

**Summary Page**

**Name of Facility** N.W. Fries, Inc. (Sylvania Debone)

**County** Screven County

**Pretreatment Permit No.** GAP050334

This permit is a new issuance for Sylvania Debone. The facility will discharge a maximum of 97,500 gallons per day of wastewater from their poultry slaughter and processing facility. This facility discharges to the City of Sylvania Wastewater Pollution Control Plant in the Savannah River Basin.

The permit was placed on public notice from March 29, 2019 to May 4, 2019. Comments were received.

**Standard Conditions & Boilerplate Modifications**

The permit boilerplate includes modified language or added language consistent with other industrial pretreatment permits.

**Final Permit Determinations and Public Comments**

- Final issued permit did not change from the draft permit placed on public notice.
- Final permit includes changes from the draft permit placed on public notice. See attached permit addendum and/or permit fact sheet addendum.
- Public comments were received during public notice period.
- Public hearing was held.



**ENVIRONMENTAL PROTECTION DIVISION**

**Richard E. Dunn, Director**

**Watershed Protection Branch**  
2 Martin Luther King, Jr. Drive  
Suite 1152, East Tower  
Atlanta, Georgia 30334  
404-463-1511

**MAY 28 2019**

Persons who commented on  
Draft Pretreatment Permit No. GAP050334

**RE: EPD Response to Comments  
N.W. Fries, Inc. (Sylvania Debone)  
Pretreatment Permit No. GAP050334**

To Whom it May Concern:

Thank you for your comments regarding the permit issuance for the N.W. Fries, Inc. (Sylvania Debone) Pretreatment Permit. Attached is a summary of comments from the public and our responses to the issue raised. We appreciate your interest in this matter.

After consideration of your comments, EPD has determined that the permit is protective of water quality standards and we have issued the permit.

If you have any questions, please contact Whitney Fenwick of my staff at 404-656-2795.

Sincerely,

A handwritten signature in blue ink, appearing to read "Audra Dickson", with a horizontal line above it.

**Audra Dickson, Manager  
Wastewater Regulatory Program  
Watershed Protection Branch**

AHD/wf

Attachment

**Public Comments and EPD Responses on Draft Pretreatment Permit  
N.W. Fries, Inc. (Sylvania Debone) – Permit No. GAP050334**

| <b>COMMENTS RECEIVED</b>   | <b>EPD RESPONSE</b>  |
|--|--|
| <p>The city of Sylvania, GA has a waste treatment plant located on Friendship Road on the outer city limits. It has been there over 45 years and dumps wastewater in Buck Creek.</p> <p>The City's wastewater treatment plant does not have a permit to dump wastewater into Buck Creek and has not had one since 2006.</p>  | <p>The pretreatment permit on public notice is for the N.W. Fries, Inc (Sylvania Debone) facility which is proposing to discharge to the City of Sylvania's wastewater treatment plant. The City of Sylvania is authorized to discharge treated wastewater to Buck Creek in accordance with state and federal regulations.</p> <p>The City of Sylvania operates the Sylvania Water Pollution Control Plant at 624 Friendship Road, Sylvania, Georgia 30467 has an effective NPDES permit (permit no. GA0021385) that was administratively extended on July 30, 2006. A letter was mailed to the City of Sylvania on June 27, 2006 by the EPD indicating the EPD's intent to extend permit GA0021385 until such time that it could be reissued within the appropriate river basin group.</p> <p>On April 30, 2019, EPD placed the City's NPDES draft renewal permit for the wastewater treatment plant on public notice for review and comment.</p> |
| <p>The city has all of its storm drains from all over town and they are also routed to Buck Creek.</p> <p>The city is supposed to have a permit to dump all of the storm drains into Buck Creek, but they do not.</p> <p>The storm drains from all over the city contain all types of trash, chemicals, raw sewage, and runoff from all the storms and streets and houses from the City of Sylvania and this is not regulated by the EPD or the health department.</p> | <p>As mentioned above in the EPD response, the pretreatment permit on public notice is for the N.W. Fries, Inc (Sylvania Debone) facility which is proposing to discharge to the City of Sylvania's wastewater treatment plant. The facility is not proposing a direct discharge to Buck Creek.</p>  |

**Public Comments and EPD Responses on Draft Pretreatment Permit  
N.W. Fries, Inc. (Sylvania Debone) – Permit No. GAP050334**

|  |   |
|--|---|
| <p>The waste treatment plant over the years has had many raw sewage spills that have damaged all the property on Buck Creek.</p> <p>I have samples that I have taken of the spills and also documentation of all the times I have reported this to the city, EPD, Corps of Engineers, EPA and federal investigators.</p> <p>I have also tested the water and soil and all tests came back contaminated.</p> <p>All of the tests that were taken have high levels of pathogens, viruses and other types of hazardous materials.</p> <p>I do not let any of my family get close to the creek for fear of some type of sickness they might get from contact with the creek.</p> | <p>The pretreatment permit on public notice is for the N.W. Fries, Inc (Sylvania Debone) facility which is proposing to discharge to the City of Sylvania's wastewater treatment plant.</p> <p>EPD issued a Consent Order to the City of Sylvania in 2014 regarding spills to waters of the state.</p> <p>The commenter did not provide dates of alleged spills or results of soil or water sampling with the submitted comments for EPD to further evaluate and research the concerns.</p>   |
| <p>The wastewater treatment plant dumps from 800,000 to over 2,000,000 gallons of wastewater into the creek on a daily basis that is supposed to be treated wastewater.</p> <p>By federal law no plant can dump water into a creek with no flow and Buck Creek has no flow unless it rains &gt;5".</p> <p>90% of the flow in Buck Creek is wastewater and storm sewer from the City of Sylvania.</p>   | <p>The pretreatment permit on public notice is for the N.W. Fries, Inc (Sylvania Debone) facility which is proposing to discharge to the City of Sylvania's wastewater treatment plant. The City of Sylvania is authorized to discharge treated wastewater to Buck Creek in accordance with state and federal regulations.</p> <p>The permit application for N.W. Fries, Inc. indicates a total flow of 66,000 gallons per day of treated process and nonprocess wastewater to the Sylvania water pollution control plant. The City of Sylvania is permitted to discharge up to 1.51 million gallons per day.</p> |

