exposure from a spill as soon as possible. Opening the nearest floor drain and washing it down the sewer
 may seem like an excellent option. But not if that floor drain goes directly to the POTW, or goes to the
 pretreatment unit and could upset the unit.
 - The POTW may require the facility to review all plans and document this is not an issue.
 - It is recognized that it may not be possible to design a Plan that will completely protect the POTW during extreme emergencies such as SIU plant explosions or fires, where saving human life may take precedent over other concerns.
 - These plans may describe how pollutants that are present at the facility are kept out of the discharge to the POTW. See Question E7.
- NOTE TO POTW for existing facilities: If the POTW has already required development of a Slug/Spill Control Plan which includes the information required by Questions I1 and I2, you may allow the facility to answer the questions with "see Plan on file with POTW" or list the Plan Name and page #. See Part III, 1.of IUP and Part III and Results Section of Inspection.
- <u>Question 13</u>: Many companies have some kind of waste minimization plan or activities in place. Or they may have had some kind of audit or review of their operations to identify ways to reduce use of water, electricity, etc, and generally be more "green." In some cases, the plans and/or audits include reduction or even elimination of some or all of the different waste products generated at the facility. Or they may review options for reducing chemical used in production, or substitution with a less toxic chemical.
- The Division of Environmental Outreach and Assistance (DEOA) is a non-regulatory division within the North Carolina Department of Environment and Natural Resources. The Environmental Assistance Center offers free and confidential environmental sustainability assistance: http://portal.ncdenr.org/web/deao/ea/eac.
- Question 14: State Pretreatment Rule 15A NCAC 2H.0916(c)(1)(M) requires Significant Industrial Users to include in the permit application a description of waste reduction (pollution prevention) activities being utilized. The codes listed in the chart are standard EPA codes found on Toxic Release Inventory (TRI) and other environmental forms. Please check "current", "projected" or "N/A" for all codes below relating to this facility's wastewater discharge.

SECTION J – OTHER PERMITS

Questions 1, 2, and 3:

Other environmental control permits may be helpful in a number of ways, most especially in the case of new discharges. See examples below.

The POTW may wish to visit the facility to review the facility's records on these permits. The POTW may find this sufficient, however, the POTW may require submittal of copies if they feel the need.

- Question 1:
 - Air and hazardous waste/RCRA permit records can reveal pollutants present at the facility. The facility should add these pollutants to the checklist in Question E7, and indicate whether these pollutants will be present in the discharge.
 - > Are hazardous/RCRA wastes properly managed so spills will not enter the sewer.
 - > Air permits may mean wastewater discharge from an air treatment unit. Also, the POTW staff may have health and safety issues with airborne exposure.
 - NOTE for POTW: See Section E, Questions 3 and 4.
- Question 2: Knowing if other facilities of the Corporation and/or parent company with similar operations are permitted will aid the POTW in determining categorical or SIU status.
- Question 3: Being honest about past problems is a good opportunity to demonstrate to your (new) POTW permitting authority your intent to be a communicative, cooperative, and compliant customer.

NOTE for POTW:

- The proposed new discharge you are considering may have previously been covered by one or more of the permit at other locations. Review of the permit, application, inspections, sampling data, other records, etc., may reveal information not included in this application.
- The permitting authorities for these other permits already have experience with the company's operation, POCs, compliance history, cooperation, openness, etc.

Permits held by the parent company and other subsidies for similar operations may also be informative.

The POTW may not wish to agree to take a new waste if the company already has another disposal option. POTWs should closely review Hazardous waste/RCRA permit records to verify these wastes are properly managed

so spills will not enter the sewer.

Explanations of permit denials and terminations can provide special insight into the company, and assist the POTW in writing an IUP that will adequately protect the WWTP. Consider the need to contact these permitting authorities to get their perspective on the situation.

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

The information provided on this questionnaire serves two functions:

- 1. To determine if your facility is in need of a Significant Industrial User (SIU) Industrial User Pretreatment Permit (IUP) for the discharge of wastewater to the Publicly Owned Treatment Works (POTW) sanitary sewer system.
- 2. If a SIU IUP is required, this survey shall serve as the application for that IUP and the information will be used to issue the IUP.

PLEASE REFER TO THE GUIDANCE FOR COMPLETING THE INDUSTRIAL USER SURVEY/APPLICATION INSTRUCTIONS, AVAILABLE AT: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite

STATUS of APPLICANT / APPLICATION - PLEASE CHECK ONE

- []
 New Permit for Proposed Discharge

 Anticipated Date of initial process wastewater discharge
- [] Existing Unpermitted Discharge
- [X] Permit Renewal for Existing SIU Permit, existing non-SIU permit, or other written permission from POTW. <u>Note</u> If this application requests a greater amount of wastewater discharge [flow], a greater amount of pollutant discharge or a discharge of different pollutants than specified in the last wastewater permit application for this facility, or any other significant changes, please indicate this as needed in the applicable Questions, especially Questions A8 and E5.

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403.14, information and data provided in this questionnaire which identifies the content, volume, and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other Information shall be governed by procedures specified in 40 CFR Part 2.

This is to be signed by the Authorized Representative of your firm, as defined in 40 CFR Part 403.12 (I) and <u>Town of</u> <u>Typicalville SUO Section 1.2(a)(3)</u>, <u>after</u> adequate completion of this form and review of the information by the signing representative.

I, <u>W.R. "Billy Bob" Slugem</u> (print name), <u>President</u> (print title), 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 submitted is, to the best of my knowledge and belief, accurate and complete. I am an authorized representative of the user and am authorized to execute this certification on behalf of the user. I am aware that there are significant penalties for submitting false information in violation of this certification, including the possibility of fines and/or imprisonment.

I also certify that I have completed the necessary notification as required by the POTW to document my qualification as an Authorized Representative as set forth in 40 CFR Part 403.12 (I) and <u>Town of Typicalville SUO Section 1.2(a)(3)</u>.

June 25, 2006 Date

WR Billy Bob Stugem Signature of Representative (Seal, if applicable)

Please return this survey to:

Public Works Director Town of Typicalville PO Box 101 Typicalville, NC 27666

SECTION A – GENERAL INFORMATION

1. For the production or manufacturing facility for which this application is being completed:

Facility name	Slugem Hosiery Mills, Inc. – Plant #2
Physical address	100 Industry Drive; Typicalville, NC 27666
Mailing address (if different)	P.O. Box 1234; Typicalville, NC 27666
General Telephone Number	<mark>919-555-1234</mark>
General Fax Number	<mark>919-555-5678</mark>
Website	N/A

2. If applicable, general information about the corporate office, parent company, etc. [X] N/A

Company name	
Physical address	
Mailing address (if different)	
General Telephone Number	
General Fax Number	
Website	

3. Primary Authorized Representative authorized to represent this firm in official dealings with the Publicly Owned Treatment Works (POTW).

Name	W. R. " Billy Bob" Slugem
Title	President
Telephone/Cell/Fax	<mark>919-555-1234; Fax: 919-555-5678</mark>
Email	BBSLUGEM@SLUGEM.COM
Primary work	_X_FacilityCorporate OfficeOther – List address here:
location:	
location:	

4. Alternate Authorized Contact for when the Primary Authorized Representative is not available.

Name	Josephine Spill
Title	Maintenance Supervisor
Telephone/Cell/Fax	<mark>919-555-1234; Fax: 919-555-5678</mark>
Email	JSPILL@SLUGEM.COM
Primary work	_X_FacilityCorporate OfficeOther – List address here:
location:	

5. On-Site Contact. If neither person identified in items 3 and 4 above are located at the production or manufacturing facility for which this application is being completed provide an on-site contact person available to answer questions regarding statements made on this survey as well as conduct a walkthrough of the facility:

Name	N/A
Title	
Telephone/Cell/Fax	
Email	

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

SECTION A – GENERAL INFORMATION - continued

6. Identify the general type of manufacturing, production and/or service(s) conducted at the site (i.e. electroplating, printing, painting, food processing, warehousing, meat packing, machine shop, etc.). Greater detail to be provided in question A. 7.

Textile – Panty Hose

7. Provide a detailed narrative description of the manufacturing/production process(es) and/or service activities identified in question A. 6. and conducted at the facility identified in question A. 1.

Knit, sew, dye, board, package and ship.

8. Are any process changes or expansions planned during the next five years? [X] Yes [] No

If yes, describe the nature of the planned changes or expansions. As needed, clarify if answers to other application questions are for before or after the change/expansion. If the facility has an existing permit, indicate if these changes could or will result in the facility requesting changes to their existing permit.

No expansions officially planned, but if close down Ozburg, VA operations, our production may go up 20-30%. Will notify POTW in advance of any plans.

9. List the Standard Industrial Classification Number(s) (SIC #) or North American Industry Classification System (NAICS) codes for your facility. If listing more than one code, indicate the percentage of production.

SIC/NAICS code:	<mark>2251</mark>	
Percentage of production	<mark>100 %</mark>	

10. In what month <u>and</u> year were the facility's operation(s) at this location (as specified in A. 7. above) established and under what name?

Facility Name	Month	Year
Slugem Hosiery	<mark>August</mark>	<mark>2001</mark>

Has your facility undergone any changes in <u>licensed ownership</u> since the date noted in question A. 10?
 Yes [X] No If yes, complete table.

Facility Name	Month	Year

Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram [See the Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application available at: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite]

PRODUCTION/PROCESS SCHEMATIC FLOW DIAGRAM (REQUIRED)

Process Diagram

Process	Raw Materials	Process Chemicals	Water Used (gallons/day)	Wastewater Generated (gallons/day)
Knit	Nylon	N/A	N/A	N/A
Sew	Nylon, Cotton	N/A	N/A	N/A
Dye	Hose Note: Boiler Blowdown is a related non process wastewater, see non process list	Dyes and chemicals	341,150 (average) 436,650 (maximum)	320,000 (average) 410,000 (maximum)
Board	Dyed hose	N/A	N/A	N/A
↓ Package	Packaging (paper, cardboard, plastic)	N/A	N/A	N/A

Ship
Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram [See the Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application available at: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite]

PLANT SITE LAYOUT (REQUIRED)



SECTION C – FACILITY OPERATION CHARACTERISTICS

ice/Administrative	e/Administrative Staff								
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
# Employees	<mark>50</mark>	<mark>50</mark>	<mark>50</mark>	<mark>50</mark>	<mark>50</mark>	N/A	N/A		
Start/End Time	8am-5pm	8am-5pm	8am-5pm	<mark>8am-5pm</mark>	8am-5pm				

Office/Administrative Staff

Production Staff

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 st Shift	# Employees	<mark>150</mark>	<mark>150</mark>	<mark>150</mark>	<mark>150</mark>	<mark>150</mark>	<mark>3</mark>	<mark>N/A</mark>
	Start Time	<mark>7 am</mark>	<mark>7 am</mark>					
	End Time	<mark>3 pm</mark>	<mark>3 pm</mark>					
2 nd Shift	# Employees	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	N/A	<mark>N/A</mark>
	Start Time	<mark>3 pm</mark>						
	End Time	<mark>11 pm</mark>						
3 rd Shift	# Employees	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	<mark>100</mark>	N/A	<mark>N/A</mark>
	Start Time	<mark>11 pm</mark>						
	EndTime	<mark>7 am</mark>						

Shift Activities

	SHIFT	DESCRIPTION OF SHIFT ACTIVITIES
Monday	1 st	Knit, sew, dye*, board, autopack, handpack, ship, administration
	2 nd	Knit, sew, dye*, board, autopack
	3 rd	Knit, sew, dye*, board, autopack
Tuesday	1 st	Knit, sew, dye*, board, autopack, handpack, ship, administration
	2 nd	Knit, sew, dye*, board, autopack
	3 rd	Knit, sew, dye*, board, autopack
Wednesday	1 st	Knit, sew, dye*, board, autopack, handpack, ship, administration
	2 nd	Knit, sew, dye*, board, autopack
	3 rd	Knit, sew, dye*, board, autopack
Thursday	1 st	Knit, sew, dye*, board, autopack, handpack, ship, administration
_	2 nd	Knit, sew, dye*, board, autopack
	3 rd	Knit, sew, dye*, board, autopack
Friday	1 st	Knit, sew, dye*, board, autopack, handpack, ship, administration
	2 nd	Knit, sew, dye*, board, autopack
	3 rd	Knit, sew, dye*, board, autopack
Saturday	1 st	Weekly equipment/facility maintenance. Cleanup of dry process
-		areas.
	2 nd	N/A
	3 rd	N/A
Sunday	1 st	N/A
	2 nd	N/A
	3 rd	N/A

Dye* = each dye shift will have its own cleanup of the dye area at the end of each shift. This includes cleaning the screens and washdown of the area.

SECTION D – PROCESS INFORMATION

NOTE: The following information must be completed for each product line. Please make copies of this page if necessary.

Information revealed in this section may be held confidential and proprietary under 40 CFR 403.14 at the request of the Industrial User and the approval of the POTW. The request for confidentiality must be made at the time of the initial submission of the application. Should such a request be made and accepted in compliance with <u>Town</u> of <u>Typicalville SUO Section 7</u>, these page(s) will be removed before review by any non-regulatory personnel.

1. Principal product(s) produced:

Ladies pantyhose

2. Raw materials and process additives used:

Nylon, Cotton. Dyes, Silicone (for softening and finishing)

3. Maximum and average production rate of this particular product line (please specify units being reported):

Average Production Rate	Maximum Production Rate	Units	
<mark>8,000</mark>	<mark>10,000</mark>	Pounds of fabric	

The production process is [X] Batch [] Continuous
 If batch, please enter the average number of batches per 24 hours. [50]

If both, please enter % or production [%] Batch [%] Continuous

5.	Days and hours of operation for this product line:	From:	<mark>Mon 7am</mark>	to	<mark>Fri 11pm</mark>
6.	Days and hours of discharge for this product line:	From:	Mon 7am	to	Fri 11 pm

7. Is production subject to seasonal variation? [X] Yes [] No

If yes, briefly describe the seasonal production cycles:

Different colored dyes for each season

SECTION E – WATER USE AND WASTEWATER DISCHARGE INFORMATION

1. Please indicate source(s) of water used at your facility:

Source Type	Check One	If yes,
Well	[]Yes [<mark>X</mark>]No	How many are there?
		How many are in use at this time?
City	[<mark>X</mark>]Yes []No	List all Account numbers: 00135792468
Surface Water	[]Yes [<mark>X</mark>]No	Identify the source:
Other	[]Yes [<mark>X</mark>]No	Explain:

2. Does this facility provide any treatment to the incoming water to improve the water quality prior to its use in the facility, (i.e. deionization, reverse osmosis, ultra filtration, pH adjustment, etc.)? [] Yes [X] No

If yes, complete table.

Treatment Process	Chemicals Used	Wastewater Generated and Volume (gpd)

3. This facility uses water for the following:

(Please record "n/a" if the application/use does not apply to the operations at your facility.)

Type of Application /Use	Detailed Description of Applicable Operation(s) and/or Equipment	Maximum Volume Used (gallons/day)	Average Volume Used (gallons/day)	[E]stimated or [M]easured
a. Process	Dyeing	<mark>418,800</mark>	<mark>330,000</mark>	[<mark>X</mark>]E []M
b. Water Into Product	N/A			[]E[]M
 c. Process Related Facility/Equipment Washdown* 		<mark>500</mark>	<mark>500</mark>	[<mark>X</mark>]E[]M
d. Process Contact Cooling or Warming Water	N/A			[]E[]M
e. Process Related Air-Pollution Control Unit	N/A			[]E[]M
f. Process Related Employee Showers	N/A			[]E[]M
g. Lab	N/A			[]E[]M
h. Maintenance Shop	N/A			[]E[]M
i. Backwash Water	N/A			[]E[]M
j. Pump Sealant Water	N/A			[]E[]M
 k. General Facility/Equipment Washdown* 		<mark>500</mark>	<mark>500</mark>	[<mark>X</mark>]E[]M
I. Other non-contact water uses: boilers; non-contact cooling/warming water, general air conditioning, cooling towers, chillers, HVAC, etc.	HVAC Boilers	<mark>100</mark> 1,000	<mark>100</mark> 100	[<mark>X</mark>]E []M
m. Domestic (e.g. restroom(s), non- process related employee showers, cafeteria, kitchen, breakroom etc.)	Restrooms and Cafeteria, so used 30, gpd	<mark>15,750</mark>	<mark>10,000</mark>	[<mark>X</mark>]E[]M
n. Other, please describe	N/A			[]E[]M
o. Total		<mark>436,650</mark>	<mark>341,150</mark>	[]E[<mark>X</mark>]M

*Please document clean up schedules in Shift activities in Section C.

SECTION E - WATER USE AND WASTEWATER DISCHARGE INFORMATION (continued)

4. The facility generates wastewater from the following areas and that water is discharged where:

If the source of wastewater discharged does not exist at your facility record "n/a". If there is no discharge from the applicable source, record "no discharge".

Source of Wastewater	Wastewater is Discharged To Where	Pretreated?	Maximum Volume Discharged (gallons/day)	Average Volume Discharged (gallons/day)	Estimated (E) or Measured (M)
a. Process	Pipe 001	[X]ves[]no	<u>392,150</u>	308,800	
b. Water Into Product	Lost through evaporation	[]yes [] no	[26650]	[21,200]	[<mark>X</mark>]E []M
c. Process Related Facility/Equipment Washdown*	Pipe 001	[<mark>X</mark>]yes []no	<mark>500</mark>	<mark>500</mark>	[<mark>X</mark>]E []M
d. Process Contact Cooling or Warming Water	N/A	[]yes [] no			[]E []M
e. Process Related Air- Pollution Control Unit	<mark>N/A</mark>	[]yes [] no			[]E []M
f. Process Related Employee Showers	<mark>N/A</mark>	[]yes [] no			[]E []M
g. Lab	<mark>N/A</mark>	[]yes [] no			[]E[]M
h. Maintenance Shop	<mark>N/A</mark>	[]yes [] no			[]E[]M
i. Backwash Water	<mark>N/A</mark>	[]yes [] no			[]E[]M
 Pump Sealant Water 	N/A	[]yes [] no			[]E[]M
k. General Facility/Equipment Washdown*	Pipe 001	[]yes [<mark>X</mark>]no	<u>500</u>	<u>500</u>	[<mark>X</mark>]E []M
I. Other non-contact water uses: boilers; non-contact cooling/warming water, general air conditioning, cooling towers, chillers, HVAC, etc.	Pipe 001 Air Permit is for Boiler	[]yes [<mark>X</mark>]no	<mark>1,100</mark>	200	[<mark>X</mark>]E []M
m. Domestic (e.g. restroom(s), non-process related employee showers, cafeteria, kitchen, breakroom etc.)	Pipe 001	[]yes [<mark>X</mark>]no	<mark>15,750</mark>	<mark>10,000</mark>	[<mark>x</mark>]e []M
n. Groundwater/ Remediated Groundwater	N/A	[]yes [] no			[]E[]M
o. Storm Water Runoff	<mark>Stream</mark>	[]yes [<mark>X</mark>]no	<mark>[4700]</mark>	<mark>[4500]</mark>	[<mark>X</mark>]E []M
p. Tank Bottoms	N/A	[]yes [] no			[]E[]M
 Question of the state of the st	<mark>N/A</mark>	[]yes[] no			[]E[]M
r. Total Discharged to POTW			<mark>410,000</mark>	<mark>320,000</mark>	[]E [<mark>X</mark>]M

*Please document clean up schedules in Shift activities in Section C.

5. Identify the daily maximum flow limit requested. Please explain any differences between the requested flow limit and actual flows listed in E. 4.

Requested Daily Maximum Flow Limit, gpd:	<mark>450,000</mark>
Requested Monthly Average Flow Limit, gpd:	
Explanation:	Ability to expand over our recorded max discharge of 410,000 gpd.

SECTION F - CHEMICALS, POLLUTANTS, WASTES

1. Complete Checklist for Priority, Conventional, Non-Conventional, and Other Pollutants.

	Chamical					
				Present in	Absent in	Concentration
	Number	Present	Absent	Discharge to	Discharge to	in Discharge.
Chemical Name	[CAS#]	at Facility	at Facility	POTW	POTW	(mg/l)
Acid Extractable Organic Compo	ounds (EPA M	ethod 625)				
2-Chlorophenol	95-57-8		X		X	
2,4-Dichlorophenol	120-83-2		×		X	
2,4-Dimethylphenol	105-67-9		X		X	
2,4-Dinitrophenol	51-28-5		×		×	
2-Methyl-4,6-dinitrophenol	534-52-1		×		×	
4-Chloro-3-methylphenol	59-50-7		×		×	
2-Nitrophenol	88-75-5		×		× X	
4-Nitrophenol	100-02-7		×		×	
Pentachlorophenol	87-86-5		×		×	
Phenol	108-95-2		X		X	
2,4,6-Trichlorophenol	88-06-2		×		×	
Base Neutral Organic Compound	ds (EPA Metho	od 625)		n		
1,2,4-Trichlorobenzene	120-82-1		X		<u> </u>	
1,2-Dichlorobenzene	95-50-1		× ×		X	
1,2-Diphenyinydrazine	122-66-7		×		X	
1,3-Dichlorobenzene	541-73-1		×		×	
2.4 Dipitrateluono	100-40-7		<u>^</u>		<u>^</u>	
2,4-Dinitiotoluene	606-20-2		<u>^</u>		<u>^</u>	
2-Chloronanhthalene	91-58-7		×		×	
3.3-Dichlorobenzidine	91-94-1		X		X	
4-Bromophenyl phenyl ether	101-55-3		X		×	
4-Chlorophenyl phenyl ether	7005-72-3		X		X	
Acenaphthene	83-32-9		X		X	
Acenaphthylene	208-96-8		X		X	
Anthracene	120-12-7		X		X	
Benzidine	92-87-5		X		X	
Benzo (a) anthracene	56-55-3		×		x	
Benzo (a) pyrene	50-32-8		×		×	
Benzo (b) fluoranthene	205-99-2		×		×	
Benzo (ghi) perylene	191-24-2		×		×	
Benzo (k) fluoranthene	207-08-9		×		X	
Bis (2-chloroethoxy) methane	111-91-1		×		×	
Bis (2-chloroethyl) ether	111-44-4		×		×	
Bis (2-chloroisopropyl) ether	102-60-1		×		×	
Bis (2-ethylhexyl) phthalate [DEHP]	117-81-7		×		X	
Butyl benzyl phthalate [BBP]	85-68-7		X		X	
Chrysene	218-01-9		X		X	
Di-n-butyl phthalate [DBP]	84-74-2		X		X	
Di-n-octyl phthalate [DOP]	117-84-0		×		×	

All chemicals require that TWO columns are checked

SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

All chemicals require that two	Chamical			т		r
	Chemical			Brosont in	Abcontin	Concentration
	Number	Present	Absent	Discharge to	Discharge to	in Discharge
Chemical Name	[CAS#]	at Facility	at Facility	POTW	POTW	(ma/l)
Base Neutral Organic Compoun	ds (continued	i)	,	-		
Dibenzo (a,h) anthracene	53-70-3		X		×	
Diethyl phthalate [DEP]	84-66-2		X		X	
Dimethyl phthalate [DMP]	131-11-3		X		X	
Fluoranthene	206-44-0		X		X	
Fluorene	86-73-7		X	1	X	
Hexachlorobenzene	118-74-1		X	1	×	
Hexachlorobutadiene	87-68-3		X	1	×	
Hexachlorocyclopentadiene	77-47-4		X	1	×	
Hexachloroethane	67-72-1		X	1	X	
Indeno (1,2,3-cd) pyrene	193-39-5		X	1	×	
Isophorone	78-59-1		X	1	×	
N-nitroso-di-n-propylamine	621-64-7		X	1	X	
N-nitrosodimethylamine	62-75-9		X	1	X	
N-nitrosodiphenylamine	86-30-6		X	1	X	
Naphthalene	91-20-3		X	1	×	
Nitrobenzene	98-95-3		X	1	×	
Phenanthrene	85-01-8		X	1	×	
Pyrene	129-00-0		X	1	X	
Metals		<u> </u>				
Aluminum			X		×	
Antimony	7440-36-0		X	1	×	
Arsenic	7440-38-2		×		×	<mark><0.01</mark>
Beryllium	7440-41-7		×	-	×	
Cadmium	7440-43-9		X	1	×	<mark><0.002</mark>
Chromium	7440-47-3	×		X		<mark>0.2142</mark>
Copper	7440-50-8	×		X		<mark>0.2</mark>
Lead	7439-92-1	×		X		<mark>0.022</mark>
Mercury	7439-97-6		X	1	×	<0.0002
Molybdenum	7439-98-7		X		×	<mark><0.1</mark>
Nickel	7440-02-0		X	1	×	<mark><0.01</mark>
Selenium	7782-49-2		X	1	×	<mark><0.01</mark>
Silver	7440-22-4		X	1	×	<mark><0.005</mark>
Thallium	7440-28-0		X	1	X	
Zinc	7440-66-6	×		X		<mark>0.5</mark>
Other Inorganic Pollutants		<u> </u>		_		
Barium	7440-39-3		×	1	X	
Chloride		×		X		<mark>500</mark>
Cyanide	57-12-5		X		X	<0.005
Fluoride			X		×	

All chemicals require that TWO columns are checked

SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

	Chamical			1		
	Chemical			Brocont in	Abcontin	Concentration
	Abstract	Prosont	Absont	Discharge to	Discharge to	in Discharge
Chemical Name		at Facility	at Eacility			(mg/l)
Purgeable Volatile Organic Co	mpounds [VO	Cel (FPA Mot	at 1 admity	1010	1010	(mg/i)
1 1 1-Trichloroethane	71-55-6		V		X	
1,1,2,2-Tetrachloroethane	79-34-5		×			
1,1,2,2-Tetrachioroethane	79-34-5		×			
1,1,2-Thchloroethane	79-00-5		~			
1,1-Dichloroethalle	75-34-3		~		<u>^</u>	
	75-35-4		<u>^</u>		<u>^</u>	
	107-06-2		×		× ×	
1,2-Dichloropropane	/8-87-5		<u>×</u>		X	
2-Chloroethyl vinyl ether	110-75-8		×		X	
Acrolein	107-02-8		×		X	
Acrylonitrile	107-13-1		×		X	
Benzene	71-43-2	X			× X	
Bromodichloromethane	75-27-4		×		X	
Bromoform	75-25-2		×		×	
Bromomethane	74-83-9		×		X	
Carbon tetrachloride	56-23-5	X			X	
Chlorobenzene	108-90-7		X		X	
Chloroethane	75-00-3		X		X	
Chloroform	67-66-3	X			X	
Chloromethane	74-87-3		×		X	
Cis 1,3-Dichloropropene			×		X	
Dibromochloromethane	594-18-3		X		X	
Ethylbenzene	100-41-4		X		X	
Methylene chloride	75-09-2		X		X	
Tetrachloroethylene	127-18-4		×		X	
Toluene	108-88-3	X			X	
Trans 1.3-Dichloropropene			×		X	
Trans-1,2-Dichloroethylene	156-60-5		×		X	
Trichloroethylene	79-01-6		×		X	
Trichlorofluoromethane	10010		X		X	
	75-01-4		×		X	
Other Pollutants of Concern	70011		<u>^</u>		<u>А</u>	
Xylene			X		×	
Aylene			^		<u>^</u>	
BOD		×		×		400
TSS		×		×		<mark>290</mark>
COD		<mark>??</mark>		X		<mark>1,144</mark>
Ammonia		X		X		3
Total Phosphorus			×	×		From domestic
Total Nitrogen			×	×		From domestic
Oil & Grease		×	<u> </u>	×		54
range of Ph		<u>~</u>		~		4 2-10 9
						4.210.8

All chemicals require that TWO columns are checked

SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

- 2. If any wastewater analyses have been performed on the wastewater discharge(s) from your facilities, please attach to this survey a copy of the lab report, chain of custodies and location of where the samples were taken for the most recent sampling date. Do not attach analyses performed by the POTW or analytical data already delivered to the POTW.
 POTW already has all available data.
- Does your facility complete a Toxic Release Inventory? [] Yes [X] No If yes, most recent copy attached _____ OR POTW already has _____
- 4. Please list boiler and cooling tower treatment additives or MSD sheets and dosage rates for each.

Type of Boiler or Cooling Unit	Treatment Additive Name	Purpose of Additive	Dosage, with units
Babcock & Wilcox boiler	Nalco # 5678A	Corrosion Inhibitor	<mark>2 oz/week</mark>
Biltmore Air HVAC cooling	Nalco # 1234, Nalco # 5678	Corrosion Inhibitor	Both 1 oz/week

. Do you have any storage tank(s) at your facility? [X] Yes [] No If yes, complete the chart below.						
Tank ID	[l]nside or [O]utside	[A]bove or [B]elow Ground	Volume (in gallons)	Contents	Associated with [P]rocess; [W]astewater treatment; [G]roundwater remediation;	Spill Containment Devices
<mark>0001</mark>	<mark>0</mark>	A	<mark>250,000</mark>	Water	Process, fire	None
<mark>0002</mark>	O	A	<mark>20,000</mark>	<mark>Fuel Oil</mark>	<mark>Boiler</mark>	Concrete
						Containment
<mark>0003</mark>	<mark>0</mark>	A	<mark>5,000</mark>	Lube Oil	Process	None

6. Are any liquid wastes or sludges (i.e. acids, alkalies, heavy metal sludges, inks, dyes, oil, grease, organic compounds, paints, pesticides, plating wastes, pretreatment sludges, solvents, thinners, waste product, etc.) from this firm disposed of by means other than discharge to the sewer system? [X] Yes [] No If yes, please complete the following:

Nature of hauled Waste and date Last hauled	Waste hauler's name, EPA ID# and address	Treatment Facility's Name, EPA ID# and Address	Disposal facility's Name, EPA ID# and Address	Est. Gallons or Pounds per Year hauled off
Scrap paper and packaging	Waste Haulers Inc.; PO Box 100: Typicalville, NC	<mark>???</mark>	<mark>???</mark>	<mark>195,000</mark>
Corrugated Paper	Recyclers Inc.; PO Box 200; Typicalville, NC	<mark>???</mark>	<mark>???</mark>	<mark>292,000</mark>
Waste gear oil	Waste Oil Services; 123 Smith St.; Typicalville, NC	<mark>???</mark>	<mark>???</mark>	<mark>1040</mark>

Is this facility a small quantity, large quantity, or conditionally exempt Hazardous Waste Generator?
 Small Quantity [] Large Quantity [] Conditionally Exempt [X] Not Applicable

Facility's EPA Hazardous Waste Generator ID#:	
Waste Codes:	

SECTION G - WASTEWATER TREATMENT, FLOW, AND SAMPLING EQUIPMENT

1. Is the wastewater generated by this facility treated prior to discharge to the POTW? [X] Yes [] No Some units were already in place at the facility purchased, but are not being used.

If yes, please complete the chart below. If a particular pretreatment unit only treats part of the wastewater, indicate this below and in the diagram required by Section B.

Pretreatment Unit	[Y]es [N]o	Additional Information	Chemicals Used
Activated Carbon			
Air Stripping			
Biological Treatment		Activated Sludge	
0		Rotating Biological Contactor (RBC)	
		Trickling Filter	
		Sequencing Batch Reactor (SBR)	
		Other	
Chemical Precipitation			
Chlorination, for			
disinfection			
Cyanide Destruction			
Defoaming Agents			
Dissolved Air Floatation		list all individual units of DAF here	
(DAF)		equalization	
		pH adjustment	
		chemical precipitation	
		Other	
Flow equalization, aerated	Y	Size(gallons) _ <u>250,000</u>	NOT IN USE
		Before After Pretreatment	
Flow equalization,		Size(gallons)	
not aerated		Before After Pretreatment	
Grease and Oil Removal		Grease Trap, Size	
for employee cafeteria,		Oil Water Separator	
kitchen, breakroom, etc.		Other	
Grease and Oil Removal		Grease Trap, Size	
for food manufacturing		Oil Water Separator	
process wastewater		Other	
Grease and Oil Removal		Grease Trap, Size	
for non-food		Oil Water Separator	
manufacturing process		Other	
wastewater			
Heat			
Reclamation/Exchange			
Ion Exchange (for			
Wastewater treatment)			
adjustment			
Ozonation			
Poverse Osmosis (for			
wastewater treatment)			
Sentic Tank			
Silver Recovery			
Solids Separation.	Y	Belt Press Centrifugation	Screening is screens on
Clarification Dewatering	•	Clarification Cvclone	all floor drains and
Removal etc		Otamication Operation	wastewater collection
		Flocculation Grit Removal	troughs below dve
		Microfiltration	machines
		Nanofiltration X Screening	
		Sedimentation Septic Tank	Comminuter: NOT IN USE
		Ultrafiltration	
		XOther <mark>Comminutor</mark>	
Solvent Separation			
Spill protection			

SECTION G - WASTEWATER TREATMENT, FLOW, AND SAMPLING EQUIPMENT (continued)

2. Describe wastewater flow measuring methods and/or equipment. If applicable, list the meter's current interval, flow volume, pulse frequency and reporting units:

Ultrasound discharge flow meter with non-resettable totalizer approved/required by POTW

3. List procedures employed to ensure the accuracy of flow measurement method/equipment.

Frequency of Cleaning:	what is this??		
Calibration method:	Stan's Flow Equipment Co. – installed meter, assume they		
	know how??		
calibration performed by:	Stan's Flow Equipment Co. staff.		
Training/credentials of calibration staff:	Stan's Flow Equipment Co - installed meter; assume they		
_	know how???		
Date of most recent calibration:	<mark>???</mark>		
Copy of Calibration Certificate	POTW already has <u>X</u> OR Copy attached		

4. Describe the sampling method and associated equipment utilized at the facility. Identify staff or contract lab responsible for sampling. Describe sampling technician training.

Sampling Equipment/Method:	Automatic composite sampler approved by POTW. Collects sample every 15 minutes, volume of each grab is proportional to flow.
Sampling staff:	ABC Labs
Training/credentials of sampling staff:	POTW came to observe lab last year and said that methods
	were ok. Now we watch the lab each time.

SECTION H – CATEGORICAL STATUS

1. Check any products listed below that are manufactured or activities that are performed at this facility:

[]40 CFR 467	Aluminum Forming	[]40 CFR 432	Meat Products
[]40 CFR 427	Asbestos Manufacturing	[]40 CFR 433	Metal Finishing
[]40 CFR 461	Battery Manufacturing	[]40 CFR 464	Metal Molding & Casting
[]40 CFR 431	Builders Paper & Board Mills	[]40 CFR 436	Mineral Mining & Processing
[]40 CFR 407	Canned & Preserved Fruits & Veg.	[]40 CFR 471	Nonferrous Metal, Form & Powders
[]40 CFR 408	Canned & Preserved Seafood	[]40 CFR 421	Nonferrous Metals Manufacturing
[]40 CFR 458	Carbon Black Manufacturing	[]40 CFR 414	OCPSF
[]40 CFR 411	Cement Manufacturing	[]40 CFR 435	Oil & Gas Extraction
[]40 CFR 437	Centralized Waste Treatment	[]40 CFR 440	Ore Mining & Dressing
[]40 CFR 434	Coal Mining	[]40 CFR 446	Paint Formulating
[]40 CFR 465	Coil Coating	[]40 CFR 443	Paving & Roofing Materials Mfg.
[]40 CFR 468	Copper Forming	[]40 CFR 455	Pesticide Manufacturing
[]40 CFR 405	Dairy Products Processing	[]40 CFR 419	Petroleum Refining
[]40 CFR 469	Electrical, Electronics Components	[]40 CFR 439	Pharmaceutical Manufacturing
[]40 CFR 413	Electroplating	[]40 CFR 422	Phosphate Manufacturing
[]40 CFR 457	Explosives Manufacturing	[]40 CFR 459	Photographic Supplies
[]40 CFR 412	Feedlots	[]40 CFR 463	Plastics Molding & Forming
[]40 CFR 424	Ferroalloy Manufacturing	[]40 CFR 466	Porcelain Enameling
[]40 CFR 418	Fertilizer Manufacturing	[]40 CFR 430	Pulp, Paper, & Paperboard
[]40 CFR 464	Foundries, Metal Mold & Casting	[]40 CFR 428	Rubber Manufacturing
[]40 CFR 426	Glass Manufacturing	[]40 CFR 417	Soap & Detergent Manufacturing
[]40 CFR 406	Grain Mills	[]40 CFR 423	Steam Electric Power Generation
[]40 CFR 454	Gum & Wood Chemical Manufactur	ing		
[]40 CFR 460	Hospitals	[]40 CFR 409	Sugar Processing
[]40 CFR 447	Ink Formulating	[>	<mark>(</mark>]40 CFR 410	Textile Mills
[]40 CFR 415	Inorganic Chemical Manufacturing	[]40 CFR 429	Timber Products Processing
[]40 CFR 420	Iron & Steel Manufacturing	[]40 CFR 442	Transportation Equipment Cleaning
[]40 CFR 425	Leather Tanning & Finishing	[] OTHER	

If any are checked, continue with Questions 2 and 3 of this Section

Otherwise, check here ____ and skip to next Section.

SECTION H – CATEGORICAL STATUS - continued

2. Is there a discharge from any of the above checked categorical operations to the POTW? [X]Yes []No If Yes, complete table.

Process operation name	40 CFR, subpart, operations, etc	40 CFR New Source Date	Date initial process start-up	Date(s) major change *
Textile	<mark>410</mark>	<mark>9/2/82</mark>	<mark>2001</mark>	N/A

* Date(s) of commencement of construction of any major upgrades, updates, refits, or reinstallations of the operation since the start-up date.

From the above, is this facility a [] New Source	[] Existing Source	[<mark>X</mark>] Unknown
--	---------------------	----------------------------

3. Are there any "dilution" wastestreams that flow through the current/proposed monitoring point? Yes [] No [X]

If Yes, ensure these wastestreams are clearly identified as such in question E,4.

I don't understand the question.

SECTION I – SLUG/SPILL PREVENTION and WASTE MINIMIZATION

1. Enter employees responsible for notifying the POTW in the event of a spill, bypass, pretreatment facility upset, or other unusual discharge or problem and employees authorized to close down production if needed, along with information about training and procedures.

	Notification of POTW	Plan Name, page #	Authority to close down production	Plan Name, page #
Designated Employee(s)	Bob Slugem, Josephine Spill, all line/shift	Slugem Emergency	Bob Slugem, Josephine Spill, all	Slugem Emergency
Training of those employees		N/A	???	N/A
Procedures	<mark>???</mark>	N/A	<mark>???</mark>	N/A
How other staff know when and how to contact designated individuals?	Emergency Contact Sheet posted	N/A	Emergency Contact Sheet posted	N/A

Does the facility have measures, equipment, and/or plans to protect the POTW and/or sanitary sewer in the event of accidental spills, slugs, or other inappropriate discharges)? [X] Yes [] No If yes, complete table.

For measures that are formalized in a Plan of some kind (eg., Spill Prevention Control and Countermeasure Plan, Spill/Slug Control Plan, Toxic Organic Management Plan), list Plan Number and page #. Note: the POTW may request copies of the identified plans.

Measures to protect POTW and/or sanitary sewer	Plan Name and page #s, if applicable
	Slugem Emergency Plan, Section 2

 Does your company have a pollution prevention/waste minimization/recycling/reuse program established, or have had a pollution prevention or other waste minimization audit conducted? [] Yes [X] No If yes, complete Table.

Name of Plan/Audit	Most recent copy attached	POTW already has copy

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

4.	l	Please c discharg	hec e.	k "curren	t", "projec	ted" or "N/A" for all codes below relating to your facility's wastewater		
<u>N/A</u>	<u>(</u>	<u>Current</u>	Pr	ojected	<u>Code</u>	Description		
[<mark>X</mark>]	[]	[]	W13	Improved maintenance scheduling, record keeping, or procedures		
[<mark>X</mark>]	[]	[]	W14	Changed production schedule to minimize equipment and feedstock changeovers		
[<mark>X</mark>]	[]	[]	W19	Other changes in operating practices (please explain)		
[<mark>X</mark>]	[]	[]	W21	Instituted procedures to insure that materials do not stay in inventory beyond shelf life		
[<mark>X</mark>]	[]	[]	W22	Began to test outdated material – continue to use if still effective		
[<mark>X</mark>]	[]	[]	W23	Eliminated shelf-life requirements for stable materials		
[<mark>X</mark>]	[]	[]	W24	Instituted better labeling procedures		
[<mark>X</mark>]	[]	[]	W25	Instituted clearinghouse to exchange materials that would otherwise be discarded		
[]	[<mark>X</mark>]	[]	W29	Other changes in inventory control (please explain) Review new chemicals for		
						Level of toxicity*		
[<mark>X</mark>]	[]	[]	W31	Improved storage or stacking procedures		
[<mark>X</mark>]	[]	[]	W32	Improved procedures for loading, unloading and transfer operations		
[<mark>X</mark>]	[]	[]	W33	Installed overflow alarms, and/or automatic shutoff valves		
[]	[<mark>X</mark>]	[]	W34	Installed secondary containment		
[<mark>X</mark>]	[]	[]	W35	Installed vapor recovery systems		
[<mark>X</mark>]	[]	[]	W36	Implemented inspections or monitoring program of potential spill or leak sources		
[<mark>X</mark>]	[]	[]	W39	Other spill and leak prevention (please explain)		
[<mark>X</mark>]	[]	[]	W41	Increased purity of raw materials		
[]	[<mark>X</mark>]	[]	W42	Substituted raw materials For less toxic chemicals*		
[<mark>X</mark>]	[]	[]	W49	Other raw materials modifications (please explain)		
[<mark>X</mark>]	[]	[]	W51	Instituted recirculation within a process		
[<mark>X</mark>]	[]	[]	W52	Modified equipment, layout, and/or piping		
[<mark>X</mark>]	[]	[]	W53	Use of different process catalyst		
[<mark>X</mark>]	[]	[]	W54	Instituted better controls on operating bulk containers to minimize discarding of empty		
						containers		
[<mark>X</mark>]	[]	[]	W55	Change from small volume containers to bulk containers to minimize discarding of		
						empty containers		

*New Waste Minimization Plan

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

<u>N/A</u> [<mark>X</mark>]	<u>C</u> [urrent]	<u>Pr</u> [ojected]	<u>Code</u> W58	Description Other process modifications (please explain)
ו <mark>א</mark> ו	ſ	1	ſ	1	W/59	Modified stripping/cleaning equipment
	ſ	1	ſ	1	W60	Changed to mechanical stripping/cleaning devices (from solvents or other materials)
	ſ	1	ſ	1	W61	Changed to aqueous cleaners (from solvents or other materials)
	۱ ۲ X	, 1	ſ	1	W62	Reduced the number of solvents used to make waste more amendable to recycling
I X I	[1	ſ	1	W63	Modified containment procedures for cleaning units
	ſ	1	ſ	1	W64	Improved draining procedures
[<mark>X</mark>]	ſ	1	ſ	1	W66	Modified or installed rinse systems
[<mark>X</mark>]	ſ	1	ſ	1	W67	Improved rinse equipment design
[<mark>X</mark>]	[1	[1	W68	Improved rinse equipment operation
[<mark>×</mark>]	[]	[]	W71	Other cleaning and degreasing operation (please explain)
[<mark>X</mark>]	[]	[]	W72	Modified spray systems or equipment
[<mark>X</mark>]	[]	[]	W73	Substituted coating materials used
[<mark>X</mark>]	[]	[]	W74	Improved application techniques
[<mark>X</mark>]	[]	[]	W75	Changed from spray to other system
[<mark>X</mark>]	[]	[]	W78	Other surface preparation and finishing (please explain)
[<mark>X</mark>]	[]	[]	W81	Changed product specifications
[<mark>X</mark>]	[]	[]	W82	Modified design or composition of product
[<mark>X</mark>]	[]	[]	W83	Modified packaging
[<mark>X</mark>]	[]	[]	W89	Other product modifications (please explain)
[<mark>X</mark>]	[]	[]	W99	Other (please explain)

SECTION J – OTHER PERMITS

1. List all environmental control permits currently managed for or by this facility. Examples: air, National Pollutant Discharge Elimination System (NPDES), Industrial User Permits (IUP), Resources Conservation and Recovery Act (RCRA), groundwater, storm water, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Permit Type	Permit Number	Issuing Agency
Stormwater	NCG000001	NCDENR
Air	00000R01	NCDENR
IUP	<mark>001</mark>	Town of Typicalville

2. With regard to the parent company and all subsidiaries, list all wastewater discharge permits issued to cover similar operations to those at this facility. Examples: National Pollutant Discharge Elimination System (NPDES), Industrial User Permits (IUP), groundwater, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Facility and Location	Permit Type	Permit Number	Issuing Agency
<mark>Ozburg, VA</mark>	IUP	<mark>13</mark>	City of Ozburg
<mark>Ozburg, VA</mark>	Air	<mark>3333</mark>	Virginia Division of Air Quality

3. With regard to the parent company and all subsidiaries, list all environmental permits applied for in the United States where issuance was denied OR the permit was terminated prior to the expiration date. Examples: air, NPDES, IUP, RCRA, groundwater storm water, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Permit Type	Issuing Agency	Date	Facility Name and Location	Reason for Denial/Termination
IUP	City of Ozburg	<mark>March</mark> 2001	<mark>Ozburg, VA</mark>	Denied flow increase from 50,000 gpd to 150,000 gpd; no available WWTP capacity

SIU INSPECTION FORM

Name Of Industry: Slugem Hosiery Mills, Inc	- Plant #2 IUP # 0010
Address Of Industry: 100 Industry Drive	IUP Expiration Date:
Typicalville, NC 27666	12/31/2006
Industry Representatives:	Title
Billy-Bob Slugem	President
Josephine Spill	Maint. Sup.
POTW Representatives:	Title
Jane D. Wastewater	Dir. Public Works
Bob Operations	WWTP ORC
Date Of Inspection: 8/15/2006	Time Of Inspection: <u>10 am</u> am/pm
Purpose of Inspection: Annual X Other (Describe)	e) IUP Renewal
POTW to which IU discharges <u>Town of Typicalville WWT</u>	TP NPDES # NC0012345
Is SIU currently in SNC? <u>No</u> If yes, for what?	?

PART I - INITIAL INTERVIEW

Has anything changed since the last inspection or IUP application in the following:

		COMMENTS
Product	<u>NO</u>	panty hose
Raw materials used	<u>YES</u>	new waste minimization work – substituting out some of our more toxic chemicals. POTW was involved.
Manufacturing processes	<u>NO</u>	
Categorical, if applicable	NA	
Production rate	YES	may have increase in future, discussed IUP requirement for PRIOR notification
Number of employees	NO	
Number of shifts	NO	

Comments: Great job on waste minimization efforts, and especially letting us know details as you went along

PART II - PLANT TOUR - Visit all areas where wastewater is generated or where there are drains to the POTW.

Plant Tour Section A - PRODUCTION AND STORAGE AREAS

1. Are there floor drains in the production area? <u>YES</u> / NO Where do they go? <u>To pretreatment</u>. Discussed potential for spills from chemicals stored in production area.

2. Are production areas diked, contained, or otherwise constructed in such a way as to prevent harm to the WWTP, especially from spills or slugs? <u>YES</u> / <u>NO</u> Comments: <u>A few barrels don't have required spill containment trays. Update</u> <u>Emergency Plan to describe better storage of bagged chemicals so don't get wet, and also do dry cleanup of powder type</u> spills before wash down area.