**Public Comments and EPD Responses on Draft Pretreatment Permit  
N.W. Fries, Inc. (Sylvania Debone) – Permit No. GAP050334**

The wasteload allocation included in Appendix A of the Fact Sheet for the draft reissuance of Sylvania WPCP's NPDES Permit indicates that the mean annual streamflow at discharge for Buck Creek is 2.6 cfs or 1.7 million gallons per day.



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

**ENVIRONMENTAL PROTECTION DIVISION**

**Richard E. Dunn, Director**

**EPD Director's Office**  
2 Martin Luther King, Jr. Drive  
Suite 1456, East Tower  
Atlanta, Georgia 30334  
404-656-4713

**MAY 28 2019**

Mr. Steven Fries, Director  
N.W. Fries, Inc.  
575 Industrial Park Road  
Sylvania, Georgia 30467

**RE: Permit Issuance**  
**Sylvania Debone**  
**Pretreatment Permit No. GAP050334**  
**Screven County, Savannah River Basin**

Dear Mr. Fries:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division  
East Central District  
3525 Walton Way Ext.  
Augusta, Georgia 30909

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Whitney Fenwick at 404.656.2795 or [whitney.fenwick@dnr.ga.gov](mailto:whitney.fenwick@dnr.ga.gov).

Sincerely,

Richard E. Dunn  
Director

RED:wf

Enclosure(s)

cc: EPD East Central District Office (Augusta) -- Taylor Stow ([taylor.stow1@dnr.ga.gov](mailto:taylor.stow1@dnr.ga.gov))  
Mr. Robert F. Peoples, P.E. ([rpeoples@pandqinc.com](mailto:rpeoples@pandqinc.com))  
Mr. Steven Fries ([steven\\_fries@claxtonpoultry.com](mailto:steven_fries@claxtonpoultry.com))

Permit No. GAP050334  
Issuance Date: MAY 28 2019



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### Industrial Pretreatment Permit

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

N.W. Fries, Inc.  
575 Industrial Park Road  
Sylvania, Georgia 30467

is authorized to discharge from a facility located at

Sylvania Debone  
575 Industrial Park Road  
Sylvania, Georgia 30467  
Screven County

to the sewerage system tributary to the

City of Sylvania Wastewater Pollution Control Plant in the Savannah River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on October 30, 2018, any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This facility is subject to the terms, conditions and requirements of 40 Code of Federal Regulations (CFR) Part 403 and the Georgia Water Quality Control Act Chapter 391-3-6.

This permit shall become effective on June 1, 2019.

This permit and the authorization to discharge shall expire at midnight May 31, 2024.



Richard E. Dunn, Director  
Environmental Protection Division

**PART I**

**A.1 Effluent Limitations and Monitoring Requirements**

During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall no. 001: treated process wastewater to the City of Sylvania Wastewater Pollution Control Plant.

Such discharges shall be limited and monitored by the permittee as specified below:

| Effluent Characteristics<br>(Specify Units) | Discharge Limitations |            |                            |            | Monitoring Requirements <sup>1</sup> |                      |                             |
|---|-----------------------|------------|----------------------------|------------|--------------------------------------|----------------------|-----------------------------|
|   | Mass Based (lbs/day)  |            | Concentration Based (mg/L) |            | Measurement Frequency                | Sample Type          | Sample Location             |
|   | Daily Avg.            | Daily Max. | Daily Avg.                 | Daily Max. |                                      |                      |                             |
| Flow (MGD)                                  | 0.066                 | 0.097      | --                         | --         | Daily                                | Continuous Recording | Final Effluent <sup>2</sup> |
| Oil & Grease                                | --                    | --         | 100                        | 100        | 2/Month                              | Grab                 | Final Effluent <sup>2</sup> |
| BOD <sub>5</sub>                            | --                    | --         | 300                        | 300        | 2/Month                              | Grab                 | Final Effluent <sup>2</sup> |
| TSS   | --                    | --         | 300                        | 300        | 2/Month                              | Grab                 | Final Effluent <sup>2</sup> |
| Ammonia, as N                               | --                    | --         | 30                         | 30         | 2/Month                              | Grab                 | Final Effluent <sup>2</sup> |

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored monthly by grab sample.

- <sup>1</sup> All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report for the monitoring period.
- <sup>2</sup> The final effluent for purposes of sampling, monitoring, and the application of pretreatment limitations is the final discharge point prior to entry into the sewerage system.

**B. Monitoring**

**1. Representative Sampling**

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

**2. Sampling Period**

- a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.
- b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.
- c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

**3. Monitoring Procedures**

Analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

**4. Detection Limit**

All parameters will be analyzed using the appropriate detection limits. If the results for a given sample are such that a parameter is not detected at or above the specified detection limit, a value of "NOT DETECTED" will be reported for that sample and the detection limit will also be reported.

**5. Recording of Results**

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;
- b. The dates and times the analyses were performed, and the person(s) performing the analyses;
- c. The analytical techniques or methods used;
- d. The results of all required analyses.

**6. 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 included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

**7. Records Retention**

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a minimum of three (3) years from the date of the sample, measurement, report or application, or longer if requested by EPD.

**8. Penalties**

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes 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 shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.

**C. Definitions**

1. A "bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
2. A "calendar day" is defined as any consecutive 24-hour period.
3. A "composite" sample shall consist of samples collected at intervals not less frequently than every two hours for a period of 24 hours or for the actual time the pretreatment facility is discharging (if less than 24 hours), and composited according to flow.
4. The "daily average" mass means the total discharge by mass during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.
5. The "daily maximum" mass means the total discharge by mass during any calendar day.
6. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.
7. The "daily maximum" concentration means the daily determination of concentration for any calendar day.
8. The "daily maximum flow" is the largest total volume determined for any 24 hour period.
9. "EPD" as used herein means the Environmental Protection Division of the Department of Natural Resources.
10. A "POTW" as used herein means Publicly-Owned Treatment Works.
11. The "Rules" as used herein means the Georgia Rules and Regulations for Water Quality Control.
12. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
13. The "State Act" as used herein means the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).

**D. Reporting Requirements**

1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.
  - a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: <https://netdmr.epa.gov/netdmr/public/home.htm>
  - b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.
  - c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.
  - d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.
2. No later than December 21, 2020, the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:
  - a. Sewer Overflow/Bypass Event Reports;
  - b. Noncompliance Notification;
  - c. Other noncompliance; and
  - d. Bypass

**3. Other Reports**

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

**4. Other Noncompliance**

All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

## **5. Signatory Requirements**

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

- a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:
  1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:
    - i a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or
    - ii the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
  3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.
- b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:
  1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;
  2. The authorization is made in writing by the person designated under (a) above; and
  3. The written authorization is submitted to the Director.
- c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.

- d. Any person signing any document under (a) or (b) above shall make the following certification:

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

## **PART II**

### **A. Management Requirements**

#### **1. Notification of Changes**

- a. The permittee shall provide EPD at least 90 days advance notice of any planned physical alterations or additions to the permitted facility that meet the following criteria:
  1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
  2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
  3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. The permittee shall give at least 90 days advance notice to EPD of any planned changes to the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Following the notice in paragraph a. or b. of this condition the permit may be modified. The permittee shall not make any changes, or conduct any activities, requiring notification in paragraph a. or b. of this condition without approval from EPD.
- d. The permittee shall provide at least 30 days advance notice to EPD of:
  1. any planned expansion or increase in production capacity; or
  2. any planned installation of new equipment or modification of existing processes that could increase the quantity of pollutants discharged or result in the discharge of pollutants that were not being discharged prior to the planned change

if such change was not identified in the permit application(s) upon which this permit is based and for which notice was not submitted under paragraphs a. or b. of this condition.

- e. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 100 µg/L, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 µg/L for acrolein and acrylonitrile, 500 µg/L for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/L antimony.
- f. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a nonroutine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 500 µg/L, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/L antimony.
- g. Upon the effective date of this permit, the permittee shall submit to EPD an annual certification in June of each year certifying whether or not there has been any change in processes or wastewater characteristics as described in the submitted NPDES permit application that required notification in paragraph a., b., or d. of this condition. The permittee shall also certify annually in June whether the facility has received offsite wastes or wastewater and detail any such occurrences.

## **2. Noncompliance Notification**

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD and the owner of the receiving POTW with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

## **3. Facility Operation**

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

**4. 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 or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

**5. Bypassing**

- a. Any diversion from or bypass of pretreatment facilities covered by this permit is prohibited, except where unavoidable to prevent personal injury, loss of life, or severe property damage. The permittee shall operate the pretreatment works to minimize discharge of the pollutants listed in this permit from overflows or bypasses. The permittee shall monitor all overflows, bypasses, or spills. EPD and the owner of the receiving POTW shall be notified, in advance if possible, of any overflows, bypasses or spills. A record of each overflow bypass and spill shall be kept with information on the location, cause, duration, a peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing overflows, bypasses or spills.
- b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD and the owner of the receiving POTW at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:
  1. A description of the discharge and cause of noncompliance; and
  2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

**6. Sludge Disposal Requirements**

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 pollutant from such materials from entering waters of the State or creating an adverse impact on the environment. Handling and disposal of such substances shall be in accordance with all applicable State and Federal regulations. Records must be maintained of the quantity (volume and concentration or mass) of such substances; the method of disposal; the location or site; and the date and time of disposal.

Sludge shall be disposed of in accordance with the regulations and guidelines established by EPD, the Federal Clean Water Act, and the Resource Conservation and Recovery Act (RCRA). Prior to disposal of sludge by any method other than co-disposal in an

appropriate and permitted landfill, the permittee shall submit a sludge management plan to EPD for written approval. For land application of nonhazardous sludge, the permittee shall comply with the applicable criteria outlined in the most current version of EPD's "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. EPD may require more stringent control of this activity. Prior to land applying nonhazardous sludge, the permittee shall submit a sludge management plan to EPD for review and approval. Upon approval, the plan for land application will become a part of the NPDES permit upon modification of the permit.

**7. Sludge Monitoring Requirements**

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported (in the unit of lbs) to EPD as specified in Part I.D of this permit.