3. Are there floor drains in the storage area? <u>YES</u> / NO Where do they go? <u>Spill containment pits</u> .
4. Are storage tanks and areas diked, contained, or otherwise constructed in such a way as to prevent harm to the WWTP,
especially from spills or slugs? <u>YES</u> / NO Comments: <u>Spill containment pits are self-contained (have no outlets).</u>
SIU's Slug/Spill Plan outlines procedures how SIU will address removal and disposal of any spills
5. Are process and storage tanks and pipes labeled? <u>YES</u> / NO
6. How are off-spec raw materials, and products disposed of? <u>Off-spec or unused raw materials and process</u>
chemicals sent back to vendor. Off-spec product is landfilled.
7. When is the production area cleaned? Clean screens and wash down dye area at end of every shift. Weekly cleaning
of dry process areas. Dry process area clean up does not produce any wastewater
8. Is the wastewater from cleaning the production area discharged to the POTW? YES / NO

9. What non-process wastewaters are discharged to POTW? ______Boiler blowdown, cooling/HVAC blowdown,

domestic, cafeteria - all are in sample point.

Comments:

SIU INSPECTION FORM

PART II - Plant Tour Section B - PRETREATMENT SYSTEM

Ask the operator to describe pretreatment system. <u>Don't have pretreatment per se. Have screens in dyeing production area.</u> NOTE Comminuter and EQ aeration basin NOT in use

- 1. Does operator seem knowledgable about the system? YES Comments: shift managers responsible for screen cleaning
- 2. Are all units operational? YES
- 4. Is there an operator for each shift? <u>YES shift managers responsible for screen cleaning</u>
- 5. How and when is sludge disposed of? <u>Each shift. Into regular trash.</u>

6. Is there a schedule for preventative maintenance? <u>YES</u> Shift managers inspect screens at each cleaning Comments:

PART II - Plant Tour Section C - SAMPLING POINT(S) AND FLOW MEASUREMENT

(Collect a sample if desired.)

1. Does an outside lab complete sampling? <u>YES</u> If yes, name of lab. <u>ABC Labs</u>

2. If industry completes sampling, ask the industry representative to describe sampling procedures. Comments: <u>I reminded Billy-Bob that they are responsible for sample collection quality, etc. even though they have an outside lab collect</u> the samples. We all watched lab staff set up and collect samples last year, and reviewed their written procedures last year (after lab snafu). Now Billy-Bob or Josephine are present when lab staff are on-site.

3. Is flow measurement equipment operational? <u>YES</u> Comments: Went over equipment cleaning question in application. Called contractor to discuss - he faxed pages that recommend at least weekly visual observation of flume and equipment, with removal of debris, solids, algae, etc. Since Josephine reads meter daily, she will add column on her flow sheet where she will record her visual observations, etc.

4. Is there a calibration log for the flow meter? YES / NO Comments: <u>Josephine had to call the contractor to obtain</u> a copy of the last calibration. Told Billy-Bob that his new IUP will require him to submit the documentation with his regular monthly report.

Comments:

PART III - EXIT INTERVIEW

Review monitoring records and other SIU records required by IUP.

- 1. Are files well organized? <u>YES</u> / NO Comments: <u>Much improved from last year. Thanks!</u>
- 2. Are sample collection / chain-of-custody forms filled out properly? YES / NO Comments: see sampling question
- 3. Do results in files agree with reports sent to POTW? YES / NO Comments:

4. Who has authority to shut down production should a spill or slug discharge occur? <u>Bob, Josephine, and all line and shift supervisors</u>. See Emergency Plan

5. How does SIU inform employees of whom to call at POTW in case of spill/slug? <u>Notices posted all over factory</u>. <u>Nextel numbers for Bob and Josephine</u>. Line and shift supervisors are readily available. POTW numbers also listed, so any employee can call if others not available.

If slug/spill plan is already required by POTW, review procedures.

6. Is SIU implementing slug/spill plan? YES / NO Comments: <u>Slugem's slug and spill prevention measures to</u> protect the POTW are incorporated into their overall plant Emergency Plan.

Comments:

INSPECTION RESULTS

Slug/Spill Control Plan Needed? <u>Have one, but it needs updates to address potential for spills from chemicals stored in</u> production area, storage of bagged chemicals, dry cleanup of powder type spills and employee training.

Comments, Required or Recommended Actions: ______ submit updated plan by 10/15/2006

Signature of Inspector(s)	Jane Wastewater	Date:	8/15/06	
	Bob Operations	Date:	8/15/06	

Sample Location:	FLOW					BOD				TSS				AMMONIA				ARSENIC	
Slugem		P or	S			Usedin	Calculated												
Sample Date	MGD		_	<	mg/L	Calculation	lbs/day												
5/5/2005	0.356	S	Spreadsheet		377	377	1119		237	237	704								
5/6/2005	0.362	S	Instructions:		352	352	1063		254	254	767								
6/8/2005	0.329	S	1) Data entered only		366	366	1004		378	378	1037								
6/9/2005	0.318	S	in Heavy		315	315	835		319	319	846								
7/11/2005	0.298	S	cells. Rest of		321	321	798		268	268	666								
7/12/2005	0.307	S	worksheet is protected,		319	319	817		270	270	691								
8/9/2005	0.389	S	password is		340	340	1103		226	226	733								
8/10/2005	0.372	S	2.		425	425	1319		356	356	1104								
9/6/2005	0.326	S	2) For below detection		375	375	1020		399	399	1085								
9/7/2005	0.313	S	data, enter "<"		373	373	974		373	373	974								
9/24/2005	0.301	Р	and enter		366	366	919		241	241	605								
10/4/2005	0.303	S	in mg/l		367	367	927		240	240	606								
10/5/2005	0.326	S	column. Spreadsheet		355	355	965		210	210	571								
11/7/2005	0.319	S	will auto-		525	525	1397		190	190	505								
11/8/2005	0.347	S	derive a value		417	417	1207		215	215	622								
12/5/2005	0.372	S	value entered		499	499	1548		306	306	949								
12/6/2005	0.354	S	(in shaded columns) and		455	455	1343		333	333	983								
1/9/2006	0.322	S	will use this		422	422	1133		302	302	811		3	3	8.06	<	0.01	0.005	0.0134
1/10/2006	0.279	S	calculating		398	398	926		298	298	693								
2/6/2006	0.265	S	averages.		511	511	1129		276	276	610								
2/7/2006	0.288	S			456	456	1095		300	300	721								
3/8/2006	0.307	S			369	369	945		348	348	891								
3/9/2006	0.312	S			522	522	1358		262	262	682								
3/25/2006	0.315	Р			498	498	1308		250	250	657								
4/3/2006	0.318	S			359	359	952		310	310	822								
4/4/2006	0.274	S			380	380	868		299	299	683								
Column Averages =>	0.32200					402	1080			287	770			3.00	8.06]		0.0050	0.0134
Column Maximum =>	0.38900					525	1548			399	1104			3.00	8.06			0.0050	0.0134
Column Minimum =>	0.26500					315	798			190	505			3.00	8.06	1		0.0050	0.0134
									-							-			
IUP Limit =>	0.4					600				400				monitor				monitor	
·																_			
5% MAHL =>	0.225						563				563				46.91				0.0784
r																			
Average Influent = >	1.88						3543				3732				345				0.0784
50 % MAHI - >	2 25						5620				5630				/60 1				0 784
$_{\rm J0}$ /0 WIATIL – >	2.23						5050				5050				407.1				0.764

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Cyanide must be grab

Sample Location:	FLOW			CADMIUM				CHROMIU	Λ			COPPER				CYANIDE	
Slugem				Usedin	Calculated			Used in	Calculated			Usedin	Calculated			Usedin	Calculated
Sample Date	MGD	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	< mg/L	Calculation	lbs/day
5/5/2005	0.356						0.15	0.15	0.4454		0.23	0.23	0.6829	<	< 0.1	0.05	0.1485
5/6/2005	0.362																
6/8/2005	0.329						0.08	0.08	0.2195		0.18	0.18	0.4939				
6/9/2005	0.318																
7/11/2005	0.298						0.12	0.12	0.2982		0.12	0.12	0.2982				
7/12/2005	0.307																
8/9/2005	0.389						0.6	0.6	1.9466		0.42	0.42	1.3626				
8/10/2005	0.372																
9/6/2005	0.326						0.11	0.11	0.2991		0.26	0.26	0.7069				
9/7/2005	0.313																
9/24/2005	0.301						0.21	0.21	0.5272		0.26	0.26	0.6527				
10/4/2005	0.303						0.22	0.22	0.5559		0.21	0.21	0.5307				
10/5/2005	0.326																
11/7/2005	0.319						0.23	0.23	0.6119		0.08	0.08	0.2128				
11/8/2005	0.347																
12/5/2005	0.372						0.25	0.25	0.7756		0.11	0.11	0.3413				
12/6/2005	0.354																
1/9/2006	0.322	<	0.002	0.001	0.0027		0.14	0.14	0.3760		0.27	0.27	0.7251	<	< 0.005	0.0025	0.0067
1/10/2006	0.279																
2/6/2006	0.265						0.2	0.2	0.4420		0.2	0.2	0.4420				
2/7/2006	0.288																
3/8/2006	0.307						0.29	0.29	0.7425		0.22	0.22	0.5633				
3/9/2006	0.312																
3/25/2006	0.315						0.28	0.28	0.7356		0.21	0.21	0.5517				
4/3/2006	0.318						0.18	0.18	0.4774		0.11	0.11	0.2917				
4/4/2006	0.274																
Column Averages =>	0.32200			0.0010	0.0027			0.2186	0.6038			0.2057	0.5611			0.0263	0.0776
Column Maximum =>	0.38900			0.0010	0.0027			0.6000	1.9466			0.4200	1.3626			0.0500	0.1485
Column Minimum =>	0.26500			0.0010	0.0027			0.0800	0.2195			0.0800	0.2128			0.0025	0.0067
	<u> </u>																
IUP Limit =>	0.4			monitor				0.3				0.25				monitor	
L													I				
5% MAHL = >	0.225				0.0052				0.2402				0.3763				0.0132
· · ·		1															
Average Influent = >	1.88				0.0157				0.9858				1.6777				0.0784
50 % MAHI - >	2.25	1			0.052				2 402				3 763				0 132
50 / 0 WIATE = $>$	2.23	1			0.052				2.402			I	5.705				0.152

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Sample Location:	FLOW		LEAD				MERCURY	,		Μ	OLYBDEN	UM			NICKEL	
Slugem			Usedin	Calculated			Usedin	Calculated			Usedin	Calculated			Usedin	Calculated
Sample Date	MGD	< mg	/L Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	< mg/L	Calculation	lbs/day
5/5/2005	0.356												E			
5/6/2005	0.362												E			
6/8/2005	0.329															
6/9/2005	0.318															
7/11/2005	0.298															
7/12/2005	0.307															
8/9/2005	0.389															
8/10/2005	0.372															
9/6/2005	0.326															
9/7/2005	0.313															
9/24/2005	0.301															
10/4/2005	0.303															
10/5/2005	0.326															
11/7/2005	0.319															
11/8/2005	0.347															
12/5/2005	0.372															
12/6/2005	0.354															
1/9/2006	0.322	0.	0.022	0.0591	<	0.0002	0.0001	0.00027	<	0.1	0.05	0.1343	<	< 0.01	0.005	0.0134
1/10/2006	0.279															
2/6/2006	0.265															
2/7/2006	0.288															
3/8/2006	0.307															
3/9/2006	0.312												E			
3/25/2006	0.315															
4/3/2006	0.318												E			
4/4/2006	0.274															
Column Averages =>	0.32200		0.0220	0.0591			0.00010	0.00027			0.0500	0.1343			0.0050	0.0134
Column Maximum =>	0.38900		0.0220	0.0591			0.00010	0.00027			0.0500	0.1343			0.0050	0.0134
Column Minimum =>	0.26500		0.0220	0.0591			0.00010	0.00027			0.0500	0.1343			0.0050	0.0134
IUP Limit = >	0.4		monitor				monitor				monitor				monitor	
LL																
5% MAHL =>	0.225			0.0554				0.000173				0.1502				0.1312
												-				
Average Influent = >	1.88			0.5017				0.0016				1.3641				0.2195
50 % MAHL = >	2.25			0.554				0.00173				1.502				1.312
	2.20	1		0.554				0.00175			· · · · · ·	1.502			I	1.012

														Oi co	I & Grease llected in g	must be grab sa lass	Imple
Sample Location:	FLOW			SELENIUM				SILVER				ZINC			0	L & GREA	SE
Slugem				Usedin	Calculated			Usedin	Calculated			Used in	Calculated			Usedin	Calculated
Sample Date	MGD	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day
5/5/2005	0.356										0.186	0.186	0.5522		40.5	40.5	120
5/6/2005	0.362																
6/8/2005	0.329										0.116	0.116	0.3183		75.9	75.9	208
6/9/2005	0.318																
7/11/2005	0.298										0.212	0.212	0.5269		11.5	11.5	29
7/12/2005	0.307																
8/9/2005	0.389										4.1	4.1	13.3015		36.6	36.6	119
8/10/2005	0.372																
9/6/2005	0.326										0.207	0.207	0.5628		47.9	47.9	130
9/7/2005	0.313																
9/24/2005	0.301										0.11	0.11	0.2761		71.1	71.1	178
10/4/2005	0.303										0.083	0.083	0.2097		60.6	60.6	153
10/5/2005	0.326																
11/7/2005	0.319										0.143	0.143	0.3804		79	79	210
11/8/2005	0.347																
12/5/2005	0.372										0.15	0.15	0.4654		71.9	71.9	223
12/6/2005	0.354																
1/9/2006	0.322	<	0.01	0.005	0.0134	<	0.005	0.0025	0.0067		0.23	0.23	0.6177		78.3	78.3	210
1/10/2006	0.279																
2/6/2006	0.265										0.18	0.18	0.3978		56.1	56.1	124
2/7/2006	0.288																
3/8/2006	0.307										0.214	0.214	0.5479		52.6	52.6	135
3/9/2006	0.312																
3/25/2006	0.315										0.19	0.19	0.4991		57.1	57.1	150
4/3/2006	0.318										0.18	0.18	0.4774		29.4	29.4	78
4/4/2006	0.274														65.5	65.5	150
Column Averages =>	0.32200			0.0050	0.0134		0.0050	0.0025	0.0067			0.4501	1.3667			55.6	148
Column Maximum =>	0.38900			0.0050	0.0134		0.0050	0.0025	0.0067			4.1000	13.3015			79.0	223
Column Minimum =>	0.26500			0.0050	0.0134		0.0050	0.0025	0.0067			0.0830	0.2097			11.5	29
							8						4 4			<u> </u>	
IUP Limit =>	0.4			monitor				monitor				0.65				150	
5% MAHL = >	0.225				0.0086				0.196				0.784				no mahl
Average Influent - >	1.88	1			0.0784				0.09/1				1 31 18				313 58
Tretage mildent - >	1.00	I			0.0704				0.0741			1	ч.5110				515.50
50 % MAHL =>	2.25				0.086				1.96				7.84				

pH must be grab

Sample Location:	FLOW			COD			TE	MPERATU	IRE		р	Н		(CHLORIDE	S
Slugem				Usedin	Calculated			Usedin	Calculated			Usedin			Usedin	Calculated
Sample Date	MGD	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	<	mg/L	Calculation	lbs/day
5/5/2005	0.356						36	36			6.9	6.9				
5/6/2005	0.362						35				7.2	7.2				
6/8/2005	0.329						38	38			6.8	6.8				
6/9/2005	0.318						38				6.8	6.8				
7/11/2005	0.298		992	992	2465		42	42			10.9	10.9		489	489	1215
7/12/2005	0.307						41				8.7	8.7				
8/9/2005	0.389						39	39			6.9	6.9				
8/10/2005	0.372						39				7.1	7.1				
9/6/2005	0.326						36	36			7	7				
9/7/2005	0.313						37				7.7	7.7				
9/24/2005	0.301						31	31			6.8	6.8				
10/4/2005	0.303						32	32			6.9	6.9				
10/5/2005	0.326						32				6.5	6.5				
11/7/2005	0.319						30	30			6.3	6.3				
11/8/2005	0.347						29				7.2	7.2				
12/5/2005	0.372						29	29			6.5	6.5				
12/6/2005	0.354						29				6.6	6.6				
1/9/2006	0.322		1296	1296	3480		28	28			6.8	6.8		511	511	1372
1/10/2006	0.279						29				7.1	7.1				
2/6/2006	0.265						31	31			6.8	6.8				
2/7/2006	0.288						30				7.5	7.5				
3/8/2006	0.307						34	34			4.2	4.2				
3/9/2006	0.312						33				6.1	6.1				
3/25/2006	0.315		1135				34				6.9	6.9				
4/3/2006	0.318						35	35			6.5	6.5				
4/4/2006	0.274						32	32			6.6	6.6				
Column Averages =>	0.32200	_		1144	2973			34				6.9731			500	1294
Column Maximum =>	0.38900			1296	3480			42				10.9000			511	1372
Column Minimum =>	0.26500			992	2465			28				4.2000			489	1215
											•					
IUP Limit = >	0.4			monitor				66				6.0-9.0			monitor	
									_							
5% MAHL = >	0.225				no mahl				no mahl							209
Average Influent = >	1.88															
50 0/ MATH	2.25											I				2000
50 % MAHL = >	2.25															2009

8.data.summary.slugem.typicalville.xls Page 5 of 6 pages 12/22/2014, 1:34 PM Revision: September 13, 2001

Sample Location:	FLOW		Pho	sphorus, 1	Fotal		Ni	itrogen, To	tal
Slugem				Usedin	Calculated			Used in	Calculated
Sample Date	MGD	<	mg/L	Calculation	lbs/day	<	mg/L	Calculation	lbs/day
5/5/2005	0.356								
5/6/2005	0.362								
6/8/2005	0.329								
6/9/2005	0.318								
7/11/2005	0.298								
7/12/2005	0.307								
8/9/2005	0.389								
8/10/2005	0.372								
9/6/2005	0.326								
9/7/2005	0.313								
9/24/2005	0.301								
10/4/2005	0.303								
10/5/2005	0.326								
11/7/2005	0.319								
11/8/2005	0.347								
12/5/2005	0.372								
12/6/2005	0.354								
1/9/2006	0.322								
1/10/2006	0.279								
2/6/2006	0.265								
2/7/2006	0.288								
3/8/2006	0.307								
3/9/2006	0.312								
3/25/2006	0.315								
4/3/2006	0.318								
4/4/2006	0.274								
Column Averages =>	0.32200								
Column Maximum =>	0.38900								
Column Minimum =>	0.26500								
IUP Limit = >	0.4			monitor				monitor	
					I				
5% MAHL =>	0.225				22.518				no mahl
Average Influent – >	1 88								
riverage initiatin = >	1.00			I				I	
50 % MAHL = >	2.25				225.18				

8.data.summary.slugem.typicalville.xls Page 6 of 6 pages 12/22/2014, 1:34 PM Revision: September 13, 2001

Workbook Name : 9.typicalville_hwa_at_jan1_07_IUP_ren.xls, Worksheet Name: AT Printed: 12/22/2014, 1:34 PM Page 1 of 4



Workbook Name : 9.typicalville_hwa_at_jan1_07_IUP_ren.xls, Worksheet Name: AT Printed: 12/22/2014, 1:34 PM Page 2 of 4

POTW=> NPDES#=>	Allocation Table Headworks last approved: Allocation Table updated: Permits last modified: Typicalville NC0012345	11/14/03 11/15/06 01/01/07 					A a F r	After ente automatic pollutant no over a	ered new cally re-ca limits, the llocation!	0.45 mgd Ilcuated 1 en carriec	l Flow Li bs/day fc l through	mit, AT V or all of S to MAIL	Workshee lugem's leftst	et ill	
				Amr	nonia	Ars	senic	Cadı	nium	Chro	mium	Cop	yper	Cya	nide
		Industry		Permit	Limits	Permi	t Limits	Permit	Limits	Permit	Limits	Permit	Limits	Permit	Limits
IUP	INDUSTRY NAMES	Permit	Pipe	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load
Count	(please list alphabeticly)	number	number	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	m⊈/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	0008			monitor							/	monitor		
2	Slugum Hosiery Inc	0010	001		monitor		monitor		monitor	0.3000	1.1259	V 0.2500	0.9383		monitor
3	Will Plateit	0006	001					0.0200	0.0163	1.7100	1.3976	2.0700	1.6919	0.0100	0.0082
4															
5															
	Colum	mn Totals =>	Ente		0		0.0000		0.0163		2.5235		2.6301		0.0082
		Basis->	Rene		Design		AS/Nit/TF		Stream Std		Stream Std		AS/Nit/TF		NPDES
	MAHL from HWA	(lbs/dav) =>	Effec		938.25		1.5679		0.1048	1	4.8048		7.5260		0.2630
	Uncontrollable Loading	(lbs/day) =>			242.84		0.0226		0.0226		0.3770		0.8746		0.0377
Т	Cotal Allowable for Industry (MAIL)	(lbs/day) =>			695.41		1.5453		0.0822		4.4278		6.6515		0.2253
	Total Permitted to Industry	(lbs/day) =>			0.00		0.0000		0.0163		2.5235		2.6301		0.0082
	MAIL left	t (lbs/day) =>			695.41		1.5453		0.0659		1.9043		4.0213		0.2171
I	Percent Allow. Ind. (MAIL) still available (%) =>				100.0 %		100.0 %		80.1 %		43.0 %		60.5 %		96.4 %
	Percent MAHL still available (%) =>			74.1 %		98.6 %		62.8 %		39.6 %		53.4 %		82.6 %	
	5 Percent MAHL	. (lbs/day) =>			46.91		0.0784		0.0052		0.2402		0.3763		0.0132

Workbook Name : 9.typicalville_hwa_at_jan1_07_IUP_ren.xls, Worksheet Name: AT Printed: 12/22/2014, 1:34 PM Page 3 of 4

	Allocation Table			[
	Headworks last approved	d: <u>11/14/03</u>													
	Allocation Table updated	d: 11/15/06													
	Permits last modified	d: 01/01/07													
			-												
POTW=>	Typicalville New 1	Dates.													
NPDES#=>	NC0012345		•	-					-			~ -			
				Le	ead	Mer	cury	Molyb	odenum	Ni	ckel	Sele	nium	Sil	ver
		Industry		Permit	t Limits	Permit	Limits	Permi	t Limits	Permit	t Limits	Permi	t Limits	Permit	Limits
IUP	INDUSTRY NAMES	Permit	Pipe	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load
Count	(please list alphabeticly)	number	number	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	0008			monitor										
2	Slugum Hosiery Inc	0010	001		monitor		monitor		monitor		monitor		monitor		monitor
3	Will Plateit	0006	001	0.2500	0.2043		monitor			1.0000	0.8173			0.2400	0.1962
4															
5															
I	Col	umn Totals =>			0.2043		0.000000		0.0000		0.8173		0.0000		0.1962
			Enter	t								-			
		Basis=>	Rene	;	Stream Std		Stream Std		Sludge Ceilina		Stream Std		Stream Std		AS/Nit/TF
	MAHL from HW	A (lbs/day) $=>$	Enec		1.1088		0.003459		3.0044		2.6244		0.1730		3.9198
	Uncontrollable Loadir	lg(lbs/day) =>			0.3317		0.002262				0.1583				0.0377
7	Fotal Allowable for Industry (MAII	(lbs/day) =>			0.7771		0.001198		#######		2.4661		########		3.8821
	Total Permitted to Industry	ry (lbs/day) =>			0.2043		0.000000		0.0000		0.8173		0.0000		0.1962
	MAIL le	eft (lbs/day) =>			0.5727		0.001198		#######		1.6488		########		3.6859
1	Percent Allow. Ind. (MAIL) still available (%) =>				73.7 %		100.0 %		#######		66.9 %		#######		94.9 %
	Percent MAHL still available (%) =>				51.7 %		34.6 %		#######		62.8 %		#######		94.0 %
	5 Percent MAHL still available (%) =>				0.0554		0.000173		0.1502		0.1312		0.0086		0.1960

Workbook Name : 9.typicalville_hwa_at_jan1_07_IUP_ren.xls, Worksheet Name: AT Printed: 12/22/2014, 1:34 PM Page 4 of 4

	Allocation Table		_ [
	Headworks last approved	d: <u>11/14/03</u>													
	Allocation Table updated	d: 11/15/06													
	Permits last modified	d: 01/01/07													
			•												
POTW=>	Typicalville [New]	Dates.													
NPDES#=>	NC0012345		ן ז ו			T (1)	T0 /		D	01.0	a				
				Zi	nc	Total N	litrogen	Total	Phos.	Oil &	Grease	T.	ſO	Chlo	orides
		Industry		Permit	Limits	Permi	t Limits	Permi	t Limits	Permit	Limits	Permit	Limits	Permit	Limits
IUP	INDUSTRY NAMES	Permit	Pipe	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load
Count	(please list alphabeticly)	number	number	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	0008			monitor		monitor		monitor	150	1251				monitor
2	Slugum Hosiery Inc	0010	001	0.6500	2.4395		monitor		monitor	150	563				monitor
3	Will Plateit	0006	001	1.4800	1.2096				monitor			2.1300	1.7409		
4															
5															
i	Col	umn Totals =>			3.6491		0.00		0.00		1814		1.7409		0
			Enter					-				-			
		Basis=>	Rene		AS/NIT/TF				Desian						Stream Std
	MAHL from HW	A $(lbs/dav) =>$	Ellec		15.6792			ľ	450.36						4188
	Uncontrollable Loadir	lg(lbs/day) =>			0.9424				66.49						
1	Fotal Allowable for Industry (MAII	L) (lbs/day) =>			14.7368				383.87						#######
	Total Permitted to Industry	ry (lbs/day) =>			3.6491		0.00		0.00		1814		1.7409		0
	MAIL le	ft (lbs/day) =>			11.0877				383.87						#######
I	Percent Allow. Ind. (MAIL) still available (%) =>				75.2 %		#######		100.0 %		#######		#######		#######
	Percent MAHL still available (%) =>			70.7 %		#######		85.2 %		#######		########		#######	
	5 Percent MAHL (lbs/day) =>				0.7840				22.5180						209

TOWN OF TYPICALVILLE, NC "We're Anything But Typical"

December 1, 2006

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

WR Billy Bob Slugem President Slugem Hosiery Mills, Inc. – Plant #2 100 Industry Drive; Typicalville, NC 27666

Subject: Transmittal Letter for Industrial User Pretreatment Permit (IUP) #0010

Dear Mr. <u>Slugem</u>:

Your Industrial User Pretreatment Permit (IUP #0010) is enclosed. This permit is issued in response to your Industrial User Wastewater Survey and Application which was received by the POTW on July 2, 2006. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the local Sewer Use Ordinance.