**8. Power Failures**

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

**9. Operator Certification Requirements**

The permittee shall, when required, have a certified operator in charge of the facility in accordance with Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant operators And Laboratory Analysts Rule 43-51-6.(b).

**10. Laboratory Analyst Certification Requirements**

The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analyses for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant operators and Laboratory Analysts Act, as amended, and the Rules promulgated thereunder.

**B. Responsibilities**

**1. Right of Entry**

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a discharge source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

**2. Transfer of Ownership or Control**

A permit may be transferred to another person by a permittee if:

- a. The permittee notifies the Director of EPD and the owner of the receiving POTW in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;

A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and

- b. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD's intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

**3. Availability of Reports**

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

#### **4. Permit Modification**

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or
- d. To comply with any applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:
  1. is different in conditions or more stringent than any effluent limitation in the permit; or
  2. controls any pollutant not limited in the permit.

#### **5. Toxic Pollutants**

Notwithstanding Part II B.8 below, if a toxic discharge standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal 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 shall be revised or modified in accordance with the toxic discharge standard or prohibition and the permittee so notified.

#### **6. Civil and Criminal Liability**

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

#### **7. 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 State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

**8. Local Ordinances**

Nothing in this permit shall be construed to relieve the permittee from the responsibility of compliance with any local ordinance whose requirements are more stringent than those contained in this permit.

**9. Property Rights**

The issuance of 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.

**10. Expiration of Permit**

The permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by EPD at least 180 days prior to the expiration date.

**11. Contested Hearings**

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

**12. 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.

**13. Best Management Practices**

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage, in-plant transfer, process and material handling, loading and unloading operations, plant site runoff, and sludge and waste disposal.

**14. Need to Halt or Reduce Activity 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 in order to maintain compliance with the conditions of this permit.

**15. Duty to Provide Information**

- a. The permittee shall furnish to the EPD Director, within a reasonable time, any information which the Director 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.
- b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

**16. Duty to Comply**

- a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) and is grounds for enforcement action; for permit termination; revocation and reissuance, or modification; or for denial of a permit renewal application. Any instances of noncompliance must be reported to EPD as specified in Part I.D and Part II.A of this permit.
- b. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this permit, makes 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 shall, upon conviction be punished by a fine or by imprisonment, or by both. The Georgia Water Quality Control Act (Act) also provides procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

**17. Upset Provisions**

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

### **PART III**

#### **A. Previous Permits**

1. All previous State waste water permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

#### **B. Schedule of Compliance**

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:
  - a. The permittee must startup all pollution control equipment required to meet the conditions of its permits before beginning to discharge and must meet all permit conditions within the shortest feasible time, which may not exceed 90 days.
2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

#### **C. Special Conditions**

1. The permittee shall not discharge substances in amounts, concentrations or combinations thereof which:
  - a. interfere with the operation of the City of Sylvania Waste Pollution Control Plant;
  - b. cause pass-through of pollutants in violation of the effluent limitations specified in National Pollutant Discharge Elimination System Permit No. GA0021385;
  - c. cause municipal sludge contamination; or
  - d. cause pass-through of pollutants that result in toxicity in aquatic life in the receiving stream.

**2. Slug Discharges**

- a. Slug discharge shall be defined as any discharge of a non-routine, episodic nature including, but not limited to an accidental spill or a non-customary batch discharge.
  - b. The permittee shall notify the EPD and the owner of the receiving POTW immediately of any discharge or discharges including slug discharges that could result in operational problems at the POTW.
  - c. Upon notification from the EPD, the permittee shall develop and implement a plan to control slug discharges in accordance with the requirements of 40 CFR Part 403.8.
3. If sampling performed by the permittee indicates a violation, the permittee shall immediately notify the EPD Compliance Office within twenty-four (24) hours of becoming aware of the violation. For continuous dischargers, the permittee shall also immediately, within 24 hours, repeat the sampling and analysis of all of the constituents that may have contributed to the violation. For intermittent dischargers, repeat sampling and analysis should be conducted on the subsequent discharge. The sampling results shall be submitted to the EPD Compliance Office within 30 days after becoming aware of the violation.



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

The Georgia Environmental Protection Division proposes to issue a Pretreatment permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

**Technical Contact:** Whitney Fenwick (whitney.fenwick@dnr.ga.gov)  
404-656-2795

**Draft permit:**

|                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | first issuance   |
| <input type="checkbox"/>            | reissuance with no or minor modifications from previous permit |
| <input type="checkbox"/>            | reissuance with substantial modifications from previous permit |
| <input type="checkbox"/>            | modification of existing permit                                |
| <input type="checkbox"/>            | requires EPA review  |

### 1.0 FACILITY INFORMATION

**1.1 Pretreatment Permit No.:** GAP050334

**1.2 Name and Address of Owner/Applicant**

N.W. Fries, Inc.  
575 Industrial Park Road  
Sylvania, Georgia, 30467  
Screven County

**1.3 Name and Address of Facility**

Sylvania Debone  
575 Industrial Park Road  
Sylvania, Georgia, 30467  
Screven County

**1.4 Facility Information**

a. Average Flow: 0.066 MGD

d. Max Flow: 0.097 MGD

b. Categorical (Y/N): N

e. Significant Industrial User (Y/N): Y

c. Production Based (Y/N): N

f. Production Capacity: N/A

**1.5 SIC Code & Description: 2015 – Poultry Slaughtering and Processing**

**1.6 Description of Industrial Processes**

The Sylvania Debone facility receives deceased chickens, where further processing is conducted; such as cutting and deboning.

**1.7 Description of the Industrial Wastewater Treatment Facility**

Process wastewater is filtered by a 0.02 inch wedge wire screen and transferred to a pump wet well, where equalization may occur. Following the wet well, wastewater is discharged to the City of Sylvania Wastewater Treatment Plant.

The sanitary waste stream is send to the City through a separate sewer line, thus only process wastewater is discharged.

**1.8 Type of Wastewater Discharge**

- |  |                                     |
|--|-------------------------------------|
| <input checked="" type="checkbox"/> process wastewater | <input type="checkbox"/> stormwater |
| <input type="checkbox"/> domestic wastewater           | <input type="checkbox"/> combined   |
| <input type="checkbox"/> other                         |                                     |

**1.9 Name and Address of Receiving POTW**

City of Sylvania Wastewater Pollution Control Plant  
 624 Friendship Road  
 Sylvania, Georgia 30467  
 Screven County

**1.10 Location and Description of the discharge (as reported by applicant)**

| Outfall # | Receiving POTW        | Receiving POTW Permit No. | Max Receiving POTW Permitted Flow | River Basin |
|-----------|-----------------------|---------------------------|-----------------------------------|-------------|
| 001       | City of Sylvania WPCP | GA0021385                 | 1.89 MGD                          | Savannah    |

**1.11 Receiving POTW Design Capacity: 1.5 MGD (Weekly Average)**

**1.12 Description of the POTW Wastewater Treatment**

The influent wastestream flows through a bar screen and is discharged into one of three aeration basins. The effluent from the aeration basins is treated in a clarifier, where the solids are sent to a digester and the remaining wastestream is sent to chlorine contact chamber. The wastewater is dechlorinated and discharged to Buck Creek in the Savannah River Basin. Sludge is removed from the digester and hauled to a landfill.

**1.13 Characterization of Effluent Discharge as Reported by Applicant**

The table below indicates all pollutants of concern believed present in the facility's wastewater effluent. The values provided are estimates based on similar industry discharges, which the applicant believes to be representative of the proposed effluent discharge.

**Outfall No. 001 – Treated Wastewater**

| Effluent Characteristics<br>(as Reported by Applicant) | Average<br>Daily Value | Maximum<br>Daily Value |
|--|------------------------|------------------------|
| Flow (MGD)   | 0.066                  | 0.097                  |
| Biochemical Oxygen Demand<br>(mg/L)                    | 1,000                  | 1,500                  |
| Chemical Oxygen Demand<br>(mg/L)                       | 1,500                  | 3,000                  |
| Oil & Grease (mg/L)                                    | 10                     | 30                     |
| Total Suspended Solids (mg/L)                          | 400                    | 600                    |
| Ammonia, as N (mg/L)                                   | 10                     | 20                     |
| Phosphorus, Total (mg/L)                               | 5                      | 5                      |
| Total Kjeldahl Nitrogen                                | 5                      | 10                     |
| pH (s.u.)  | 6 – 8                  | 6 – 8                  |

**2.0 APPLICABLE REGULATIONS**

**2.1 Local Regulations**

City of Sylvania Code of Ordinances Sec. 74-40. (Sewer Use Ordinance)  
See Appendix A for Sewer Use Ordinance

**2.1 State Regulations**

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

**2.2 Federal Regulations**

| Source     | Activity                 | Applicable Regulation |
|------------|--------------------------|-----------------------|
| Industrial | Pretreatment             | 40 CFR 403            |
|            | Process Water Discharges | 40 CFR 122            |
|            |                          | 40 CFR 125            |

**2.3 Industrial Effluent Limit Guideline(s) – N/A**

### 3.0 EFFLUENT LIMITS AND PERMIT CONDITIONS

#### 3.1 Permit Development

“The national pretreatment program objectives are achieved by applying and enforcing three types of pretreatment standards:”

- General and specific prohibitions
- Categorical pretreatment standards
- Local limits

“All three types of standards can be enforced by EPA, the state, and local government, even though they are developed at different levels of government (i.e., federal, state, and local). Pretreatment standards and requirements can be expressed as numeric limits, narrative prohibitions, and best management practices.”

“The control authority is responsible for identifying standard(s) applicable to each IU and applying the most stringent requirements where multiple provisions exist.” EPA Guidance - *Applicability of Pretreatment Standards and Requirements* (<https://www.epa.gov/npdes/pretreatment-standards-and-requirements>)

“Local limits are developed for pollutants (e.g. metals, cyanide, BOD5 , TSS, oil and grease, organics) that may cause interference, pass through, sludge contamination, and/or worker health and safety problems if discharged in excess of the receiving POTW treatment plant’s capabilities and/or receiving water quality standards.” EPA Guidance Document – *Introduction to the National Pretreatment Program, February 1999*

Local limit considerations can be broken down into several categories consisting of: sewer use ordinances, state level local limits, POTW NPDES limits, water quality standards, and POTW inhibition.

#### 3.2 Conventional Pollutants

| Pollutants of Concern | Basis  |
|-----------------------|--|
| pH                    | <u>Local Limit</u><br>The City of Sylvania’s Sewer Use Ordinance has established an allowable pH range of 6.0 s.u. to 9.0 s.u.   |
|                       | <u>Categorical Limit</u><br>There is no applicable federally based categorical limit.  |
| Oil and Grease        | <u>Local Limit</u><br>The City of Sylvania’s Sewer Use Ordinance establishes a daily average of 100 mg/L and daily maximum limit of 100 mg/L tested via a grab sample. |
|                       | <u>Categorical Limit</u><br>There is no applicable federally based categorical limit.  |

Local Limit

The City of Sylvania's Sewer Use Ordinance does not have established effluent limits for BOD; however they prohibit any discharge of materials that exert or cause an unusual quantity of BOD which causes an impact to the City of Sylvania's treatment processes.