Please read this permit carefully, especially Part I, F and G, and III, 1 and 3. Please note the following changes over your previous IUP:

- Increased flow limit
- Reduced BOD and TSS self-monitoring, increased COD monitoring and required COD concurrent with BOD.
- Added requirement to submit documentation of flow meter calibration.
- Added monitoring for nutrients due to receiving stream issues.
- Updated overall IUP format to address the Division (PERCS) new Model IUP.

If any parts, measurement frequencies, or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. Unless such demand is made, this decision shall be final and binding.

Sincerely,

Jane D. Wastewater, PE

Jane D. Wastewater, PE Director of Public Works

JDW/slugtrans.002 cc with attachments:

Mayor John Smith Bill Operations, Typicalville WWTP ORC Josephine Spill, Pretreatment ORC, Slugem Hosiery Dana Folley, PERCS

Town of Typicalville

Control Authority and/or Municipality

PERMIT

Industrial User Pretreatment Permit (IUP) To Discharge Wastewater Under the Industrial Pretreatment Program

0010	N/A
IUP Number	40 CFR Category(if Applicable)

In compliance with the provisions of 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 the Control Authority and/or Municipality Sewer Use Ordinance. The following Industry, hereafter referred to by name or as the permittee:

Industry name, permittee:	Slugem Hosiery Mills, Inc. – Plant #2
Facility Located at Street Address	100 Industry Drive
City	Typicalville
State, Zip	NC 27666

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 and/or Municipality listed below:

IUP Control Authority and/or Municipality WWTP name:	Town of Typicalville WWTP
NPDES Number:	NC0012345
WWTP Address:	1234 Wastewater Drive
City, State, Zip	Typicalville, NC 27666

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

Effective Date must be on or

Signature Date must be on or before Effective Date.	Effective date, this permit shall become effective at 12:0 January 1, 20 Expiration date, this permit shall expire at midnight on th	and the authorization to discharge 01 am on this date: 0007 and the authorization to discharge	after signature date. IUP Effective period cannot exceed 5 years from IUP renewal effective date	
	December 31	, 2010		/
Decen	nber 1, 2006	Jane D. Waster	water, PE	
Date signed		Director of Publ	lic Works	

IUP, PART I, OUTLINE:

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

A. IUP Basic Information:

Receiving Control Authority & WWTP name :	POTW NPDES # :
Town of Typicalville WWTP	NC0012345
IUP Name :	IUP Number :
Slugem Hosiery Mills, Inc. – Plant #2	0010
IUP Effective date :	Pipe Numbers, list all regulated pipes:
January 1, 2007	001
IUP Expiration date:	IUP 40 CFR # (if applicable), or N/A:
December 31, 2010	N/A

B. IUP History. A Complete Permit History is required:

Effective Date	Renewal or Modification	Description of changes over previous IUP.
9/1/2001	First Issued	IUP first issued. Note this new SIU moved down from Ozburg, VA, so they could expand their operations. They are located at the site of a former SIU, Terrible Textiles. Required installation of discharge flow meter and sampling equipment.
1/1/04	Renewal	Increased flow limit to 0.4 MGD due to anticipated production increase.
1/1/07	Renewal	Increased flow limit to 0.45 MGD. Added monitoring for nutrients due to receiving stream issues. Reduced BOD and TSS self-monitoring, increased COD monitoring and required COD concurrent with BOD. Added requirement to submit documentation of flow meter calibration. Updated overall IUP format to address PERCS new Model IUP.

- C.) Authorization Statement:
 - 1.) The Permittee is hereby authorized to discharge wastewater in accordance with the effluent limitations, monitoring requirements, and all other conditions set forth in this Industrial User Pretreatment Permit (IUP) into the sewer collection system and wastewater treatment facility of the Control Authority and/or Municipality.
 - 2.) The Permittee is hereby authorized to continue operation of and discharge wastewater from the following treatment or pretreatment facilities. These facilities must correspond to the treatment units listed on both the application and inspection forms.



On site but not in use: Comminuter, Aerated Equalization Tank

- 3.) The Permittee is hereby authorized to, if required by the Control Authority and/or Municipality and after receiving Authorization to Construct (A to C) from the Control Authority and/or Municipality, construct and operate additional pretreatment units as needed to meet final effluent limitations.
- D.) Description of IUP Discharge(s):
 - 1. Describe the discharge(s) from all regulated pipes.

Pipe # 001, Description of Discharge:

Process Wastewater from hosiery manufacturing (dyeing), domestic, HVAC blowdown, boiler blowdown, cafeteria.

E.) Schematic and Monitoring Locations:

The facility schematic and description of monitoring location(s) given below must show enough detail such that someone unfamiliar with the facility could readily find and identify the monitoring location(s) and connection to the sewer. Include and identify all regulated pipes.



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 => Receiving POTW NPDES # => Effective date for these Limits => Expiration date for these Limits =>
 Typicalville
 IU name =>
 Slug

 NC0012345
 IUP # =>
 010

 1/1/2007
 Pipe # =>
 001

 12/31/2010
 40 CFR # =>
 N/A

Slugem Hosiery Inc.-Plant #2 010 001

if not applicable put N/A

THE LIMITS ON THIS PAGE ARE, (Check one below): LIMITS for ENTIRE permit period => Yes

		Concentration Limits		Mass Limits		Monitoring Frequency					
										Sample	Required
										Collection	Laboratory
			Monthly		Daily	Monthly				Method	Detection
		Daily Max	Average	Units	Max	Average	Units	By Industry	By POTW	(C or G)	Level
1	Flow	0.45		MGD				Daily *	Every sample *	Meter *	
2	BOD**	600		Mg/l				Monthly **	Once/6 Months**	С	10
3	COD**		Monitor	Mg/l			lbs/day	Monthly **	Once/6 Months**	С	10
4	TSS	400		Mg/l				Monthly	Once/6 Months	С	10
5	Temperature	66		Deg. C				Daily *	Once/6 Months	G	
6	PH	6.0-9.0		Std. Units				Daily *	Once/6 Months	G	0.1 SU
7	Ammonia		Monitor	Mg/l			lbs/day	Once/year		С	0.5
8	Phosphorus		Monitor	Mg/l			lbs/day	Once/year		С	1
9	Total Nitrogen		Monitor	Mg/l			lbs/day	Once/year		С	1
10	Oil & Grease	150		Mg/l			lbs/day	Monthly	Once/6 Months	G	5
11	Arsenic		Monitor	Mg/l			lbs/day	Once/year		С	0.01
12	Cadmium		Monitor	Mg/l			lbs/day	Once/year		С	0.002
13	Chlorides		Monitor	Mg/l			Lbs/day	Once/6 Months		С	5
14	Chromium	0.3		Mg/l			lbs/day	Monthly	Once/6 Months	С	0.005
15	Copper	0.25		Mg/l			lbs/day	Monthly	Once/6 Months	С	0.01
16	Cyanide		Monitor	Mg/l			lbs/day	Once/year		G	0.01
17	Lead		Monitor	Mg/l			lbs/day	Once/year		С	0.01
18	Mercury		Monitor	Mg/l			lbs/day	Once/year		С	0.0002
19	Molybdenum		Monitor	Mg/l			lbs/day	Once/year		С	0.1
20	Nickel		Monitor	Mg/l			lbs/day	Once/year		С	0.01
21	Selenium		Monitor	Mg/l			lbs/day	Once/year		С	0.01
22	Silver		Monitor	Mg/l			lbs/day	Once/year		С	0.005
23	Zinc	0.65		Mø/l			lbs/day	Monthly	Once/6 Months	С	0.01

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

****** A COD sample must be collected and analyzed concurrent with every BOD sample

G.) Definitions and Limit Page(s) notes:

In addition to the definitions in the Town of Typicalville Sewer Use Ordinance the following definitions and requirements apply:

1. Composite Sample:

Unless defined differently below, a composite sample for the monitoring requirements of this IUP, is defined as the automatic or manual collection of one grab sample of constant volume, not less than 100 ml, collected every 15 minutes during the entire discharge period on the sampling day **and proportioned for flow**. Sampling day shall be a typical production, and discharge day.

2. Daily Monitoring Frequency

Daily Monitoring Frequency as specified in this IUP shall mean each day of discharge.

3. Continuous/Daily Monitoring Frequency

For flow, "daily" shall mean the permittee shall read the flow meter totalizer every day, including weekends and holidays, convert this to a daily flow, and report these daily flows to the Control Authority with the report due under Part II, 2.

4. "Every Sample" Monitoring Frequency

A Monitoring Frequency of "every sample" as specified in this IUP shall mean each time a composite or grab sample is collected.

5. Grab Sample

Grab sample for the monitoring requirements of this IUP, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

6. Instantaneous measurement

An Instantaneous measurement for the monitoring requirements of this IUP is defined as a single reading, observation, or measurement.
Outline of PART II,

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

- 16. Federal and/or State Laws
- 17. Penalties
- 18. Need to Halt or Reduce
- 19. Transferability
- 20. Property Rights
- 21. Severability
- 22. Modification, Revocation, Termination
- 23. Reapplication
- 24. Dilution Prohibition
- 25. Reports of Changed Conditions
- 26. Construction of pretreatment facilities
- 27. Reopener
 - 28. Categorical Reopener
 - 29. General Prohibitive Standards
 - 30. Reports of Potential Problems

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to, and approval by, the permit issuing authority.

2. Reporting

a) Monitoring results obtained by the permittee shall be reported on forms specified by the Control Authority and/or Municipality, postmarked no later than the twentieth day of the month following the month in which the samples were taken. If no discharge occurs during a reporting period (herein defined as each calendar month) in which a sampling event was to have occurred, a form with the phrase "no discharge" shall be submitted. Copies of these and all other reports required herein shall be submitted to the Control Authority and/or Municipality and shall be sent to the following address:

> Jane D. Wastewater Pretreatment Coordinator Town of Typicalville WWTP 1234 Wastewater Drive Typicalville, NC 27699

b) If the sampling performed by the permittee indicates a violation, the permittee shall notify the Control Authority and/or Municipality within 24 hours of becoming aware of the violation. The permittee shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Control Authority and/or Municipality within 30 days after becoming aware of the violation.

3. Test Procedures

Test procedures for the analysis of pollutants shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be submitted to the Control Authority and/or Municipality. The Control Authority and/or Municipality may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

5. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Control Authority and/or Municipality Sewer Use Ordinance and is grounds for possible enforcement action.

6. Duty to Mitigate - Prevention of Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health, the POTW, the waters receiving the POTW's discharge, or the environment.

7. Facilities Operation, Bypass

The permittee shall at all times maintain in good working order and operate as efficiently as possible, all control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Bypass of treatment facilities is prohibited except when approved in advance by the Control Authority and/or Municipality. Bypass approval shall be given only when such bypass is in compliance with 40 CFR 403.17.

8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from such materials from entering the sewer system. The permittee is responsible for assuring its compliance with any requirements regarding the generation, treatment, storage, and/or disposal of "Hazardous waste" as defined under the Federal Resource Conservation and Recovery Act.

9. Upset Conditions

An "upset" means an exceptional incident in which there is an unintentional and temporary noncompliance with the effluent limitations of this permit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed or inadequate treatment facilities, lack of preventative maintenance, or careless or improper operations.

An upset may constitute an affirmative defense for action brought for the noncompliance. The permittee has the burden of proof to provide evidence and demonstrate that none of the factors specifically listed above were responsible for the noncompliance.

10. Right of Entry

The permittee shall allow the staff of the State of North Carolina Department of Environment and Natural Resources, Division of Water Resources, the Regional Administrator of the Environmental Protection Agency, the Control Authority and/or Municipality, and/or their authorized representatives, upon the presentation of credentials:

- 1. To enter upon the permittee's premises where a real or potential discharge is located or in which records are required to be kept under the terms and conditions of this permit; and
- 2. At reasonable times to have access to and copy records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

11. Availability of Records and Reports

The permittee shall retain records of all monitoring information, including all calibration and maintenance records as well as copies of reports and information used to complete the application for this permit for at least three years. All records that pertain to matters that are subject to any type of enforcement action shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

Except for data determined to be confidential under the Sewer Use Ordinance, all reports prepared in accordance with terms of this permit shall be available for public inspection at the Control Authority and/or Municipality. As required by the Sewer Use Ordinance, effluent data shall not be considered confidential.

12. Duty to Provide Information

The permittee shall furnish to the Director of Public Works or his/her designees, within a reasonable time, any information which the Director, his/her designee, or the Division of Water Resources may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish, upon request, copies of records required to be kept by this permit.

13. Signatory Requirements

All reports or information submitted pursuant to the requirements of this permit must be signed and certified by the Authorized Representative as defined under the Sewer Use Ordinance. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of this section must be submitted to the POTW Director prior to or together with any reports to be signed by an authorized representative.

14. Toxic Pollutants

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit may be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

15. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

16. Federal and/or State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal and/or State law or regulation.

17. Penalties

The Sewer Use Ordinance of the Control Authority and/or Municipality provides that any person who violates a permit condition is subject to a civil penalty not to exceed \$25,000 dollars per day of such violation.

Under state law, (NCGS 143-215.6B), under certain circumstances it is a crime to violate terms, conditions, or requirements of pretreatment permits. It is a crime to knowingly make 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. These crimes are enforced at the prosecutorial discretion of the local District Attorney.

18. Need to Halt or Reduce not a Defense

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.

19. Transferability

This permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without approval of the Town.

20. Property Rights

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

21. Severability

The provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

22. Permit Modification, Revocation, Termination

This permit may be modified, revoked and reissued or terminated with cause in accordance to the requirements of the Control Authority and/or Municipality Sewer Use Ordinance and North Carolina General Statute or implementing regulations.

23. Re-Application for Permit Renewal

The permittee is responsible for filing an application for reissuance of this permit at least 180 days prior to its expiration date.

24. Dilution Prohibition

The permittee shall not increase the use of potable or 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 the limitations contained in this permit.

25. Reports of Changed Conditions

The permittee shall give notice to the Control Authority and/or Municipality 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 Control Authority and/or Municipality. Also see Part II, 30 below for additional reporting requirements for spill/slug issues.

Significant changes may include but are not limited to

- (a) increases or decreases to production;
- (b) increases in discharge of previously reported pollutants;
- (c) discharge of pollutants not previously reported to the Control Authority and/or Municipality;
- (d) new or changed product lines;
- (e) new or changed manufacturing processes and/or chemicals; or
- (f) new or changed customers.

26. Construction

Generic Conditions

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

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 WWTP effluent or any pollutant that is otherwise limited by the POTW discharge permit. The permit as modified or reissued under this paragraph may also contain any other requirements of State or Federal pretreatment regulations then applicable.

28. Categorical Reopener

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 302(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- 1.) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
- 2.) controls any pollutant not limited in this permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

29. General Prohibitive Standards

The permittee shall comply with the general prohibitive discharge standards in 40 CFR 403.5 (a) and (b) of the Federal pretreatment regulations.

30. Potential Problems

The permittee shall provide protection from accidental and slug discharges of prohibited materials and other substances regulated by this permit. The permittee shall also notify the POTW immediately of any changes at its facility affecting the potential for spills and other accidental discharge, discharge of a non-routine, episodic nature, a non-customary batch discharge, or a slug load as defined in the Sewer Use Ordinance.

Additionally, the permittee shall notify by telephone the Control Authority and/or Municipality immediately of all discharges that could cause problems to the POTW including any slug loadings as defined in the Sewer Use Ordinance. If the permittee experiences such a discharge, they shall inform the Control Authority and/or Municipality immediately upon the first awareness of the commencement of the discharge. Notification shall include location of the discharge, type of waste, concentration and volume if known and corrective actions taken by the permittee. A written follow-up report thereof shall be filed by the permittee within five (5) days, unless waived by the Control Authority and/or Municipality.

Industrial User Pretreatment Permit (IUP) PART III Special Conditions

1. Slug/Spill Control Plan

In addition to the requirements in Part II, 30, the Permittee shall complete installation and/or commence implementation, operation, and/or maintenance of the following specific protection Measures, Activities, Plans, etc. (Items without specific completion dates, or marked as "Continuous." must be performed for the entire duration of the permit):

		Required Completion/
	Description of Measure, Activity, Plan, etc.	Implementation Date
1.	Submit updated Slug/Spill Control Plan in accordance	Received 9/15/2006
	with SUO Section 2.8(c).	
2.	Implementation of current and updated Slug/Spill	Continuous
	Control Plan upon POTW Approval	

The permittee shall provide updates to the Control Authority as required by Part II, 30, of this IUP. Modifications to the measures shall be approved by the Control Authority prior to installation/implementation. If a measure fails, the Control Authority shall be notified within 24 hours.

2. Sludge Management Plan

Ninety days prior to the initial disposal of sludge generated by any pretreatment facility, the permittee shall submit a sludge management plan to the Control Authority.

3. Flow Measurement Requirements

The permittee shall maintain appropriate discharge flow measurement devices and methods consistent with approved scientific practices to ensure the accuracy and reliability of measurements of the volume of monitored discharges. Devices installed shall be a continuous recording flow meter capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. The totalizer shall be non-resettable. The devices shall be installed, calibrated, and maintained to ensure accuracy. At the time of issuance of the permit, this method consists of ultrasound discharge flow meter at sample point for Pipe 001. The meter shall be calibrated every year, and the permittee shall include a copy of the calibration report with the applicable monthly report required under Part II, 2, of this permit. Modifications to the flow metering equipment shall be approved by the Control Authority prior to installation. If a required flow measurement device fails, the Control Authority shall be notified within 24 hours.

4. Certified Laboratory Analysis

Pollutant analysis shall be performed by a North Carolina Division of Water Resources Certified Laboratory that is certified in the analysis of the pollutant in wastewater.

Industrial User Pretreatment Permit (IUP) PART III Special Conditions

5. Certified Operator

Pursuant to Chapter 90A-44 of North Carolina General Statutes, and upon classification of the facility by the Water Pollution Control System Operators Certification Commission (WPCSOCC), the permittee shall employ a certified wastewater pretreatment plant operator in responsible charge (ORC) of the wastewater treatment facilities. Such operator must hold a certification of the type and grade equivalent to, or greater than the classification assigned to the wastewater treatment facilities by the WPCSOCC. The permittee must also employ a certified backup operator of the appropriate type and grade to comply with the conditions of Title 15A, Chapter 8A .0202. The ORC of the facility must visit the wastewater facility; and must comply with all other conditions of Title 15A, Chapter 8A .0202. The permittee shall submit a letter designating the operator in responsible charge to the WPCSOCC or their designee within thirty days after facility classification.

Until the above certified operator requirements come into effect, the permittee shall at all times have appropriately trained operators capable of properly operating all units. Permittee shall notify POTW of designated operators including credentials, within 24 hours of staff change.

A. IUP Basic Information

Receiving POTW name:	POTW NPDES#:
Town of Typicalville WWTP	NC0012345
IUP name:	IUP Number:
Slugem Hosiery, Inc. Plant #2	0010
IUP Effective date:	Pipe Numbers, list all regulated pipes:
January 1, 2007	001
IUP expiration date:	IUP 40 CFR#, if applicable:
December 31, 2010	N/A

B. IUP Survey & Application form

Attach completed copy of the Industrial User Wastewater Survey & Application Form (see appendix 6-A)

- C. IU Inspection form Attach copy of the most recent Industrial User Inspection Form (see chapter 7) completed by the Control Authority.
- D. RATIONALE FOR LIMITATIONS: As listed on the IUP Limits Page(s), PART I, Section F of the IUP.

RATIONALE #1:

Review of IU Monitoring Data, with no Over Allocation situation:

The following pollutants were assigned numerical limits in this IUP based on a review of monitoring data for the permittee to determine what ranges of concentrations are currently being discharged. To account for sample variability a factor was applied to the monitoring data to determine the permit limit. Permit limits assigned by the Local IUP Control Authority can not result in an Over Allocation situation for any pollutants.

Flow (IUP has concentration based limits)

- BOD and TSS Limits assigned because POTW NPDES permit has limits for these parameters (even when SIU is < 5% MAHL)
- Cr, Cu, and Zn Limits assigned because are present in the dyes or other chemicals added, SIU has had very high values in past, and/or average discharge significantly above typical domestic sewage (even when SIU is < 5% MAHL)

RATIONALE #2a:

Categorical Industrial Limits, with no Over Allocation situation:

N/A - SIU is Textile – 40 CFR 410, but 410 has no Pretreatment Standards, so Slugem is not categorical

RATIONALE #3a:

Over Allocation Prevention, with IU pollutant reduction:

N/A

RATIONALE #3b:

Interim Limits for IU pollutant reduction:

The following pollutants were assigned interim numerical limits in this IUP to allow time for the industry to come compliance with final limits that will not in over allocations.