5-Day Biochemical  
Oxygen Demand

As a result of the Savannah Harbor Restoration (5R) Plan, the City of Sylvania's wasteload allocation will require a reduction to their effluent limit for BOD<sub>5</sub> from the monthly average limit of 30 mg/L to 5.0 mg/L to comply with the requirements of the 5R Plan. EPD has conducted a local limit evaluation to determine what impact the effluent from Sylvania Debone will have on the City of Sylvania WPCP. The results of the local limit evaluation indicate pass-through will occur if any additional BOD<sub>5</sub> is received and the City will exceed the new permitted monthly average of 5.0 mg/L. To ensure no additional loading is received, a local limit was set equal to a conservative BOD<sub>5</sub> concentration of 300 mg/L for domestic sewage. EPD believes that a daily average BOD<sub>5</sub> effluent limit of 300 mg/L will protect the City of Sylvania from exceeding their permit limit.

Categorical Limit

There is no applicable federally based categorical limit.

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Local Limit

The City of Sylvania's Sewer Use Ordinance does not have established effluent limits for TSS; however they prohibit any discharge of materials that exert or cause an unusual quantity of TSS which causes an impact to the City of Sylvania's treatment processes.

Total Suspended  
Solids

The City of Sylvania's wasteload allocation requires a reduction to their effluent limit from TSS from the monthly average limit of 30 mg/L to 20 mg/L. EPD has conducted a local limit evaluation to determine what impact the effluent from Sylvania Debone will have on the City of Sylvania WPCP. The results of the local limit evaluation indicate pass-through will occur if any additional TSS is received and the City will exceed the new permitted monthly average of 20 mg/L. To ensure no additional loading is received, a local limit was set equal to a conservative TSS concentration of 300 mg/L for domestic sewage. EPD believes that a daily average TSS effluent limit of 300 mg/L will protect the City of Sylvania from exceeding their permit limit.

Categorical Limit

There is no applicable federally based categorical limit.

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### 3.3 Nonconventional Pollutants

| Pollutants of Concern | Basis  |
|-----------------------|--|
| Ammonia, as N         | <p><u>Local Limit</u><br/>                     As a result of the Savannah Harbor Restoration (5R) Plan, the City of Sylvania's NPDES permit will be receiving a reduction to their effluent limit for ammonia nitrogen from the monthly average of 2 mg/L to 0.7 mg/L to comply with the requirements of the 5R Plan. EPD has conducted a local limit evaluation to determine what impact the effluent from Sylvania Debone will have on the City of Sylvania WPCP. The results of the local limit evaluation indicate pass-through will occur if any additional ammonia nitrogen is received and the City will exceed the new permitted weekly average of 0.7 mg/L. To ensure no additional loading is received, a local limit was set equal to a conservative ammonia nitrogen concentration of 30 mg/L for domestic sewage. EPD believes that a daily average ammonia nitrogen effluent limit of 30 mg/L will protect the City of Sylvania from exceeding their permit limit.</p> <hr/> <p><u>Categorical Limit</u><br/>                     There is no applicable federally based categorical limit.</p> |

### 3.4 Comparison and Summary of Limits

The highlighted limits shown below indicate the most stringent allowable limits for the permit based on all pretreatment standards.

| Pollutant        | Categorical <sup>1</sup> | SUO             | Sludge Regulations <sup>2</sup> | POTW NPDES-Based Limit                 | WQS <sup>3</sup><br>(acute & chronic) | POTW Inhibition |
|------------------|--------------------------|-----------------|---------------------------------|--|---------------------------------------|-----------------|
| Oil & Grease     | N/A                      | 100 mg/L        | N/A                             | N/A                                    | N/A                                   | N/A             |
| pH               | N/A                      | 6.0-9.0<br>s.u. | N/A                             | N/A                                    | N/A                                   | N/A             |
| BOD <sub>5</sub> | N/A                      | N/A             | N/A                             | -3,588 mg/L<br>(300 mg/L) <sup>4</sup> | N/A                                   | N/A             |
| TSS              | N/A                      | N/A             | N/A                             | -255 mg/L<br>(300 mg/L) <sup>4</sup>   | N/A                                   | N/A             |
| Ammonia, as N    | N/A                      | N/A             | N/A                             | -407 mg/L<br>(30 mg/L) <sup>4</sup>    | N/A                                   | 1591<br>mg/L    |

<sup>1</sup> Sylvania Debone is not subject to any federal categorical effluent limitations.  
<sup>2</sup> The City of Sylvania hauls its sludge to a landfill, hence sludge criteria doesn't apply.  
<sup>3</sup> There are no numerical water quality standards for the pollutants marked as N/A.  
<sup>4</sup> For any calculated negative local limit, the local limit was changed to the domestic concentration.

### 3.6 Example Limit Calculations

An example calculation for each standard that required consideration has been included below. Complete results can be found in Appendix B – Effluent Limit Calculations.