N/A

RATIONALE #4:

4.) Other Rationale for Limitations:

The following fationale was used for developing for Linnes.	The following	rationale was	s used for	developing	, IUP Limits.
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Parameter	Rationale
РН	SUO, BPJ
Temperature	SUO, BPJ
0 & G	SUO, BPJ

RATIONALE #5a:

Non-Categorical Parameters where No Limit needed or assigned in an IUP:

The following pollutants were not assigned numerical limits in this IUP because the loadings for these pollutants from this IU were less than 5% of the MAHL. The loading of these pollutants from this IU is considered insignificant at this time.

Average flow, mgd, used in calculations below0.32					
Pollutant	Avg SIU	Avg SIU	5%	50%	Ave
	mg/l	lbs/day	MAHL,	MAHL,	Influent,
			lbs/day	lbs/day	lbs/day
Ammonia	3	7.31	46.91		
Lead	0.022	0.0591	0.0554	0.5544	0.5017
Chlorides**	500	1334	209**	2090**	1718**
Mercury	< 0.0002				
Cadmium	< 0.002				
Cyanide	< 0.005				
Nickel	< 0.01				

** HWA only tentative as is based on NC Water Quality Action Level and POTW is passing Whole Effluent Toxicity consistently (no violations is last 10 years)

All other LTMP POCs were assigned monitoring once per year for HWA uncontrollable mass balance.

RATIONALE #5b:

Categorical Parameters with Waived Monitoring:

N/A

Example IUP Mod #1 for Will Plateit Effective September 1, 2007

Raise flow limit; Increase self-monitoring frequency; Adds monitoring for COD.

Item 1 – August 15, 2007 Transmittal Letter to SIU

Item 2 – July 15, 2007 Request from SIU

Item 3 – Modified IUP pages (Cover, History, Limits)

Item 4 – Allocation Table

Information on IUP Modifications from "IUP Basics, Including What to Submit to the Division"

IUP <u>renewals</u> involve a new application and can start a new 5 year time period for an IUP. This is sometimes called an IUP <u>reissuance</u>. Typically done when previous IUP expires. Sometimes SIU completes new application before IUP expires, ex. major expansion, ownership change.

IUP <u>modifications</u> occur within the 5 year time period and do not involve a new application, but usually a letter from the SIU requesting a specific change, or the POTW deciding a change is necessary.

- 1) What to submit to the Division for IUP <u>modifications</u>:
 - a) Copy of the letter transmitting the IUP modification to the SIU. It must inform the SIU of their right to adjudicate the IUP. Please review Appendix 6-D of the *Comprehensive Guidance of North Carolina Pretreatment Programs* for suggested wording.
 - i) Do not instruct the SIU to remove and <u>discard</u> the replaced pages. You may either tell them to move them to the end of the IUP, or mark them as "void" on the effective date of this new IUP modification. Some POTWs list the effective date at the bottom of each IUP page so there will be no confusion.
 - b) New IUP cover page with a new effective date and new signature date.
 - c) New permit history page with an entry for that modification that uses the IUP modification effective date and the phrase "IUP modification" and lists all changes the IUP modification made over the previous IUP or IUP modification. See Section III, 3, of the document "Basic IUP Guidance, Including What to Submit to the Division" on the PERCS Permit Writing web-page for more on Permit Histories.
 - d) Any other pages of the IUP that are modified. If the limits page itself is changed, don't forget to change the effective date on this page.
 - e) Updated Allocation Table if limits were changed.
 - f) IUP synopsis, if changed. See Section III, 7, of the document "Basic IUP Guidance, Including What to Submit to the Division" on the PERCS Permit Writing web-page for more on IUP Synopsis.
 - g) Copy of letter from the SIU requesting the change, if applicable.
 - h) The effective date cannot be earlier than the date the IUP is signed (Issuing retroactive permits is explicitly prohibited by the state pretreatment rules 15A NCAC 2H .0916(c)(7)(C), effective November 1, 1994).
 - i) The IUP must be transmitted to the SIU on or before the effective date.
 - j) All listings of the effective and expiration dates must be consistent throughout the IUP package.
 - k) If any item is or has been submitted to the Division under separate cover, please identify this in the IUP submission.

TOWN OF TYPICALVILLE, NC "We're Anything But Typical"

	August 15, 2007	
<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u> _		
Mr. Stanley Cooper, President Will Plateit, Inc. P. O. Box 1234 Typicalville, NC 27666		Documents when SIU received IUP.

Subject: Will-Plateit, Inc. Industrial User Pretreatment Permit No. 006 - Permit Modification

Dear Mr. Cooper:

Thank you for your July 15, 2007, letter notifying us of your expansion and request for an IUP modification. Congratulations on your new contract! Your Permit Modification fee of \$200 has been received and your request is granted. As we discussed during our August 12, 2007, meeting, Town policy requires SIUs with flow limits between 0.1 and 0.5 MGD to self-monitor IUP limited parameters once per month. Also, monitoring for COD has been added due to concerns with inhibition of the Town WWTP.

Attached please find a modification of your Industrial User Pretreatment Permit No. 006. This permit is issued pursuant to the requirements of North Carolina General Statues 143-215.1 and the Town of Typicalville Sewer Use Ordinance Section 4. Only those pages that were changed are included. The modification becomes effective September 1, 2007, and amends those pages in your previous IUP effective January 1, 2007. Please insert these pages into your IUP. Remove the old pages from your IUP and place them in a separate "historical" file for future reference.

If any parts, measurement frequencies, or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. Unless such demand is made, this decision shall be final and binding.

Please take notice that this permit is not transferable (see Part II (19)).

Notify permittee of their right to adjudicate the IUP.

Thank you for your continued cooperation with the pretreatment program requirements. If you have any questions or comments, please feel free to call me at (919) 123-4567.

Sincerely,

How to handle new versus old pages.

JDW/slugtrans.002 cc with attachments:

Jane D. Wastewater, PE Jane D. Wastewater, P.E

Bill Operations, Typicalville WWTP ORC Krystal Klean, Pretreatment ORC, Will Plateit, Inc. Dana Folley, PERCS



WILL PLATEIT COMPANY PO BOX 1234 1234 INDUSTRY DRIVE TYPICALVILLE NC 27666



TELEPHONE 919-555-1234 FAX 919-555-5678 WWW.WILLPLATEIT.COM

July 15, 2007

Ms. Jane D. Wastewater, PE Director of Public Works Town of Typicalville WWTP PO Box 101 Typicalville, NC 27666

Dear Ms. Wastewater:

We are pleased to announce a new contract with Acme Metals that will increase our production. We plan to hire 10 new people. Of course this new contract will mean an increase in our wastewater discharge volume. Therefore, we are hereby requesting an increase in our IUP flow limit to 0.135 mgd. This new contract is for more of the same products we've been manufacturing for Acme for the last several years, so there won't be any process changes or new chemicals. As you may recall, our pretreatment system is actually designed for 0.15 mgd, so no problems there either. We anticipate our production increase will begin in mid September. We realize this request is short notice, but if there is anything we can do to help, please let me know.

The \$200 IUP modification fee is attached.

Thank you for your consideration in this matter, and if you should need any additional information, please contact me or Krystal Klean at 555 - 1234.

Sincerely,

Stanley Cooper

Stanley Cooper President

Cc: Gary Cooper, Production Manager Krystal Klean, Wastewater Treatment

Town of Typicalville

Control Authority and/or Municipality

PERMIT

Industrial User Pretreatment Permit (IUP) To Discharge Wastewater Under the Industrial Pretreatment Program

006	433.17
IUP Number	40 CFR Category(if Applicable)

In compliance with the provisions of 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 the Control Authority and/or Municipality Sewer Use Ordinance. The following Industry, hereafter referred to by name or as the permittee:

Industry name, permittee:	Will Plateit Company
Facility Located at Street Address	1234 Industry Drive
City	Typicalville
State, Zip	NC 27666

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 and/or Municipality listed below:

IUP Control Authority and/or Municipality WWTP name:	Town of Typicalville WWTP
NPDES Number:	NC0012345
WWTP Address:	1234 Wastewater Drive
City, State, Zip	Typicalville, NC 27666

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



IUP # 006, PART I, OUTLINE:

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

A. IUP Basic Information:

Control Authority, Receiving WWTP name: Town of Typicalville WWTP	POTW NPDES #: NC0012345
IUP Name : Will Plateit Company	IUP Number : 006
IUP Effective date: September 1, 2007	Pipe Numbers, list all regulated pipes: 001
IUP Expiration date: December 31, 2010	IUP 40 CFR # (if applicable), or N/A: 433.17

B. IUP History. A Complete Permit History is required:

Effective Date	Renewal or Modification	Description of changes over previous IUP.
1/1/94	Renewal	No changes over previous IUP
10/1/96	Modification	Lowered cyanide limit (historical data)
1/1/99	Renewal	Added Phosphorus monitoring (new NPDES limit and SIU has iron phosphate operation). Revised IUP format to follow the Division Comp Guide (rearranged Part II, added to Part III.
7/1/2001	Modification	Added mercury limit (LTMP data showed detections), and requirement to submit Slug Spill Control Plan – III, 1.
1/1/2004	Renewal	Increased flow self-monitoring to daily, also Part III, 3; changed mercury limit to "<0.0002 mg/l" due to over allocation; added pH limit and TSS monitoring.
1/1/2007	Renewal	Required mercury 1631 method, removed limit; clarified pretreatment unit operator requirements – III, 5; clarified TTO POTW sampling and SIU certification requirements - III, 7.
<mark>9/1/2007</mark>	Modification	Increased flow limit to 0.135 MGD; increased sampling frequency to once per month for limited parameters; added monitoring for COD.

New Permit History Entry: a) List New <u>Effective</u> Date (not date signed or printed out); b) List whether Mod or Renewal; c) Provide brief list/description of changes.

Do not delete previous entries. May put IUP History anywhere in IUP, or even outside of IUP.

	List Modification Effective Date on each page to avoid confusion.
IUP # 006 Renewal Effective Date: 1/1/2007	Modification Effective Date: 9/1/2007

Put New Effective Date Here

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

New Flow Limit Here

Receiving POTW name => Typicalville Receiving POTW NPDES # => NC0012345 Effective date for these Limits => 9/1/2007Expiration date for these Limits => 12/31/2010IU name => Will Plateit IUP # => 006Pipe # => 00140 CFR # => 433.17New Effective Date Here

	Parameters	Conce	entration Lim	its	Monitoring	Frequency		
		Daily Max	Monthly Average	Units	By Industry	By POTW	Sample Collection Method (C or G)	Required Laboratory Detection Level
1	Flow	0.135		MGD	Continuous/ Daily *	Every sample *	Meter *	
2	PH	6.0-9.0		SU	Every sample	Every sample	G	0.1 SU
3	Cadmium	0.07		mg/l	1/Month	Once/6 Months	С	0.002
4	Chromium	1.71		mg/l	<mark>1/Month</mark>	Once/6 Months	С	0.005
<mark>5</mark>	COD ****			mg/l	<mark>1/Month</mark>		C	<mark>10</mark>
6	Copper	2.07		mg/l	<mark>1/Month</mark>	Once/6 Months	C	0.002
7	Cyanide	0.01		mg/l	<mark>1/Month</mark>	Once/6 Months	G	0.01
8	Lead	0.43			<mark>1/Month</mark>	Once/6 Months	С	0.01
9	Mercury **				Once/6 months	Once/6 Months	Grab**	1 ng/l **
10	Nickel	2.38		mg/l	<mark>1/Month</mark>	Once/6 Months	С	0.01
11	Phosphorous****			mg/l	<mark>1/Month</mark>	Once/6 Months	С	0.05
12	Silver	0.24		mg/l	<mark>1/Month</mark>	Once/6 Months	С	0.005
13	Zinc	1.48		mg/l	<mark>1/Month</mark>	Once/6 Months	С	0.01
14	TTO ***	2.13 ***		mg/l	Once/6 Months ***	Once/year ***	G	0.01
17								
	*See Part I, G	5 , 3 and 4, a	nd III, 3				•	
	** See Part I.	G , 7	,		\backslash			
	*** See Part	Ш́6-8			\backslash	Г		
	**** Monito	ring only			N N	New Monitorin Frequencies He	ere	
Add to L	ed COD							
Para	meters							
						List Modificatior on each page to a	n Effective I woid confus	Date sion.

IUP # 006 Renewal Effective Date: 1/1/2007 Modification Effective Date: 9/1/2007



Workbook Name : typicalville_hwa_at_will_plateit_mod.xls, Worksheet Name: AT Printed: 3/22/2011, 4:58 PM Page 2 of 4

POTW=> NPDES#=>	Allocation Table Headworks last Allocation Table Permits last Typicalville NC0012345	approved: 11/1 e updated: 08/0 modified: 09/0 New Dates.	4/03 11/07 11/07					A a ^a p n	after ente utomatica ollutant l o over al	red new l ally re-ca imits, the location!	Flow Lim lcuated Il en carried	it, AT W os/day fo through	orksheet r all of W to MAIL	fill- Plater leftsti	it's ill	
		<u></u>	-7		Amn	nonia	Ars	enic	Cadr	nium	Chro	nium	/	per	Cya	nide
		Indu	stry		Permit	Limits	Permit	Limits	Permit	Limits	Permit	Limits	<u>ít</u>	Limits	Permit	Limits
IUP	INDUSTRY NAM	IES Perr	nit Pipe		Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	þ.	Load	Conc.	Load
Count	(please list alphabeticly)	num	ber numb	er	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	g/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	000)8			monitor								monitor		
1	Slugum Hosiery Inc	001	10 001			monitor			0.0000	0.0005	0.3000	1.1259	0.2500	0.9383	0.0100	0.0440
2	Will Plateit	000	06 001						0.0200	0.0225	1.7100	1.9253	2.0700	2.3306	0.0100	0.0113
4																
10			<u>, </u>	_				0.0000		0.0005		2.0510		2.2600		0.0112
		Column Tota	ls =>	I		0		0.0000		0.0225	ļ	3.0512	l l	3.2689		0.0113
								AS/Nit/TF						AS/Nit/TF		
		Basis	S=>			Design		inhibition		Stream Std		Stream Std		inhibition		NPDES
	MAHL fi	rom HWA (lbs/day	y) =>			938.25		1.5679		0.1048		4.8048		7.5260		0.2630
	Uncontrollabl	le Loading (lbs/dag	y) =>			242.84		0.0226		0.0226		0.3770		0.8746		0.0377
	Fotal Allowable for Industr	ry (MAIL) (lbs/da	y) =>			695.41		1.5453		0.0822		4.4278		6.6515		0.2253
	Total Permitted t	o Industry (lbs/da	y) =>			0.00		0.0000		0.0225		3.0512		3.2689		0.0113
	MAIL left (lbs/day) =>					100.0 %		1.5455		0.0597		21.1.0		50.0.0		0.2141
	Percent Allow. Ind. (MAIL	L) still available (%	() =>		ļ	74.1.0		100.0 %		72.0 %		31.1 %		50.9 %		95.0 %
	Percent MAH	L still available (%	o)=>		ļ	/4.1 %		98.0 %		JO.9 %		28.1 %		44.9 %		81.4 %
	5 Perce	ent MAHL (lbs/day	y) =>			46.91		0.0784		0.0052		0.2402		0.3763		0.0132

	Allocation Table		_	ſ											
	Headworks last approved:	11/14/03													
	Allocation Table updated:	08/01/07													
	Permits last modified:	09/01/07													
POTW=> NPDES#=>	Typicalville New D	ates.	_												
				Le	ad	Mer	cury	Molyb	denum	Nic	kel	Sele	nium	Sil	ver
		Industry		Permit	Limits	Permit	Limits	Permit	t Limits	Permit	Limits	Permit	t Limits	Permit	Limits
IUP	INDUSTRY NAMES	Permit	Pipe	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load
Count	(please list alphabeticly)	number	number	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	0008			monitor										
1	Slugum Hosiery Inc	0010	001												
2	Will Plateit	0006	001	0.2500	0.2815		monitor			1.0000	1.1259			0.2400	0.2702
4															
10															
	Colu	mn Totals =>			0.2815		0.000000		0.0000		1.1259		0.0000		0.2702
									Sludge						∆S/Nit/TE
		Basis=>			Stream Std		Stream Std		Ceiling		Stream Std		Stream Std		inhibition
	MAHL from HWA	(lbs/day) =>			1.1088		0.003459		3.0044		2.6244		0.1730		3.9198
	Uncontrollable Loading	(lbs/day) =>			0.3317		0.002262				0.1583				0.0377
]	Fotal Allowable for Industry (MAIL)	(lbs/day) =>			0.7771		0.001198		#######		2.4661		#######		3.8821
Total Permitted to Industry (lbs/day) =>			0.2815		0.000000		0.0000		1.1259		0.0000		0.2702		
	MAIL left	(lbs/day) =>			0.4956		0.001198		#######		1.3402		#######		3.6119
]	Percent Allow. Ind. (MAIL) still available	ilable (%) =>			63.8 %		100.0 %		#######		54.3 %		#######		93.0 %
	Percent MAHL still avai	ilable (%) =>			44.7 %		34.6 %		#######		51.1 %		#######		92.1 %
	5 Percent MAHL	(lbs/day) =>			0.0554		0.000173		0.1502		0.1312		0.0086		0.1960

	Allocation Table		_	[
	Headworks last approved	I: 11/14/03													
	Allocation Table updated	l: <mark>08/01/07</mark>													
	Permits last modified	l: 09/01/07													
POTW=> NPDES#=>	Typicalville New I	Dates.	_												
				Zi	nc	Total N	litrogen	Total	Phos.	Oil &	Grease	T	Ю	Chlo	rides
		Industry		Permit	Limits	Permit	Limits	Permit	t Limits	Permit	Limits	Permit	Limits	Permit	Limits
IUP	INDUSTRY NAMES	Permit	Pipe	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load	Conc.	Load
Count	(please list alphabeticly)	number	number	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day
1	Chicken Pluckers	0008			monitor		monitor		monitor	150	1251				monitor
1	Slugum Hosiery Inc	0010	001	0.6500	2.4395		monitor		monitor	150	563				monitor
2	Will Plateit	0006	001	1.4800	1.6663				monitor			2.1300	2.3982		
4															
10															
	Colu	umn Totals =>			4.1058		0.00		0.00		1814		2.3982		0
					∆S/Nit/TE										
		Basis=>			inhibition				Design						Stream Std
	MAHL from HW	A (lbs/day) =>			15.6792				450.36						4188
	Uncontrollable Loadin	g (lbs/day) =>			0.9424				66.49						
]	Total Allowable for Industry (MAII	L) (lbs/day) =>			14.7368				383.87						#######
Total Permitted to Industry (lbs/day) =>				4.1058		0.00		0.00		1814		2.3982		0	
MAIL left (lbs/day) =>				10.6310				383.87						#######	
1	Percent Allow. Ind. (MAIL) still av	ailable (%) =>			72.1 %		#######		100.0 %		#######		#######		#######
	Percent MAHL still av	ailable (%) =>			67.8 %		#######		85.2 %		#######		#######		#######
	5 Percent MAH	L (lbs/day) =>			0.7840				22.5180						209

Categorical Regulations



IDENTIFYING CIUs

- What is a categorical industrial user or CIU?
- an industrial user covered by one or more of federal regulations covering certain specific industrial categories
- regulations are found in 40 CFR 405-471
- How do you decide if an IU or potential IU is a CIU?

IDENTIFYING CIUs

- only considered a CIU if 40 CFR regulation contains pretreatment standards
 - PSES Pretreatment Standards for Existing Sources
 - PSNS Pretreatment Standards for New Sources
 - Skip over BPT, BCT, BAT, NSPS For "direct" dischargers, eg., metal finisher that has their own NPDES permit

IDENTIFYING CIUs

- many categorical regulations depend on what you make
- ex., metal products and machinery, pharmaceuticals, organic chemical, plastic, and synthetic fiber manufacturers
- some depend on how you make it
 ex. metal finishers and electroplaters; metal molding and casting; plastic molding and forming

IDENTIFYING CIUs

- some depend on a number of factors
 - ex., SIUs who "form" parts from aluminum are aluminum formers (forming includes casting, drawing, rolling, extruding, and forging)
 - versus the plater that only plates the aluminum
 - $^{\circ}$ or the former that works with copper instead of aluminum
- are you confused yet?

POTW Responsibilities

- Be familiar with the CATEGORIES
- Comp Guide, Appendix 3–D
 - categories
 - subparts
 - pretreatment regulated parameters
 - New Source dates
- PERCS Pretreatment Webpage: Categorical User Information
 - presentations, links to EPA websites

POTW Responsibilities IU Application Section H Question 1 – IUs often make errors! –

- check 446 because use paint
- Question 2 -- Some category

 Some categories have different limits for different subparts or process operations
 New Source or Existing Source - more later

 Question 3 - "dilution" wastestreams in sample point? - if so, use Combined Wastestream Formula (CWF) - more later

New versus Existing Source

- IU Application Section H, Question 2 -
- Existing Source in operation when CFR was published and
- no significant changes since then
 New Source everyone else
- Appendix 3-D "New Source" Date
- EPA Guidance and Dates on PERCS
- Categorical User Webpage

POTW Responsibilities

- review Comp Guide Appendix 3-D list to see if any possibilities
- Read potentially applicable regulation with IU and have them explain why they think they are or are not covered by which parts
- call the Division PERCS Pretreatment staff to get help in category determination

Categorical Applicability

- Confirm with Approval Authority
- Document in CIU permit rationale
 What CFR, including subpart, operations,
 - New versus Existing
 - CWF and other Limits calculations
- Also very helpful to document why an IU is <u>not</u> covered by a CFR

Categorical Limits

- concentration based limits ex., mg/l
- mass and/or production based limits
 - lbs. pollutant per day
 - lbs. pollutant per lbs. of product
- if causes over allocation, apply lower local limit in IUP

Concentration Based Limits

- usually mg/l (414 listed in ug/l)
- Metal Finishing (433), Electroplating (413), Pharmaceutical (439), CWT (437), etc.
- if sample location contains <u>NO</u> "dilution" wastestreams, can put CFR limits directly in IUP
- unless causes over allocation



Combined Wastestream Formula (CWF)

- what is a "dilution" wastestream?
 - 40 CFR 403.6(e)(1)(i)(F_D)
 - sanitary
 - boiler blowdown, non-contact cooling, stormwater, demineralizer (eg., reverse osmosis,) unless....
 can show are categorical pollutants present in significant amounts

Combined Wastestream Formula (CWF)

- Categorical Limits only apply to categorical process wastewater 40 CFR 403.6(e) and also (c)
- "dilution" wastestreams get no pollutant credit/allocation
- categ flow divided by total flow = dilution ratio
- categ limit multiplied by dilution ratio = permit limit
- must use actual flow values, not IUP flow limit -40 CFR 403.6(c)
- Spreadsheet on PERCS web-site

Combined Wastestream Formula (CWF)

- categorical limit = 1 mg/l
 sample point = 75% process, 25% domestic + cooling CWF limit at combined location = 0.75mg/l
 - sample point = 1% process, 99% domestic + cooling, CWF limit at combined location = 0.01 mg/l

Combined Wastestream Formula (CWF)

- CWF limit below best available practical quantitation level (PQL)?
 - CIU must segregate wastestreams so sample only process
 40 CFR 403.6(e)(2)



Combined Wastestream Formula (CWF)

- what if IU has other "non-dilution" wastestreams that have categorical pollutants present but aren't covered by categorical regulation ?
 - can rule as "unregulated" process wastestream, basically treated same as "regulated" process wastestream
 40 CFR 403.6(e)(1)(i)

Production Based Limits

- IU allowed to discharge X amount of pollutant for each pound of metal raw material going through a given process operation
 - sometimes "off-lbs" of metal raw material = each lb of metal coming <u>out</u> of operation.
 - used when lbs of metal coming out of operation < lbs of metal going into operation
- add amounts for each operation at SIU together to get IUP limit

Categorical Issues

Production Based Limits

- all the metals forming categories
 - 420-Iron and Steel
 - 421-Nonferrous metals manufacturing
 - 424-Ferroalloy Manufacturing
 - 461-Battery
 - 464-Metal Molding and Casting
 - 465-Coil coating
 - 467-Aluminum Forming
 - 468–Copper Forming
 - 471-Nonferrous Metals Forming and Metal Powders



Production Based Limits

- option 1 apply in IUP as production based
 - $\,{}^{\circ}$ list limits straight from the regulation in IUP
 - calculate different lbs/day limit every day using production rate for that day
 - spreadsheet available from the Division
 - what do you put on your Allocation Table?
 Ibs/day based on max facility production



Production Based Limits

option 2 - calculate alternative mass based limit and apply in IUP

- (amount allowed in regulation) * (average production per day) = IUP limit in lbs/day
- 40 CFR 403.6(c)(3) must use <u>actual long-term daily production</u>
- review production records periodically, update IUP limits when significant change
- spreadsheet available from the Division

Production Based Limits

- option 3 calculate alternative concentration based limit for IUP
 - (amount allowed in 40 CFR...) * (average production per day) * (average flow per day) = IUP limit in mg/l
 - 40 CFR 403.6(c)(3) and (4) use actual long-term daily production and flow
 - review production and flow records periodically, modify IUP limits when significant change
 - spreadsheet available from the Division



Production Based Limits

- if 1,000 lbs/day of parts go through:
 same rinse tank 4 separate times
 or
 - through 4 different rinse tanks
- (1,000 lbs/day)*(4) = 4,000 lbs/day production
 (4,000 lbs/day)*(CFR allowed) = lbs/day limit



help and spreadsheets from the Division



CATEGORICAL ISSUES

 if categorical limit results in over allocation, POTW must apply lower IUP limit

CATEGORICAL ISSUES

 for anything categorical – determinations, subparts, operations, limits calculations, feel free to get help from the Division PERCS Pretreatment staff

40 CFR 403 - Categorical

- 40 CFR 403 General Pretreatment Regs
- 403.6 National Pretreatment Standards - Categorical Standard
 All about calculating limits
- 403.12 Reporting Requirements for POTWs and Industrial Users
 (b) and (d) - one time reports for new CIUs
 - Lots more!