#### 3.6.a. Categorical Effluent Limit Guideline Calculations – N/A

#### 3.6.b. State Local Limit Calculations – N/A

#### 3.6.c. NPDES Permit Limit Calculations

$$BOD_5 \text{ AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{NPDES Limit} \left( \frac{\text{mg}}{\text{L}} \right) \times \text{POTW Flow (MGD)}}{1 - \frac{\text{POTW Removal Efficiency (\%)}}{100}}$$

$$BOD_5 \text{ AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 5 \left( \frac{\text{mg}}{\text{L}} \right) \times 1.1 \text{ (MGD)}}{1 - \frac{94\%}{100}}$$

$$BOD_5 \text{ AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = 764.5$$

$$BOD_5 \text{ Load} \left( \frac{\text{lbs}}{\text{day}} \right) = \text{AHL} \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{\text{Safety Factor (\%)}}{100} \right) - \text{Dom. | Com. Load} \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$BOD_5 \text{ Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 764.5 \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{20\%}{100} \right) - 2,587.06 \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$BOD_5 \text{ Load} \left( \frac{\text{lbs}}{\text{day}} \right) = -1,975$$

$$BOD_5 \text{ Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{\text{Allowable Loading} \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times \text{IU Pollutant Flow (MGD)}}$$

$$BOD_5 \text{ Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{-1,975 \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.066 \text{ (MGD)}}$$

$$BOD_5 \text{ Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = -3,588 \text{ (Not Most Stringent Value)}$$

#### 3.6.d. Acute Water Quality Standard Calculations – N/A

#### 3.6.e. Chronic Water Quality Standard Calculations – N/A

**3.6.f. POTW Inhibition Calculations**

$$\text{Ammonia - N AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{Inhibition Level} \left( \frac{\text{mg}}{\text{L}} \right) \times \text{POTW Flow (MGD)}}{1 - \frac{\text{POTW Removal Efficiency}(\%)}{100}}$$

$$\text{Ammonia - N AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 480 \left( \frac{\text{mg}}{\text{L}} \right) \times 1.1 \text{ (MGD)}}{1 - \frac{85\%}{100}}$$

$$\text{Ammonia - N AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = 4,421$$

$$\text{Ammonia - N} \left( \frac{\text{lbs}}{\text{day}} \right) = \text{AHL} \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{\text{Safety Factor}(\%)}{100} \right) - \text{Dom. | Com. Load} \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Ammonia - N Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 4,421 \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{20\%}{100} \right) - 258.7 \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Ammonia - N Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 3,294$$

$$\text{Ammonia - N Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{\text{Allowable Loading} \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times \text{IU Pollutant Flow (MGD)}}$$

$$\text{Ammonia - N Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{3,294 \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.066 \text{ (MGD)}}$$

$$\text{Ammonia - N Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = 5,984 \text{ (Not Most Stringent Value)}$$

**4.0 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS****4.1 Anti-Backsliding**

This is a new pretreatment permit; hence anti-backsliding does not apply.

**4.2 Compliance Schedule**

The permittee shall attain compliance with all limits on the effective date of the permit.

## 5.0 REPORTING

The facility has been assigned to the following EPD office for reporting, compliance and enforcement.

Georgia Environmental Protection Division  
East Central District (Augusta) Office  
3525 Walton Way Ext.  
Augusta, GA 30909

### 5.1 E-Reporting

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

## 6.0 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

## 7.0 PERMIT EXPIRATION

The permit will expire five years from the effective date.

## 8.0 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

### 8.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue an permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Georgia Environmental Protection Division  
Wastewater Regulatory Program  
2 Martin Luther King Jr. Drive  
Suite 1152 East  
Atlanta, Georgia 30334

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

## 8.2 Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at [EPDcomments@dnr.ga.gov](mailto:EPDcomments@dnr.ga.gov) within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

## 8.3 Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.06(7)(b). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

#### **8.4 Final Determination**

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

<http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0>

#### **8.5 Contested Hearings**

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.

**Appendix A**

**City of Sylvania Sewer Use Ordinance**

**Sec. 74-40. - Prohibited discharges into public sewers.**

- (a) No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff or subsurface drainage.**
- (b) No person shall discharge or cause to be discharged any of the following waters or wastes to any public sewers:**
  - (1) Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas.**
  - (2) Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, to constitute a hazard to humans or animals, to create a public nuisance or to create any hazard in the receiving waters in the sewage treatment plant.**
  - (3) Any waters or wastes having a pH less than 6.0 or greater than 9.0 or containing heavy concentrations of salts or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.**
  - (4) Solids or viscous substances in quantities or of such size capable of causing obstruction in the flow of sewage or other interference to the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.**
- (c) No person shall discharge or cause to be discharged the following described substances, materials, waters or wastes if it appears likely, in the opinion of the city manager, that these wastes can harm either the sewers, sewage treatment process or equipment having adverse effect on the receiving stream or can otherwise endanger life, limb, public property or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the city manager will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and other pertinent factors. The substances prohibited are:**
  - (1) Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit or 65 degrees Celsius.**
  - (2) Any water or waste containing fats, wax, grease or oils whether emulsified or not in excess of 100 mg/l or containing substances which may solidify or become viscous at temperatures between 32 and 150 degrees Fahrenheit or zero and 65 degrees Celsius.**
  - (3) Any garbage that has not been properly shredded. The installation and operation of any**

garbage grinder equipped with a motor of three-quarters hp. or greater shall be subject to the review and approval of the city manager.