Streamlining - 40 CFR 403

- Equivalent Mass Limits
- Equivalent Concentration Limits
- Sampling Waiver for pollutants not present
- Non-significant CIUs
- Middle Tier CIUs



Pharmaceuticals-40 CFR 439

- second most common NC CIU
 27
- 5 different subcategories
 depend on how drug is made
 no PSES/PSNS for R&D
- presentation on PERCS webpage

OCPSF - 40 CFR 414

- Organic Chemicals, Plastics, and Synthetic Fibers
- third most common NC CIU 23
- IU adds chemical A to chemical B to get chemical C, where chemical C is covered by a specific list of SIC codes
- does <u>not</u> cover adding A and B to get a mixture of A and B

IUP Writing Workshop June 16, 2011

Categorical Issues

Metal Finishing - 40 CFR 433

- most common categorical IU in NC
 over 200 and rising!
- use various chemical processes to change the <u>surface</u> of a piece of metal, either adding a layer or taking a layer off - often referred to in the business as "surface finishing"
- promulgated in 1984



Metal Finishing - 40 CFR 433

- ▶ 6 "basic" operations 433.10:
- electroplating
- electroless plating
- anodizing
- \circ coating (chromating, phosphating, and coloring)
- chemical etching and milling
- printed circuit board manufacture
- 40 "other" operations (ex. cleaning, machining, grinding, painting, punching holes, making bends, soldering, welding, tumbling, etc.)



Basic 433 Operations

- Some, like plating, very easy to see the surface change
- Some, like iron phosphating, sometimes difficult to detect with the untrained eye



Core #1 - Electroplating





Core #4a - Chromating



Core #4b - Iron Phosphating



For Example: Stee Cooper, Brass Identify Base Metal Step 1 Step 2 Clean What about Rinse Step 2F all the Acid Descale & Activa Step 3 rinsing and Rinse Step 3F cleaning? Step -Rinse Step 4R For Exa Final Plate Step 5 Step 5R Rin ise Step 6 & Si Rir For Example: Box or Hot Air Spin Dryers Dry & Package

Rinsing

- Generally rinse part with water after each core or ancillary operation
- Removes chemicals from core/ancillary solution still on surface of part
- Rinse discharged continuously or batches
- Counter current to save water
- Rinse water considered part of core/ancillary when deciding if IU <u>discharges</u> from that core/ancillary

Cleaning - Ancillary #7

- > Only action is to remove dirt, oil, etc. from the top of the surface of the metal.
 - has separate cleaning bath with chemicals, then has its own rinsing tank with just water
 - usually done before a core operation bath
 IUs will often call their 5 stage Iron Phosphating (core #4b) operation "cleaning"
- Does not change the character of the actual metal surface or the color of the metal itself
- Will only look different because dirt layer is gone

Metal Finishing - 40 CFR 433

- 433.10 if CIU <u>PERFORMs</u> one of the 6 "basic," and discharge from any of the 6 "basic" or 40 "other," all discharged are 433
 - even if don't discharge from the PERFORMED "basic," discharges from the 40 "other" are covered by 433

• 40 CFR 433.10(a)

40 CFR 413 - Electroplating

- Original "surface finisher" regulation
 promulgated in 1979 and 1981
 same 6 main or "Core" processes as 433
- Majority 413s became 433 in 1984
- NC has a few left
- Any new "surface finisher will be 433

433/413 Metal Shape Changing

- 413/433s -change shape of metal piece in "relatively minor way" -
 - drilling and/or threading holes
 - making bends, holes, dents, etc. by
 impact deformation Dana says "ka-
 - boom!"
 - pressure deformation slow, steady force
- Grinding, machining, or cutting off areas

433/413 Metal Shape Changing



Other Metals Categories -Major Shape Changing

- Casting = melt metal, pour into cast, allow metal to solidify in new shape
- Rolling = reduce diameter by passing metal between lubricated rollers (metal hot or cold)
- Drawing = pulling metal thru a die to make diameter thinner or change shape
- Extruding = use pressure to force metal to flow thru die
- Forging = use pressure to change shape, with or without dies. Usually on <u>heated</u> metal.

Other Metals Categories -Major Shape Changing

- Extrusion and drawing turned aluminum "puck" into fire extinguisher can - 40 CFR 467 - Aluminum Forming
- Note hole pressure testing (433/413 ancillary #45)
- LP gas regulator melted metal poured into cast (464) Tungsten carbide drill bit -powder forming (471)
- Rolling and Forging



Other Metals Categories

- 420-Iron and Steel
- 421-Nonferrous metals manufacturing
- 424-Ferroalloy Manufacturing
- ▶ 461-Battery
- 464-Metal Molding and Casting
- 465-Coil coating
- 467–Aluminum Forming
- 468-Copper Forming
- 471-Nonferrous Metals Forming + Metal Powders

Categorical versus Local Limits

- Categorical Pretreatment Standards -<u>Technology</u> Based
 - determine industry pollutants present and amounts in untreated wastewater
 - determine (pre-) treatment technologies

 - available and "expected effluent" will installation/operating costs close down too many Clus?
 - if no, and CIU technology has higher removal rate than typical POTW, assign "expected effluent" as pretreatment categorical limit
 - do compare costs to environmental benefits, but not the deciding factor

Categorical versus Local Limits

- Local Limits –<u>Technically</u> Based
- How much and still protect stream, WWTP bugs, sludge, people
- Metals ,Cyanide: Regular HWA/AT
- Organics: Organics HWA/AT



	Division of vvaler Resources Water Quality Programs
P HOME DWR HOME CONTACTS TER SCIENCES SECTION LAB PLA TER QUALITY PERMITTING WATER PLA	ADMIN WATER QUALITY REGIONAL OPERATIONS Search DENR O - Text + NNING PUBLIC WATER SUPPLY NNING SITE MAP
Water Quality Permitting	Permit Writing Guidance
Wastewater Branch	
NPDES Wastewater Pretreatment	Details about the next Pretreatment Permit Writing Workshop are on the Training page.
	Basic IUP Guidance, Including What to Submit (August 2005)
 Categorical User Information 	IUP Training Materials- New! April 2012
 Comprehensive Guide Headworks Analysis Industrial Waste Survey Information 	 IUP Writing Steps: Workshop Outline Industrial User Wastewater Survey and Discharge Permit Application: Slugem Hosiery Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application Slugem Hosiery SIU Inspection Form
 Mercury Guidance Other Downloads Other Industrial 	 Slugem Hosiery Data Summary Spreadsheet Categorical Industry Overview Presentation Blank Industrial User Wastewater Survey and Discharge Permit Application (April 2012)
Information Other Pretreatment	Permit Writing Files
Links Pretreatment Annual Report Guidance Permit Writing Guidance Staff Contacts Training Collection Systems Non Discharge Description 	 Generic Industrial User Permit (includes Permit Synopsis) - streamlining update changes in red. Note some changes are not related to streamlining but are still required) (September 25, 2006) - NC POTWs are expected to incorporate all required changes from this Generic IUP with your next IUP renewals. Example IUP & Synopsis: Will Plateit (40 CFR 433) (March 2009) Combined Wastestream Formula: Example IUP & Synopsis: Will Plateit (40 CFR 433). Example IUP modification: Will Plateit (40 CFR 433) Industrial User Permit (IUP) Application Form (1997) Ammonia and Total Nitrogen IUP Limit Guidance (July 2005) SIU Inspection Form
 Non-Discharge Permitting Unit 	April 11, 2011 - Streamlined Review of IUPs

мпниц пероге

Guidance

- Permit Writing
 Guidance
- Staff Contacts
- Training
- Collection Systems
- Non-Discharge Permitting
- Unit
- Wetlands

incorporate all required changes from this Generic IUP with your next IUP renewals.

- Example IUP & Synopsis: Will Plateit (40 CFR 433) (March 2009)
- Combined Wastestream Formula: Example IUP & Synopsis: Will Plateit (40 CFR 433).
- Example IUP modification: Will Plateit (40 CFR 433)
- Industrial User Permit (IUP) Application Form (1997)
- · Ammonia and Total Nitrogen IUP Limit Guidance (July 2005)
- SIU Inspection Form

April 11, 2011 - Streamlined Review of IUPs

In order to use available resources more effectively and recognizing the maturity and experience prevalent in the pretreatment program, the Division is proposing a process to streamline the review of Industrial User Permits (IUPs).

feedback

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After attending the class and meeting other criteria, a permit writer may be approved to participate in the streamlined permit review process. Permits submitted under this process will not be subject to a full Division review. Benefits to the POTW include less paperwork to submit and immediate approval of your permits. Please review the following documents for more detail. Programs employing at least one approved permit writer and meeting all of the other specified requirements will be considered "Approved". If staffing changes occur, the Program may be required to go through the approval process again.

- Streamlined Industrial User Permit (IUP) Review Process
- Streamlined Industrial User Permit Review Submittal Form

Other Related Permit Writing Items

- Biocides/Chemical Pretreatment Worksheet Form PT101: Excel version (January 2012), Word Version (October 1997) and Guidance
- Boiler & Cooling Tower Presentation 2001 Pretreatment Consortium Workshop
- Spill/Slug Control Plan Document

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WATER SCIENCES SECTION	LAB PLANNING PUBLIC WATER SUPPLY	(
WATER QUALITY PERMITTING	WATER PLANNING SITE MAP	

Water Quality Permitting

• Wastewater Branch

NPDES Wastewater

- Pretreatment
 - Categorical User Information
 - Comprehensive Guide
 - Headworks Analysis
 - Industrial Waste
 Survey Information
 - Mercury Guidance
 - Other Downloads
 - Other Industrial
 - Information
 - Other Pretreatment Links
 - LIIIKS
 - Pretreatment
 - Annual Report
 - Guidance
 - Permit Writing Guidance
 - Staff Contacts
 - Training
- Collection Systems
- Non-Discharge Permitting
 - Unit

Categorical User Information

This page contains information, documents, and links related to Federal Categorical Regulations. Categorical Regulations, also called Effluent Guidelines, are federal limits and requirements for specific industrial categories that apply nationwide. Industrial Users subject to Categorical Regulations with applicable Pretreatment Standards or requirements are called Categorical Industrial Users or CIUs. All CIUs are automatically considered Significant Industrial Users (SIUs). The categorical limits for each CIU are compared to their POTW's local limits (Allocation Table), and the more stringent limits are applied.

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The most common Categories used in NC are:

- 40 CFR 433 Metal Finishing
- 40 CFR 439 Pharmaceuticals
- 40 CFR 414 Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF)

GENERAL INFORMATION ON CATEGORICAL REGULATIONS

EPA Categorical (Effluent Guidelines) Website:

- Note: Only those categories with Pretreatment Standards for Existing Sources (PSES) and/or Pretreatment Standards for New Sources (PSNS) apply to Industrial Users discharging to a POTW (Indirect Dischargers).
- Click on "40 CFR Part" to get a copy of the actual regulation.
- For many categories, clicking on the name of the category will take you to the EPA's website for that specific category.
- For other categories, this will take you to a list of EPA contacts for that category.

EPA National Service Center for Environmental Publications (NSCEP) - Online Publication Title Index :

- Website for EPA's Guidance and Technical Documents, including Development Documents.
- For the more common categories, it is recommended to use the link above to access EPA's website for that specific category, if applicable.

- Collection Systems
- Non-Discharge Permitting Unit
- Wetlands

- Website for EPA's Guidance and Technical Documents, including Development Documents.
- For the more common categories, it is recommended to use the link above to access EPA's website for that specific category, if applicable.

EPA Industrial Wastewater Contacts In the Effluent Guidelines Program (Categorical Dischargers)

EPA Guidance on New Sources Determinations and New Source Dates

The 40 CFR headers below link to EPA's effluent guidelines webpage, including Rules and Preambles, Development Documents and more.

40 CFR 414 - ORGANIC CHEMCIALS, PLASTICS, AND SYNTHETIC FIBERS (OCPSF)

Calculate OCPSF Permit Limits with this spreadsheet

40 CFR 433 - METAL FINISHING

- 40 CFR 433 Example IUP & Synopsis: Will Plateit
- 40 CFR 433 Calculate 433 metal finishing limits using the Combined Wastestream Formula (CWF)
- 40 CFR 433- Metal Finishing (433) vs Electroplating (413) (August 2005)
- 40 CFR 433/413 Verification Form Companies can complete this to determine/document if they are covered by 433/413, or to document they are not covered.
- 40 CFR 433 + 413 Websites -
 - Metal Coatings Alternatives Guide
 - National Metal Finishing Resource Center
 - National Paint & Coatings Association
 - Powder Coating Institute

40CFR 439-Pharmaceutical

- 40 CFR 439 NC PERCS Pharmaceutical Presentation (September 2006)
- 40 CFR 439 NC PERCS Pharmaceutical Permit Language (Updated September 2006)
- 40 CFR 439 NC Pharmaceutical Guidance Memo (2001)

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PRETREATMENT PERMIT WRITING TRAINING CLASS

Today's Date: _____

Please circle one "X" for each of the following statements:

		Strongly			Strongly
	Question	Agree	Agree	Disagree	Disagree
1.	The ideas were clearly presented	Х	Х	Х	Х
2.	The information was well organized.	Х	Х	Х	Х
3.	The information received was useful.	Х	Х	Х	Х
4.	The speakers were good.	Х	Х	Х	Х
5.	I feel more comfortable preparing my IUP now.	Х	Х	Х	Х
6.	The Workshop will help me do my IUP.	Х	Х	Х	Х
7.	The Handouts will help me do my IUP.	Х	Х	Х	Х
8.	The Workshop was a good use of my time.	Х	Х	Х	Х
9.	The length of time was appropriate.	Just right	Too long	Too short	
10.	Pretreatment is a source of true happiness.	Х	Х	Х	Х

The best part of the workshop was...

The worst part of the workshop was...

What did you learn that will be most useful when you prepare your IUP?

What new thing did you learn today?

The Workshop would have been better if...

How was the facility?

Other comments (*Please use back of page if necessary*):

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

The information provided on this questionnaire serves two functions:

- 1. To determine if your facility is in need of a Significant Industrial User (SIU) Industrial User Pretreatment Permit (IUP) for the discharge of wastewater to the Publicly Owned Treatment Works (POTW) sanitary sewer system.
- 2. If a SIU IUP is required, this survey shall serve as the application for that IUP and the information will be used to issue the IUP.

PLEASE REFER TO THE GUIDANCE FOR COMPLETING THE INDUSTRIAL USER SURVEY/APPLICATION INSTRUCTIONS, AVAILABLE AT: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite

STATUS of APPLICANT / APPLICATION - PLEASE CHECK ONE

- [] Existing Unpermitted Discharge
- [] Permit Renewal for Existing SIU Permit, existing non-SIU permit, or other written permission from POTW. <u>Note</u> If this application requests a greater amount of wastewater discharge [flow], a greater amount of pollutant discharge or a discharge of different pollutants than specified in the last wastewater permit application for this facility, or any other significant changes, please indicate this as needed in the applicable Questions, especially Questions A8 and E7.

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403.14, information and data provided in this questionnaire which identifies the content, volume, and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other Information shall be governed by procedures specified in 40 CFR Part 2.

This is to be signed by the Authorized Representative of your firm, as defined in 40 CFR Part 403.12 (I) and {YOUR SUO CITATION}, after adequate completion of this form and review of the information by the signing representative.

Ι,

(print name),

(print title),

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 submitted is, to the best of my knowledge and belief, accurate and complete. I am an authorized representative of the user and am authorized to execute this certification on behalf of the user. I am aware that there are significant penalties for submitting false information in violation of this certification, including the possibility of fines and/or imprisonment.

I also certify that I have completed the necessary notification as required by the POTW to document my qualification as an Authorized Representative as set forth in 40 CFR Part 403.12 (I) and {YOUR SUO CITATION}.

Date

Signature of Representative (Seal, if applicable)

Please return this survey to:

{POTW Address}

SECTION A – GENERAL INFORMATION

1. For the production or manufacturing facility for which this application is being completed:

Facility name	
Physical address	
Mailing address (if different)	
General Telephone Number	
General Fax Number	
Website	

2. If applicable, general information about the corporate office, parent company, etc. [] N/A

Company name	
Physical address	
Mailing address (if different)	
General Telephone Number	
General Fax Number	
Website	

3. Primary Authorized Representative authorized to represent this firm in official dealings with the Publicly Owned Treatment Works (POTW).

Name	
Title	
Telephone/Cell/Fax	
Email	
Primary work location:	FacilityCorporate OfficeOther – List address here:

4. Alternate Authorized Contact for when the Primary Authorized Representative is not available.

Name	
Title	
Telephone/Cell/Fax	
Email	
Primary work location:	FacilityCorporate OfficeOther – List address here:

5. On-Site Contact. If neither person identified in items 3 and 4 above are located at the production or manufacturing facility for which this application is being completed provide an on-site contact person available to answer questions regarding statements made on this survey as well as conduct a walkthrough of the facility:

Name	
Title	
Telephone/Cell/Fax	
Email	

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

SECTION A – GENERAL INFORMATION - continued

- 6. Identify the general type of manufacturing, production and/or service(s) conducted at the site (i.e. electroplating, printing, painting, food processing, warehousing, meat packing, machine shop, etc.). Greater detail to be provided in question A. 7.
- 7. Provide a detailed narrative description of the manufacturing/production process(es) and/or service activities identified in guestion A. 6. and conducted at the facility identified in guestion A. 1.
- 8. Are any process changes or expansions planned during the next five years? [] Yes [] No

If yes, describe the nature of the planned changes or expansions. As needed, clarify if answers to other application questions are for before or after the change/expansion. If the facility has an existing permit, indicate if these changes could or will result in the facility requesting changes to their existing permit.

9. List the Standard Industrial Classification Number(s) (SIC #) or North American Industry Classification System (NAICS) codes for your facility. If listing more than one code, indicate the percentage of production.

SIC/NAICS code:		
Percentage of production		

10. In what month <u>and</u> year were the facility's operation(s) at this location (as specified in A. 7. above) established and under what name?

Facility Name	Month	Year

11. Has your facility undergone any changes in <u>licensed ownership</u> since the date noted in question A. 10? []Yes []No If yes, complete table.

Facility Name	Month	Year
Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram [See the Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application available at: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite]

PRODUCTION/PROCESS SCHEMATIC FLOW DIAGRAM (REQUIRED)

Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram [See the Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application available at: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite]

PLANT SITE LAYOUT (REQUIRED)

Section B – Flow Diagram/Schematics, Site Layout, and Pretreatment System Flow Diagram [See the Guidance Document for Completing the Industrial User Wastewater Survey and Discharge Permit Application available at: http://portal.ncdenr.org/web/wq/swp/ps/pret/permwrite]

WASTEWATER PRETREATMENT SYSTEM FLOW DIAGRAM (IF APPLICABLE)

SECTION C – FACILITY OPERATION CHARACTERISTICS

Office/Administrative Staff

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
# Employees							
Start/End Time							

Production Staff

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1 st Shift	# Employees							
	Start Time							
	End Time							
2 nd Shift	# Employees							
	Start Time							
	End Time							
3 rd Shift	# Employees							
	Start Time							
	EndTime							

Shift Activities

	SHIFT	DESCRIPTION OF SHIFT ACTIVITIES
Monday	1 st	
-	2 nd	
	3 rd	
Tuesday	1 st	
	2 nd	
	3 rd	
Wednesday	1 st	
	2 nd	
	3 rd	
Thursday	1 st	
	2 nd	
	3 rd	
Friday	1 st	
	2 nd	
	3 rd	
Saturday	1 st	
-	2 nd	
	3 rd	
Sunday	1 st	
	2 nd	
	3 rd	

SECTION D – PROCESS INFORMATION

NOTE: The following information must be completed for each product line. Please make copies of this page if necessary.

Information revealed in this section may be held confidential and proprietary under 40 CFR 403.14 at the request of the Industrial User and the approval of the POTW. The request for confidentiality must be made at the time of the initial submission of the application. Should such a request be made and accepted in compliance with {YOUR SUO CITATION}, these page(s) will be removed before review by any non-regulatory personnel.

- 1. Principal product(s) produced:
- 2. Raw materials and process additives used:
- 3. Maximum and average production rate of this particular product line (please specify units being reported):

Average Production Rate	Maximum Production Rate	Units

4. The production process is [] Batch [] Continuous If batch, please enter the average number of batches per 24 hours. [] If both, please enter % or production %] Batch [%] Continuous [From: ______ to _____ 5. Days and hours of operation for this product line: From: _____ to _____ Days and Hours of discharge for this product line: 6. 7. Is production subject to seasonal variation? [] Yes [] No If yes, briefly describe the seasonal production cycles:

SECTION E - WATER USE AND WASTEWATER DISCHARGE INFORMATION

Source Type	Check One	If yes,
Well	[]Yes []No	How many are there?
		How many are in use at this time?
City	[] Yes [] No	List all Account numbers:
Surface Water	[]Yes []No	Identify the source:
Other	[]Yes []No	Explain:

1. Please indicate source(s) of water used at your facility:

2. Does this facility provide any treatment to the incoming water to improve the water quality prior to its use in the facility, (i.e. deionization, reverse osmosis, ultra filtration, pH adjustment, etc.)? [] Yes [] No

If yes, complete table.		
Treatment Process	Chemicals Used	Wastewater Generated and Volume (gpd)

3. This facility uses water for the following:

(Please record "n/a" if the application/use does not apply to the operations at your facility.)

Type of Application /Use	Detailed Description of Applicable Operation(s) and/or Equipment	Maximum Volume Used (gallons/day)	Average Volume Used (gallons/day)	[E]stimated or [M]easured
Process				[]E[]M
Water Into Product				[]E[]M
Process Related Facility/Equipment Washdown*				[]E[]M
Process Contact Cooling or Warming Water				[]E[]M
Process Related Air-Pollution Control Unit				[]E[]M
Process Related Employee Showers				[]E[]M
Lab				[]E[]M
Maintenance Shop				[]E[]M
Boilers (Please specify if live and/or dry steam is used.)				[]E[]M
Backwash Water				[]E[]M
Pump Sealant Water				[]E[]M
General Facility/Equipment Washdown*				[]E[]M
Other non-contact water uses: boilers; non-contact cooling/warming water, general air conditioning, cooling towers, chillers, HVAC, etc.				[]E[]M
Domestic (e.g. restroom(s), non-process related employee showers, cafeteria, kitchen, breakroom etc.)				[]E[]M
Other, please describe				[]E[]M
Total				

*Please document clean up schedules in Shift activities in Section C.

SECTION E - WATER USE AND WASTEWATER DISCHARGE INFORMATION (continued)

4. The facility generates wastewater from the following areas and that water is discharged where

If the source of wastewater discharged does not exist at your facility record "n/a". If there is no discharge from the applicable source, record "no discharge".

Source of Wastewater	Wastewater is Discharged To Where	Pretreated?	Volume Discharged (gallons/day)	Estimated (E) or Measured (M)
a. Process		[]yes []no		[]E []M
b. Water Into Product		[]yes []no		Î Î E Î Î M
c . Process Related Facility/Equipment Washdown*		[]yes []no		[]E []M
d. Process Contact Cooling		[] yes [] no		[]E []M
or Warming Water				-
e.Process Related Air- Pollution Control Unit		[] yes [] no		[]E []M
f. Process Related Employee Showers		[]yes []no		[]E []M
g.Lab		[]yes []no		[]E []M
h.Maintenance Shop		[]yes []no		[]E []M
i. Backwash Water		[] yes [] no		[]E []M
j. Pump Sealant Water		[] yes [] no		[]E []M
k. General Facility/Equipment Washdown*		[]yes []no		[]E []M
I. Other non-contact water uses: boilers; non-contact cooling/warming water, general air conditioning, cooling towers, chillers, HVAC, etc.		[]yes []no		[]E []M
 m. Domestic (e.g. restroom(s), non-process related employee showers, cafeteria, kitchen, breakroom etc.) 		[]yes []no		[]E []M
n.Groundwater/Remediated Groundwater		[]yes []no		[]E []M
o.Storm Water Runoff		[] yes [] no		[<u>]</u> E []M
p. Tank Bottoms		[] yes [] no		[]E []M
q.Other, please specify		[] yes [] no		[]E []M
r. Total Discharged to POTW				

*Please document clean up schedules in Shift activities in Section C.

5. Identify the daily maximum flow limit requested. Please explain any differences between the requested flow limit and actual flows listed in E. 4.

Requested Daily Maximum Flow Limit, gpd:	
Requested Monthly Average Flow Limit, gpd:	
Explanation:	

SECTION F - CHEMICALS, POLLUTANTS, WASTES

1. Complete Checklist for Priority, Conventional, Non-Conventional, and Other Pollutants.

Chemical Abstract Present in Absent in Concentration Present Absent in Discharge, Number Discharge to Discharge to POTW **Chemical Name** [CAS#] at Facility at Facility POTW (mg/l)Acid Extractable Organic Compounds (EPA Method 625) 2-Chlorophenol 95-57-8 2,4-Dichlorophenol 120-83-2 2,4-Dimethylphenol 105-67-9 2,4-Dinitrophenol 51-28-5 2-Methyl-4,6-dinitrophenol 534-52-1 4-Chloro-3-methylphenol 59-50-7 2-Nitrophenol 88-75-5 4-Nitrophenol 100-02-7 Pentachlorophenol 87-86-5 Phenol 108-95-2 2,4,6-Trichlorophenol 88-06-2 Base Neutral Organic Compounds (EPA Method 625) 1,2,4-Trichlorobenzene 120-82-1 1,2-Dichlorobenzene 95-50-1 1,2-Diphenylhydrazine 122-66-7 1,3-Dichlorobenzene 541-73-1 1,4-Dichlorobenzene 106-46-7 2,4-Dinitrotoluene 121-14-2 2,6-Dinitrotoluene 606-20-2 2-Chloronaphthalene 91-58-7 3.3-Dichlorobenzidine 91-94-1 4-Bromophenyl phenyl ether 101-55-3 4-Chlorophenyl phenyl ether 7005-72-3 Acenaphthene 83-32-9 Acenaphthylene 208-96-8 Anthracene 120-12-7 Benzidine 92-87-5 Benzo (a) anthracene 56-55-3 Benzo (a) pyrene 50-32-8 Benzo (b) fluoranthene 205-99-2 Benzo (ghi) perylene 191-24-2 Benzo (k) fluoranthene 207-08-9 Bis (2-chloroethoxy) methane 111-91-1 Bis (2-chloroethyl) ether 111-44-4 Bis (2-chloroisopropyl) ether 102-60-1 Bis (2-ethylhexyl) phthalate 117-81-7 [DEHP] Butyl benzyl phthalate [BBP] 85-68-7 Chrysene 218-01-9 Di-n-butyl phthalate [DBP] 84-74-2 Di-n-octyl phthalate [DOP] 117-84-0

All chemicals require that TWO columns are checked

SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

		leekeu		1		
	Chemical			Present in	Absent in	Concentration
	Number	Present	Absent	Discharge to	Discharge to	in Discharge
Chemical Name	[CAS#]	at Facility	at Facility	POTW	POTW	(mg/l)
Base Neutral Organic Compoun	ds (continued)	· · · · · · · · · · · · · · · · · · ·		•	
Dibenzo (a,h) anthracene	53-70-3					
Diethyl phthalate [DEP]	84-66-2					
Dimethyl phthalate [DMP]	131-11-3					
Fluoranthene	206-44-0					
Fluorene	86-73-7					
Hexachlorobenzene	118-74-1					
Hexachlorobutadiene	87-68-3					
Hexachlorocyclopentadiene	77-47-4					
Hexachloroethane	67-72-1					
Indeno (1,2,3-cd) pyrene	193-39-5					
Isophorone	78-59-1					
N-nitroso-di-n-propylamine	621-64-7					
N-nitrosodimethylamine	62-75-9					
N-nitrosodiphenylamine	86-30-6					
Naphthalene	91-20-3					
Nitrobenzene	98-95-3					
Phenanthrene	85-01-8					
Pyrene	129-00-0					
Metals					8	<u>1</u>
Aluminum						
Antimony	7440-36-0					
Arsenic	7440-38-2					
Beryllium	7440-41-7					
Cadmium	7440-43-9					
Chromium	7440-47-3					
Copper	7440-50-8					
Lead	7439-92-1					
Mercury	7439-97-6					
Molybdenum	7439-98-7					
Nickel	7440-02-0					
Selenium	7782-49-2					
Silver	7440-22-4					
Thallium	7440-28-0					
Zinc	7440-66-6					
Other Inorganic Pollutants						
Barium	7440-39-3					
Chloride						
Cyanide	57-12-5					
Fluoride	1					

All chemicals require that TWO columns are checked

SECTION E – SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

All olienilouis require that two		Jonea		1		
	Chemical			Dresent in	Abaantin	Concentration
	Abstract	Present	Absent	Discharge to	Absent In Discharge to	in Discharge
Chemical Name	[CAS#]	at Facility	at Facility	POTW	POTW	(ma/l)
Purgeable Volatile Organic Co	mpounds [VO	Cs] (EPA Met	nod 624)		_	
1,1,1-Trichloroethane	71-55-6					
1,1,2,2-Tetrachloroethane	79-34-5					
1,1,2-Trichloroethane	79-00-5					
1,1-Dichloroethane	75-34-3					
1,1-Dichloroethylene	75-35-4					
1,2-Dichloroethane	107-06-2					
1,2-Dichloropropane	78-87-5					
2-Chloroethyl vinyl ether	110-75-8					
Acrolein	107-02-8					
Acrylonitrile	107-13-1					
Benzene	71-43-2					
Bromodichloromethane	75-27-4					
Bromoform	75-25-2					
Bromomethane	74-83-9					
Carbon tetrachloride	56-23-5					
Chlorobenzene	108-90-7					
Chloroethane	75-00-3					
Chloroform	67-66-3					
Chloromethane	74-87-3					
Cis 1,3-Dichloropropene						
Dibromochloromethane	594-18-3					
Ethylbenzene	100-41-4					
Methylene chloride	75-09-2					
Tetrachloroethylene	127-18-4					
Toluene	108-88-3					
Trans 1,3-Dichloropropene						
Trans-1,2-Dichloroethylene	156-60-5					
Trichloroethylene	79-01-6					
Trichlorofluoromethane						
Vinyl chloride	75-01-4					
Other Pollutants of Concern						
Xylene						
BOD						
TSS						
Ammonia						
Total Phosphorus						
Total Nitrogen						
Oil & Grease						
range of Ph						
			<u> </u>	1		
				}		
				 		
				1		

All chemicals require that TWO columns are checked

SECTION F – CHEMICALS, POLLUTANTS, WASTES (continued)

2. If any wastewater analyses have been performed on the wastewater discharge(s) from your facilities, please attach to this survey a copy of the lab report, chain of custodies and location of where the samples were taken for the most recent sampling date. Do not attach analyses performed by the POTW or analytical data already delivered to the POTW.

4.	Please list boiler and cooling tower tre	eatment additives or MSD s	sheets and dosage rates for each.
----	--	----------------------------	-----------------------------------

Type of Boiler or Cooling Unit	Treatment Additive Name	Purpose of Additive	Dosage, with units

5. Do you have any storage tank(s) at your facility? [] Yes [] No If yes, complete the chart below.

Tank ID	[I]nside or [O]utside	[A]bove or [B]elow Ground	Volume (in gallons)	Contents	Associated with [P]rocess; [W]astewater treatment; [G]roundwater remediation;	Spill Containment Devices

6. Are any liquid wastes or sludges (i.e. acids, alkalies, heavy metal sludges, inks, dyes, oil, grease, organic compounds, paints, pesticides, plating wastes, pretreatment sludges, solvents, thinners, waste product, etc.) from this firm disposed of by means other than discharge to the sewer system? []Yes []No If yes, please complete the following:

		5		
Nature of hauled Waste and date Last hauled	Waste hauler's name, EPA ID# and address	Treatment Facility's Name, EPA ID# and address	Disposal facility's Name, EPA ID# and Address	Est. Gallons or Pounds per Year hauled off

7. Is this facility a small quantity, large quantity, or conditionally exempt Hazardous Waste Generator? [] Small Quantity [] Large Quantity [] Conditionally Exempt [] Not Applicable

Facility's EPA Hazardous Waste Generator ID#:	
Waste Codes:	

^{3.} Does your facility complete a Toxic Release Inventory? [] Yes [] No If yes, most recent copy attached _____ OR POTW already has _____

SECTION G - WASTEWATER TREATMENT, FLOW, AND SAMPLING EQUIPMENT

1. Is the wastewater generated by this facility treated prior to discharge to the POTW? [] Yes [] No

If yes, please complete the chart below. If a particular pretreatment unit only treats part of the wastewater, indicate this below and in the diagram required by Section B.

Pretreatment Unit	[Y]es [N]o	Additional Information	Chemicals Used
Activated Carbon			
Air Stripping			
Biological Treatment		Activated Sludge	
5		Rotating Biological Contactor (RBC)	
		Trickling Filter	
		Sequencing Batch Reactor (SBR)	
		Other	
Chemical Precipitation			
Chlorination, for			
disinfection			
Cyanide Destruction			
Defoaming Agents			
Dissolved Air Floatation		list all individual units of DAF here	
(DAF)		equalization	
		pH adjustment	
		chemical precipitation	
		Other	
Flow equalization, aerated		Size(gallons)	
		Before After Pretreatment	
Flow equalization,		Size(gallons)	
not aerated		Before After Pretreatment	
Grease and Oil Removal		Grease Trap, Size	
for employee cafeteria,		Oil Water Separator	
kitchen, breakroom, etc.		Other	
Grease and Oil Removal		Grease Trap, Size	
for food manufacturing		Oil Water Separator	
process wastewater		Other	
Grease and Oil Removal		Grease Trap, Size	
for non-food		Oil Water Separator	
manufacturing process		Other	
wastewater			
Heat			
Reclamation/Exchange			
Ion Exchange (for			
wastewater treatment)			
Neutralization, pH			
adjustment			
Ozonation			
Reverse Osmosis (for			
wastewater treatment)			
Silver Recovery		Dalt Dasa	
Solids Separation,		Beit Press Centrifugation	
Clarification, Dewatering,		ClarificationCyclone	
Removal, etc.		Fliter Press Flitration	
		Flocculation Grit Removal	
		Nonofiltration	
		Nanonination Screening	
		SequinentationSeptic Tank	
Solvent Separation			
Spill protection			

SECTION G - WASTEWATER TREATMENT, FLOW, AND SAMPLING EQUIPMENT (continued)

- 2. Describe wastewater flow measuring methods and/or equipment. If applicable, list the meter's current interval, flow volume, pulse frequency and reporting units:
- 3. List procedures employed to ensure the accuracy of flow measurement method/equipment.

Frequency of Cleaning:			
Calibration method:			
calibration performed by:			
Training/credentials of calibration staff:			
Date of most recent calibration:			
Copy of Calibration Certificate	POTW already has	OR	Copy attached

4. Describe the sampling method and associated equipment utilized at the facility. Identify staff or contract lab responsible for sampling. Describe sampling technician training.

Sampling Equipment/Method:	
Sampling staff:	
Training/credentials of sampling staff:	

SECTION H – CATEGORICAL STATUS

1. Check any products listed below that are manufactured or activities that are performed at this facility:

[]40 CFR 467	Aluminum Forming	[]40 CFR 432	Meat Products
[]40 CFR 427	Asbestos Manufacturing	[]40 CFR 433	Metal Finishing
[]40 CFR 461	Battery Manufacturing	[]40 CFR 464	Metal Molding & Casting
[]40 CFR 431	Builders Paper & Board Mills	[]40 CFR 436	Mineral Mining & Processing
[]40 CFR 407	Canned & Preserved Fruits & Veg.	[]40 CFR 471	Nonferrous Metal, Form & Powders
[]40 CFR 408	Canned & Preserved Seafood	[]40 CFR 421	Nonferrous Metals Manufacturing
[]40 CFR 458	Carbon Black Manufacturing	[]40 CFR 414	OCPSF
[]40 CFR 411	Cement Manufacturing	[]40 CFR 435	Oil & Gas Extraction
[]40 CFR 437	Centralized Waste Treatment	[]40 CFR 440	Ore Mining & Dressing
[]40 CFR 434	Coal Mining	[]40 CFR 446	Paint Formulating
[]40 CFR 465	Coil Coating	[]40 CFR 443	Paving & Roofing Materials Mfg.
[]40 CFR 468	Copper Forming	[]40 CFR 455	Pesticide Manufacturing
[]40 CFR 405	Dairy Products Processing	[]40 CFR 419	Petroleum Refining
[]40 CFR 469	Electrical, Electronics Components	[]40 CFR 439	Pharmaceutical Manufacturing
[]40 CFR 413	Electroplating	[]40 CFR 422	Phosphate Manufacturing
[]40 CFR 457	Explosives Manufacturing	[]40 CFR 459	Photographic Supplies
[]40 CFR 412	Feedlots	[]40 CFR 463	Plastics Molding & Forming
[]40 CFR 424	Ferroalloy Manufacturing	[]40 CFR 466	Porcelain Enameling
[]40 CFR 418	Fertilizer Manufacturing	[]40 CFR 430	Pulp, Paper, & Paperboard
[]40 CFR 464	Foundries, Metal Mold & Casting	[]40 CFR 428	Rubber Manufacturing
[]40 CFR 426	Glass Manufacturing	[]40 CFR 417	Soap & Detergent Manufacturing
[]40 CFR 406	Grain Mills	[]40 CFR 423	Steam Electric Power Generation
[]40 CFR 454	Gum & Wood Chemical Manufactur	ing	J	
[]40 CFR 460	Hospitals	[]40 CFR 409	Sugar Processing
[]40 CFR 447	Ink Formulating	[]40 CFR 410	Textile Mills
[]40 CFR 415	Inorganic Chemical Manufacturing	[]40 CFR 429	Timber Products Processing
[]40 CFR 420	Iron & Steel Manufacturing	[]40 CFR 442	Transportation Equipment Cleaning
[]40 CFR 425	Leather Tanning & Finishing	[] OTHER	

If any are checked, continue with Questions 2 and 3 of this Section

Otherwise, check here _____ and skip to next Section.

SECTION H – CATEGORICAL STATUS - continued

2. Is there a discharge from any of the above checked categorical operations to the POTW? [] Yes [] No If Yes, complete table.

Process operation name	40 CFR, subpart, operations, etc	40 CFR New Source Date	Date initial process start-up	Date(s) major change *

* Date(s) of commencement of construction of any major upgrades, updates, refits, or reinstallations of the operation since the start-up date.

From the above, is this facility a [] New Source	[] Existing Source	[] Unknown
--------------------------------------	--------------	---------------------	------------

 Are there any "dilution" wastestreams that flow through the current/proposed monitoring point? Yes [] No []
 If Yes, ensure these wastestreams are clearly identified as such in question E,4.

SECTION I – SLUG/SPILL PREVENTION and WASTE MINIMIZATION

1. Enter employees responsible for notifying the POTW in the event of a spill, bypass, pretreatment facility upset, or other unusual discharge or problem and employees authorized to close down production if needed, along with information about training and procedures.

If information is formalized in a Plan of some kind, list Plan Number and page #.

	Notification of POTW	Plan Name, page #	Authority to close down production	Plan Name, page #
Designated				
Employee(s)				
Training of those				
employees				
Procedures				
How other staff know				
when and how to				
contact designated				
individuals?				

 Does the facility have measures, equipment, and/or plans to protect the POTW and/or sanitary sewer in the event of accidental spills, slugs, or other inappropriate discharges)? []Yes []No If yes, complete table.

For measures that are formalized in a Plan of some kind (eg., Spill Prevention Control and Countermeasure Plan, Spill/Slug Control Plan, Toxic Organic Management Plan), list Plan Number and page #. Note: the POTW may request copies of the identified plans.

Measures to protect POTW and/or sanitary sewer	Plan Name and page #s, if applicable

 Does your company have a pollution prevention/waste minimization/recycling/reuse program established, or have had a pollution prevention or other waste minimization audit conducted? [] Yes [] No If yes, complete Table.

Name of Plan/Audit	Most recent copy attached	POTW already has copy

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

4.	Please check "current", "projected" or "N/A" for all codes below relating to your facility's wastewater
	discharge.

<u> </u> [<u>/A</u>]	<u>C</u> [<u>urrent</u>]	<u>Pr</u> [ojected]	<u>Code</u> W13	<u>Description</u> Improved maintenance scheduling, record keeping, or procedures		
[]	[]	[]	W14	Changed production schedule to minimize equipment and feedstock changeovers		
[]	[]	[]	W19	Other changes in operating practices (please explain)		
[]	[]	[]	W21	Instituted procedures to insure that materials do not stay in inventory beyond shelf life		
[]	[]	[]	W22	Began to test outdated material – continue to use if still effective		
[]	[]	[]	W23	Eliminated shelf-life requirements for stable materials		
[]	[]	[]	W24	Instituted better labeling procedures		
[]	[]	[]	W25	Instituted clearinghouse to exchange materials that would otherwise be discarded		
[]	[]	[]	W29	Other changes in inventory control (please explain)		
[]	[]	[]	W31	Improved storage or stacking procedures		
[]	[]	[]	W32	Improved procedures for loading, unloading and transfer operations		
[]	[]	[]	W33	Installed overflow alarms, and/or automatic shutoff valves		
[]	[]	[]	W34	Installed secondary containment		
[]	[]	[]	W35	Installed vapor recovery systems		
[]	[]	[]	W36	Implemented inspections or monitoring program of potential spill or leak sources		
[]	[]	[]	W39	Other spill and leak prevention (please explain)		
[]	[]	[]	W41	Increased purity of raw materials		
[]	[]	[]	W42	Substituted raw materials		
[]	[]	[]	W49	Other raw materials modifications (please explain)		
ſ	1	ſ	1	ſ	1	W51	Instituted recirculation within a process		
ſ	1	ſ	1	ſ	1	W52	Modified equipment, lavout, and/or piping		
ſ	1	ſ	1	ſ	1	W53	Use of different process catalyst		
ſ	1	ſ	1	ſ	1	W54	Instituted better controls on operating bulk containers to minimize discarding of empty		
	,	L					containers		
[]	[]	[]	W55	Change from small volume containers to bulk containers to minimize discarding of		
							empty containers		

INDUSTRIAL USER WASTEWATER SURVEY AND DISCHARGE PERMIT APPLICATION

<u>N</u> [<u>//A</u>]	<u>Ci</u> [<u>urrent</u>]	<u>Pr</u> [ojected]	<u>Code</u> W58	Description Other process modifications (please explain)
[]	[]	[]	W59	Modified stripping/cleaning equipment
[]	[]	[]	W60	Changed to mechanical stripping/cleaning devices (from solvents or other materials)
[]	[]	[]	W61	Changed to aqueous cleaners (from solvents or other materials)
[]	[]	[]	W62	Reduced the number of solvents used to make waste more amendable to recycling
[]	[]	[]	W63	Modified containment procedures for cleaning units
[]	[]	[]	W64	Improved draining procedures
[]	[]	[]	W66	Modified or installed rinse systems
[]	[]	[]	W67	Improved rinse equipment design
[]	[]	[]	W68	Improved rinse equipment operation
[]	[]	[]	W71	Other cleaning and degreasing operation (please explain)
[]	[]	[]	W72	Modified spray systems or equipment
[]	[]	[]	W73	Substituted coating materials used
[]	[]	[]	W74	Improved application techniques
[]	[]	[]	W75	Changed from spray to other system
[]	[]	[]	W78	Other surface preparation and finishing (please explain)
[]	[]	[]	W81	Changed product specifications
[]	[]	[]	W82	Modified design or composition of product
[]	[]	[]	W83	Modified packaging
[]	[]	[]	W89	Other product modifications (please explain)
[]	[]	[]	W99	Other (please explain)

SECTION J – OTHER PERMITS

1. List all environmental control permits currently managed for or by this facility. Examples: air, National Pollutant Discharge Elimination System (NPDES), Industrial User Permits (IUP), Resources Conservation and Recovery Act (RCRA), groundwater, storm water, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Permit Type	Permit Number	Issuing Agency

2. With regard to the parent company and all subsidiaries, list all wastewater discharge permits issued to cover similar operations to those at this facility. Examples: National Pollutant Discharge Elimination System (NPDES), Industrial User Permits (IUP), groundwater, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Facility and Location	Permit Type	Permit Number	Issuing Agency

3. With regard to the parent company and all subsidiaries, list all environmental permits applied for in the United States where issuance was denied OR the permit was terminated prior to the expiration date. Examples: air, NPDES, IUP, RCRA, groundwater storm water, general, non-discharge, and septic tank. Be prepared to provide the POTW with copies of identified permits and related records.

Permit Type	Issuing Agency	Date	Facility Name and Location	Reason for Denial/Termination

PERMIT

Control Authority and/or Municipality

40 CFR Category(if Applicable)

Industrial User Pretreatment Permit (IUP) To Discharge Wastewater Under the Industrial Pretreatment Program

In compliance with the provisions of 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 the Control Authority and/or Municipality Sewer Use Ordinance. The

following Industry, hereafter referred to by name or as the permittee:

IUP Number

Industry name, permittee:	
Facility Located at Street Address	
City	
State, Zip	

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 and/or Municipality listed below:

IUP Control Authority and/or Municipality WWTP name:
NPDES Number:
WWTP Address:
City, State, Zip

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



Date signed

Industrial User Pretreatment Permit (IUP) PART I

Specific Conditions

IUP, PART I, OUTLINE:

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

A. IUP Basic Information:

Receiving Control Authority & WWTP name :	POTW NPDES # :
IUP Name :	IUP Number :
IUP Effective date :	Pipe Numbers, list all regulated pipes:
IUP Expiration date :	IUP 40 CFR # (if applicable), or N/A:

B. IUP History. A Complete Permit History is required):

Effective Date	Renewal or Modification	Description of changes over previous IUP.

Specific Conditions

- C.) Authorization Statement:
 - 1.) The Permittee is hereby authorized to discharge wastewater in accordance with the effluent limitations, monitoring requirements, and all other conditions set forth in this Industrial User Pretreatment Permit (IUP) into the sewer collection system and wastewater treatment facility of the Control Authority and/or Municipality.
 - 2.) The Permittee is hereby authorized to continue operation of and discharge wastewater from the following treatment or pretreatment facilities. These facilities must correspond to the treatment units listed on both the application and inspection forms.

IU Treatment Units			
List all Treatment Units:	Descriptions:		

- 3.) The Permittee is hereby authorized to, if required by the Control Authority and/or Municipality and after receiving Authorization to Construct (A to C) from the Control Authority and/or Municipality, construct and operate additional pretreatment units as needed to meet final effluent limitations.
- D.) Description of IUP Discharge(s):
 - 1. Describe the discharge(s) from all regulated pipes.

Pipe # $\underline{001}$, Description of Discharge:

E.) Schematic and Monitoring Locations:

The facility schematic and description of monitoring location(s) given below must show enough detail such that someone unfamiliar with the facility could readily find and identify the monitoring location(s) and connection to the sewer. Include and identify all regulated pipes.

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 => Receiving POTW NPDES # => Effective date for these Limits => Expiration date for these Limits =>
 IU name =>

 IUP # =>

 Pipe # =>

 40 CFR # =>

if not applicable put N/A

THE LIMITS ON THIS PAGE ARE, (Check one below):

 LIMITS for ENTIRE permit period =>

 INTERIM Limits for period # 1 =>

 INTERIM Limits for period # 2 =>

 FINAL Limits Page =>

		Concentration Limits			Mass Limits			Monitoring Frequency			
		Daily Max	Monthly Average	Units	Daily Max	Monthly Average	Units	By Industry	By POTW	Sample Collection Method (C or G)	Required Laboratory Detection Level
1	Flow	Dully mun	Trefuge	MGD	Duily Mun	Trotuge	Cints	Dy maabary	Byrorn	(0 01 0)	Lever
2	BOD			mg/l							
3	TSS										
4	Temperature										
5	PH										
OTI	OTHER PARAMETERS; Please List Alphabetically										
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											

G.) Definitions and Limit Page(s) notes:

In addition to the definitions in the Town of XXXX Sewer Use Ordinance the following definitions and requirements apply:

1. Composite Sample:

Unless defined differently below, a composite sample for the monitoring requirements of this IUP, is defined as the automatic or manual collection of one grab sample of constant volume, not less than 100 ml, collected every hour during the entire discharge period on the sampling day. Sampling day shall be a typical production, and discharge day.

2. Composite Sample, alternative definition:

A composite sample for the monitoring requirements of this IUP is the same as described above unless specifically defined below as the automatic or manual collection of constant volume and constant time grab samples collected and composited according to the following criteria:



3. Daily Monitoring Frequency

Daily Monitoring Frequency as specified in this IUP shall mean each day of discharge.

4. Grab Sample

Grab sample for the monitoring requirements of this IUP, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

5. Instantaneous measurement

An Instantaneous measurement for the monitoring requirements of this IUP is defined as a single reading, observation, or measurement.

Outline of PART II,

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

- 16. Federal and/or State Laws
- 17. Penalties
- 18. Need to Halt or Reduce
- 19. Transferability
- 20. Property Rights
- 21. Severability
- 22. Modification, Revocation, Termination
- 23. Reapplication
- 24. Dilution Prohibition
- 25. Reports of Changed Conditions
- 26. Construction of pretreatment facilities
- 27. Reopener
- 28. Categorical Reopener
- 29. General Prohibitive Standards
- 30. Reports of Potential Problems

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to, and approval by, the permit issuing authority.

2. Reporting

a.) Monitoring results obtained by the permittee shall be reported on forms specified by the Control Authority and/or Municipality, postmarked no later than the twentieth day of the month following the month in which the samples were taken. If no discharge occurs during a reporting period (herein defined as each calendar month) in which a sampling event was to have occurred, a form with the phrase "no discharge" shall be submitted. Copies of these and all other reports required herein shall be submitted to the Control Authority and/or Municipality and shall be sent to the following address:

Name Title Control Authority and/or Municipality Name Address City, State, Zip

b.) If the sampling performed by the permittee indicates a violation, the permittee shall notify the Control Authority and/or Municipality within 24 hours of becoming aware of the violation. The permittee shall also repeat the sampling and analysis and submit the results of the repeat

analysis to the Control Authority and/or Municipality within 30 days after becoming aware of the violation.

NOTE: REQUIRED STREAMLINING CHANGE in Part II, 2, for IUPs with no SIU self monitoring. PERMIT WRITER MUST CHOOSE one of the following two options, or insert your own wording that complies with 40 CFR 403.12(g)(2). See Notes and Wording in Section 5.8 of SUO, and also Streamlining Guidance for more discussion.

c.) If no self-monitoring is required by this IUP, and the sampling performed by the Control Authority and/or Municipality indicates a violation, the Control Authority and/or Municipality shall repeat the sampling and analysis and receive the results of the repeat analysis within 30 days after becoming aware of the violation.

OR

d.) If no self-monitoring is required by this IUP, and the sampling performed by the Control Authority and/or Municipality indicates a violation, the Control Authority and/or Municipality shall notify the permittee within 24 hours of becoming aware of the violation, and the permittee shall sample for the applicable parameter and submit the results of this analysis within 30 days after the POTW became aware of the violation.

3. Test Procedures

Test procedures for the analysis of pollutants shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be submitted to the Control Authority and/or Municipality. The Control Authority and/or Municipality may require more frequent monitoring or the monitoring of other pollutants not required in this permit by written notification.

5. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Control Authority and/or Municipality Sewer Use Ordinance and is grounds for possible enforcement action.

6. Duty to Mitigate - Prevention of Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health, the POTW, the waters receiving the POTW's discharge, or the environment.

7. Facilities Operation, Bypass

The permittee shall at all times maintain in good working order and operate as efficiently as possible, all control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Bypass of treatment facilities is prohibited except when approved in advance by the Control Authority and/or Municipality. Bypass approval shall be given only when such bypass is in compliance with 40 CFR 403.17.

8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from such

materials from entering the sewer system. The permittee is responsible for assuring its compliance with any requirements regarding the generation, treatment, storage, and/or disposal of "Hazardous waste" as defined under the Federal Resource Conservation and Recovery Act.

9. Upset Conditions

An "upset" means an exceptional incident in which there is an unintentional and temporary noncompliance with the effluent limitations of this permit because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed or inadequate treatment facilities, lack of preventative maintenance, or careless or improper operations.

An upset may constitute an affirmative defense for action brought for the noncompliance. The permittee has the burden of proof to provide evidence and demonstrate that none of the factors specifically listed above were responsible for the noncompliance.

10. Right of Entry

The permittee shall allow the staff of the State of North Carolina Department of Environment and Natural Resources, Division of Water Resources, the Regional Administrator of the Environmental Protection Agency, the Control Authority and/or Municipality, and/or their authorized representatives, upon the presentation of credentials:

- 1. To enter upon the permittee's premises where a real or potential discharge is located or in which records are required to be kept under the terms and conditions of this permit; and
- 2. At reasonable times to have access to and copy records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

11. Availability of Records and Reports

The permittee shall retain records of all monitoring information, including all calibration and maintenance records as well as copies of reports and information used to complete the application for this permit for at least three years. All records that pertain to matters that are subject to any type of enforcement action shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

Except for data determined to be confidential under the Sewer Use Ordinance, all reports prepared in accordance with terms of this permit shall be available for public inspection at the Control Authority and/or Municipality. As required by the Sewer Use Ordinance, effluent data shall not be considered confidential.

12. Duty to Provide Information

The permittee shall furnish to the Director of Public Works or his/her designees, within a reasonable time, any information which the Director, his/her designee, or the Division of Water Resources may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish, upon request, copies of records required to be kept by this permit.

NOTE: REQUIRED STREAMLINING CHANGE: Clarify SIU Authorized Representative and Signatory Requirements.

13. Signatory Requirements

General Conditions

All reports or information submitted pursuant to the requirements of this permit must be signed and certified by the Authorized Representative as defined under the Sewer Use Ordinance. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of this section must be submitted to [POTW Director] prior to or together with any reports to be signed by an authorized representative.

14. Toxic Pollutants

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit may be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

15. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

16. Federal and/or State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal and/or State law or regulation.

17. Penalties

The Sewer Use Ordinance of the Control Authority and/or Municipality provides that any person who violates a permit condition is subject to a civil penalty not to exceed \$25,000 dollars per day of such violation.

Under state law, (NCGS 143-215.6B), under certain circumstances it is a crime to violate terms, conditions, or requirements of pretreatment permits. It is a crime to knowingly make 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. These crimes are enforced at the prosecutorial discretion of the local District Attorney.

18. Need to Halt or Reduce not a Defense

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.

19. Transferability

This permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without approval of the Town.

20. Property Rights

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

21. Severability

The provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

22. Permit Modification, Revocation, Termination

This permit may be modified, revoked and reissued or terminated with cause in accordance to the requirements of the Control Authority and/or Municipality Sewer Use Ordinance and North Carolina General Statute or implementing regulations.

23. Re-Application for Permit Renewal

The permittee is responsible for filing an application for reissuance of this permit at least 180 days prior to its expiration date.

24. Dilution Prohibition

The permittee shall not increase the use of potable or 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 the limitations contained in this permit.

25. Reports of Changed Conditions

NOTE: REQUIRED CHANGE: Clarify Changed Conditions Requirements.

The permittee shall give notice to the Control Authority and/or Municipality 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 Control Authority and/or Municipality. Also see Part II, 30 below for additional reporting requirements for spill/slug issues.

NOTE: OPTIONAL CHANGE: Suggested wording to further clarify Changed Conditions Requirements.

Significant changes may include but are not limited to

- (a) increases or decreases to production;
- (b) increases in discharge of previously reported pollutants;
- (c) discharge of pollutants not previously reported to the Control Authority and/or Municipality;
- (d) new or changed product lines;
- (e) new or changed manufacturing processes and/or chemicals; or
- (f) new or changed customers.

26. Construction

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

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 WWTP effluent or any pollutant that is otherwise limited by the POTW discharge permit. The permit as modified or reissued under this paragraph may also contain any other requirements of State or Federal pretreatment regulations then applicable.

28. Categorical Reopener

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 302(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- 1.) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
- 2.) controls any pollutant not limited in this permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

29. General Prohibitive Standards

The permittee shall comply with the general prohibitive discharge standards in 40 CFR 403.5 (a) and (b) of the Federal pretreatment regulations.

NOTE: REQUIRED STREAMLINING CHANGE in Part II, 30: Two new sentences, plus other corrections.

30. Potential Problems

The permittee shall provide protection from accidental and slug discharges of prohibited materials and other substances regulated by this permit. The permittee shall also notify the POTW immediately of any changes at its facility affecting the potential for spills and other accidental discharge, discharge of a non-routine, episodic nature, a non-customary batch discharge, or a slug load as defined in the Sewer Use Ordinance.

Additionally, the permittee shall notify by telephone the Control Authority and/or Municipality immediately of all discharges that could cause problems to the POTW including any slug loadings as defined in the Sewer Use Ordinance. If the permittee experiences such a discharge, they shall inform the Control Authority and/or Municipality immediately upon the first awareness of the commencement of the discharge. Notification shall include location of the discharge, type of waste, concentration and volume if known and corrective actions taken by the permittee. A written follow-up report thereof shall be filed by the permittee within five (5) days, unless waived by the Control Authority and/or Municipality.

Special Conditions

NOTE TO PERMIT WRITERS CHOOSE applicable Special Condition MAKE any needed adjustments REMOVE rest, Including "Note to Permit Writer"

1. Slug/Spill Control Measures

NOTE TO PERMIT WRITER: REQUIRED STREAMLINING CHANGE in Part III, 1: 403 now requires POTW that require SIUs to implement any slug/spill control measures, to list those measures in the IUP. Additionally, 403 allows POTWs to require the traditional Slug/Spill Control Plan or to require any specific other measure. For example, the POTW might require one or more of the following "example measures."

- 1. Submit Slug/Spill Control Plan in accordance with SUO [Section 2.8(c)]; Implement Upon POTW Approval
- 2. Implement approved Slug/Spill Control Plan
- 3. Implement POTW Approved (Insert Name of SIU's Plan/SOP/Other Document)
- 4a. Submit plans for installation of berms around XXX, with alarms to detect spills and an SOP of operation.
- 4b. Complete installation of berms and alarms and commence implementation of approved SOP.
- 5. Plug Floor Drains in <u>(list areas here)</u>.

These or any other "measures" a POTW wants to require would be listed in the blanks in the Suggested Special Condition below, with any applicable due dates.

In addition to the requirements in Part II, 30, the Permittee shall complete installation and/or commence implementation, operation, and/or maintenance of the following specific protection Measures, Activities, Plans. Etc. (Items without specific completion dates, or marked as "Continuous." must be performed for the entire duration of the permit):

	Required
	Completion/
	Implementation
Description of Measure, Activity, Plan, etc.	Date

The permittee shall provide updates to the Control Authority as required by Part II, 30, of this IUP. Modifications to the measures shall be approved by the

Control Authority prior to installation/implementation. If a measure fails, the Control Authority shall be notified within 24 hours.

2. Sludge Management Plan

Ninety days prior to the initial disposal of sludge generated by any pretreatment facility, the permittee shall submit a sludge management plan to the Control Authority.

3. Flow Measurement Requirements

(For SIUs with discharge flow meters)

The meter shall be calibrated every _____ (enter time period). Modifications to the flow metering equipment shall be approved by the Control Authority prior to installation. If a required flow measurement device fails, the Control Authority shall be notified within 24 hours.

OR:

3. Flow Measurement Requirements

(For SIUs currently without discharge flow meters)

- a.) Temporary Flow Measurement Method Until such time as discharge flow measurement devices for individual regulated pipes are required by the Control Authority, the permittee shall record the water meter reading providing water to the facility at the beginning and end of each composite sample collection time period, convert this to an estimate of the daily discharge flow for each pipe, and report this value on the discharge monitoring report form.
- b.) Installation of Discharge Flow Measurement Devices If required by any of the following: the Control Authority, Submit Plans to Control Authority by _____ Complete Installation by _____ Use of production based Effluent Limits

Use of Mass based Effluent Limits

Use of Combined Wastestream Formula Effluent Limits

the permittee shall install appropriate discharge flow measurement devices and methods consistent with approved scientific practices to ensure the accuracy and reliability of measurements of the volume of monitored discharges. Devices installed shall be a continuous recording flow meter capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. The devices shall be installed, calibrated, and maintained to ensure accuracy. If a required flow measurement device fails, the Control Authority shall be notified within 24 hours. Modifications to the flow metering equipment shall be approved by the Control Authority prior to installation.

4. Certified Laboratory Analysis

Pollutant analysis shall be performed by a North Carolina Division of Water Resources Certified Laboratory that is certified in the analysis of the pollutant in wastewater.

5. Certified Operator

Pursuant to Chapter 90A-44 of North Carolina General Statutes, and upon classification of the facility by the Certification Commission, the permittee shall employ a certified wastewater pretreatment plant operator in responsible charge (ORC) of the wastewater treatment facilities. Such operator must hold a certification of the type and grade equivalent to, or greater than the classification assigned to the wastewater treatment facilities by the Certification Commission. The permittee must also employ a certified backup operator of the appropriate type and grade to comply with the conditions of Title 15A, Chapter 8A .0202. The ORC of the facility must visit the wastewater facility as required; must properly manage and document daily operation and maintenance of the facility; and must comply with all other conditions of Title 15A, Chapter 8A .0202. The permittee shall submit a letter designating the operator in responsible charge to the Certification Commission or their designee within thirty days after facility classification.

6. Total Toxic Organics (TTO) Definition

"TTO", or Total Toxic Organics, is the sum of the concentrations of the toxic organic compounds listed in 40 CFR ______ that are found in the permittee's process discharge at a concentration greater than 0.01 mg/l.

7. Total Toxic Organics (TTO) Certification

In lieu of monitoring for TTO, the permittee may, upon submitting to the Control Authority one sample showing TTO compliance and a toxic organic management plan, make the following certification every six months:

"Based upon my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the Control Authority."

NOTE TO PERMIT WRITER: If SIU decides not to submit certification, the POTW must perform TTO analysis at least once per year in order to comply with 15A NCAC 02H .0908(d). Wording below addresses this, in particular requiring the July through December certification to be submitted <u>before the end of December (we suggest the 15th or maybe earlier)</u>, so that the POTW will actually have time to collect the TTO sample before the end of December.

Note wording about billing is OPTIONAL.

At a minimum, the certification statements are due by ______ of each year covering the January through June six month period, and December ______ of each year covering the July through December six month reporting period. If the certification is not submitted for both periods within ______ days of the respective due dates, the Control Authority shall collect TTO samples before December 31 {and the permittee may be billed for the cost of the TTO sampling and/or analysis}.

8. Toxic Organic Management Plan

Within ninety days of the issuance of this permit, the permittee shall develop and submit to the Control Authority a toxic organic management plan.

9. Production Records

(for Categorical Industrial Users Covered by Production Based Categorical Standards only)

The permittee shall keep records of the number of off-pounds of metal processed each day of production for each core and ancillary operation covered by 40 CFR ______. These records shall be submitted to the Control Authority by _______ and _____ (enter as dates), and shall cover the previous six month report period (January through June and July through December). Additionally, the applicable daily production data shall be recorded in all submittals of sampling data.

Additionally, the permittee shall notify the [POTW Director] within two (2) business days after the User has a reasonable basis to know that the production level will significantly change within the next calendar month. 40 CFR 403.6(c)(9).

10. Combined Wastestream Formula Flow Condition (for Categorical Industrial Users only)

Regulated Categorical Process Flow:

The permittee shall have available flow monitoring equipment at such locations as necessary to measure the total daily volume of wastewater discharged that is covered by 40 CFR ______. This flow monitoring equipment shall also be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes, however it is not required that it be continuous recording. At the time of issuance of the permit, this method consists of ______

and the frequency shall be ______ and data shall be collected and reported as required in Part II, 1-4 of this IUP. Modifications to the flow metering equipment shall be approved by the Control Authority prior to installation.

NOTE TO PERMIT WRITER: The following are OPTIONAL STREAMLINING CONDITIONS

11. Monitoring Waiver Parameters

Monitoring by the permittee and the Control Authority has been waived for the following parameters in accordance with 40 CFR 403.12(e)(2).

Parameter Name	40 CFR	Standards

The permittee shall provide the following certification with each report required by Part II, 2, of this IUP, but in no case less than once every six months.

"Based upon my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standards for 40 CFR ______, I certify that, to the best of my knowledge, there has been no increase in the

level of _

in the wastewaters due to the activities at the facility since filing of the [[[last monitoring report]]] [[[last periodic report under 40 CFR 403.12(e)(1).]]]"

In the event that a waived parameter is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee shall immediately notify the Control Authority and sample for the parameter within _____ days of the notification.

12. Equivalent Concentration Limits

This SIU is subject to 40CFR _____, and has been approved for Equivalent Concentration Limits as allowed by 40 CFR 403.6(c)(6). In order to demonstrate dilution is not being used, and to remain eligible for the Equivalent Concentration Limits, the following conditions must be met.

- a) Continue appropriate effluent flow monitoring. Currently consisting of [fill in method & frequency].
- b) Record production rates.
- c) Submit monthly flow and production rate summaries by the 20th day of the following month, with an analysis of flow and production rate changes to demonstrate no dilution.

Increases in flow not accompanied by a corresponding increase in production may be an indication of dilution, will be investigated and could result in disqualification.

13. Equivalent Mass Limits

This SIU is subject to 40CFR _____, and has been approved for Equivalent Mass Limits for Concentration Limits as allowed by 40CFR 403.6(c)(5). In order to remain eligible for the Equivalent Mass Limits, the following conditions must be met.

- a. Maintain and effectively operate control and treatment technology adequate to achieve compliance with the equivalent mass limit. Currently consisting of:
- b. Continue appropriate effluent flow monitoring. Currently consisting of [fill in method & frequency].
- c. Continue to record production rates.
- d. Notify the POTW immediately if production rates vary by more than 20% of the production used as the basis for calculating the equivalent mass limits.
- e. Submit monthly flow and production rate summaries by the 20th day of the following month, with an analysis of flow and production rate changes to demonstrate no dilution.
- f. Continue to employ the same or comparable water conservation measures.

Failure to comply with any of the above conditions disqualifies the User from coverage by equivalent mass limits. Pre-existing concentration-based Pretreatment Standards will be automatically enforceable at the time of disqualification.
A. IUP Basic Information

Receiving POTW name:	POTW NPDES#:
IUP name:	IUP Number:
IUP Effective date:	Pipe Numbers, list all regulated pipes:
IUP expiration date:	IUP 40 CFR#, if applicable:

B. IUP Survey & Application form

Attach a completed copy of the Industrial User Wastewater Survey & Application Form (see appendix 6-A)

C. IU Inspection form

Attach a copy of an Industrial User Inspection Form (see chapter 7) completed by the Control Authority within the past 12 months.

D. RATIONALE FOR LIMITATIONS:

As listed on the IUP Limits Page(s), PART I, Section F of the IUP.

RATIONALE #1:

Review of IU Monitoring Data, with no Over Allocation situation:

The following pollutants were assigned numerical limits in this IUP based on a review of monitoring data for the permittee to determine what ranges of concentrations are currently being discharged. To account for sample variability a factor was applied to the monitoring data to determine the permit limit. Permit limits assigned by the Local IUP Control Authority can not results in an Over Allocation situation for any pollutants.

RATIONALE #2a:

Categorical Industrial Limits, with no Over Allocation situation:

Check here if Combined Wastestream Formula (CWF) or other categorical limits calculations were used. If used, Please attach calculations: (see CWF Spreadsheet, Appendix 6-F)

Were used (attach calculations)	
Were not used	

The following pollutants were assigned numerical limits in this IUP based on the categorical regulations. These limits do not result in over allocations.

RATIONALE #3a:

Over Allocation Prevention, with IU pollutant reduction:

The following pollutants were assigned numerical limits in this IUP based on allocating the Maximum Allowable Industrial Loading (MAIL) determined with the Headworks Analysis (HWA) among all Industrial Users. The total loading of each pollutant from all permitted discharges does not exceed the MAIL. These limits do not result on over allocations.

RATIONALE #3b:

Interim Limits for IU pollutant reduction:

The following pollutants were assigned interim numerical limits in this IUP to allow time for the industry to come compliance with final limits that will not in over allocations.

RATIONALE #4:

4.) Other Rationale for Limitations:

The following rationale was used for developing IUP Limits.

Parameter	Rationale

RATIONALE #5a:

Non-Categorical Parameters where No Limit needed or assigned in an IUP:

The following pollutants were not assigned numerical limits in this IUP because the loadings for these pollutants from this IU were less than 5% of the MAHL. The loading of these pollutants from this IU is considered insignificant at this time.

Pollutant	Avg SIU mg/l	Avg SIU lbs/day	5% MAHL, lbs/day
Flow			

RATIONALE #5b:

Categorical Parameters with Waived Monitoring:

Monitoring is waived for the following categorical parameters (attach documentation of waiver justification).