- (4) Any waters or wastes containing strong acid Iron pickling wastes or concentrated plating solutions whether neutralized or not.
- (5) Any waters or wastes containing heavy metals or toxic substances in excess of the following daily concentrations:

|                             |                  |
|-----------------------------|------------------|
| <b>Chromium, hexavalent</b> | <b>0.25 mg/l</b> |
| <b>Chromium, total</b>      | <b>1.0 mg/l</b>  |
| <b>Lead</b>                 | <b>0.6 mg/l</b>  |
| <b>Tin</b>                  | <b>1.0 mg/l</b>  |
| <b>Zinc</b>                 | <b>1.0 mg/l</b>  |
| <b>Copper</b>               | <b>1.0 mg/l</b>  |
| <b>Nickel</b>               | <b>1.0 mg/l</b>  |
| <b>Silver</b>               | <b>1.0 mg/l</b>  |
| <b>Cadmium</b>              | <b>1.0 mg/l</b>  |
| <b>Total metals</b>         | <b>6.0 mg/l</b>  |
| <b>Cyanide</b>              | <b>0.3 mg/l</b>  |
| <b>Phenol</b>               | <b>1.0 mg/l</b>  |
| <b>Arsenic</b>              | <b>0.05 mg/l</b> |
| <b>Chlorine residual</b>    | <b>1.0 mg/l</b>  |

The above concentration limits are set by the city as maximal. The limits may be reduced by order of the city manager at any time when it is found that the wastewater treatment plant does not meet its proper limits of treatment, and the city manager may establish concentration limits for other substances as may be appropriate. All users on the system must comply with such revised standard limits within a reasonable time period established by the city manager, or as required by other regulatory agencies.

- (6) Any waters or wastes containing phenols or other taste- or odor-producing substances in such concentrations exceeding limits which may be established by the city as necessary after treatment of the composite sewage to meet requirements of the state, federal, or other public agencies of jurisdiction of this discharge to the receiving waters.
- (7) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the city in compliance with applicable state and federal regulations.
- (8) Any waters or wastes having a pH outside of the range of 6.0 to 9.0.
- (9) Materials which exert or cause:
  - a. Unusual concentration of inert suspended solids; such as, but not limited to, fuller's earth, lime slurries, and lime residues or of dissolved solids; such as, but not limited to sodium chloride and sodium sulfate.
  - b. Excessive discoloration, such as, but not limited to, dye wastes and vegetable tanning solutions.
  - c. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.
  - d. Unusual volume of flow or concentration of wastes constituting slugs.
- (10) Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of state or federal agencies having jurisdiction over discharge to the receiving waters.

(Code 1976, § 5-1027; Ord. No. 229, 8-2-83; Ord. No. 409, § 1, 8-20-02)

**Appendix B**

**Effluent Limit Calculations**

Primary Treatment

Local Limits Determination Based on NPDES Daily Effluent Table

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

| Pollutant    | IU Pollut. Flow (MGD) (Gind) | POTW Flow (MGD) (Opotw) | Removal Efficiency (%) (Rpotw) | NPDES Daily Limit (mg/l) (Cact) | Domestic and Commercial Conc. (mg/l) (Cdom) | Domestic and Commercial Flow (MGD) (Qdom) | MAXIMUM LOADING                      |                                      |                                    | INDUSTRIAL                |                        |
|--------------|------------------------------|-------------------------|--------------------------------|---------------------------------|---|---|--------------------------------------|--------------------------------------|------------------------------------|---------------------------|------------------------|
|              |                              |                         |                                |                                 |   |   | Allowable Heterotics (lbs/day) (Lhw) | Domestic/Commercial (lbs/day) (Ldom) | Allowable Loading (lbs/day) (Lind) | Local Limit (mg/l) (Cind) | Safety Factor (%) (SF) |
| Ammonia-N    | 0.086                        | 1.1                     | 85                             | 0.7                             | 30  | 1.034                                     | 42,912                               | 258,7068                             | -224,4672                          | -407,7778                 | 20                     |
| Arsenic      |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| BOD          | 0.086                        | 1.1                     | 94                             | 5                               | 900   | 1.034                                     | 784.5                                | 2587,068                             | -1976,468                          | -3588,8688                | 20                     |
| Cadmium      |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Chromium     |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Haz. Chrom.  |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| COD          |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Copper       |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Cyanide      |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Lead         |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Mercury      |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Nickel       |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Oil & Grease |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Phosphorus   |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| Silver       |                              |                         |                                |                                 |   |   |                                      |                                      |                                    |                           |                        |
| TSS          | 0.086                        | 1.1                     | 94                             | 20                              | 300   | 1.034                                     | 3058                                 | 2587,068                             | -140,688                           | -255,5556                 | 20                     |

(Oind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

(Opotw) POTW's average influent flow in MGD.

(Rpotw) Removal efficiency across POTW as percent. (in this case = to Rprim)

(Cact) NPDES daily maximum permit limit for a particular pollutant in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l. (based on EPA numbers from 1991)

(Lhw) Maximum allowable heterotics pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Medium allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

8.34 \* Cact \* Opotw

1 - Rpotw

Primary Treatment

Local Limits Determination Based on NPDES Monthly Effluent Limits

TABLE 2

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING INDUSTRIAL

| Pollutant    | IU Pollut. Flow (MGD) (Qind) | POTW Flow (MGD) (Qpotw) | Removal Efficiency (%) (Rpotw) | NPDES Monthly Limit (mg/l) (Ccrit) | Domestic and Commercial Conc. (mg/l) (Cdom) | Flow (MGD) (Qdom) | MAXIMUM LOADING                     |                                      |                                    | Safety Factor (%) (SF) |                           |
|--------------|------------------------------|-------------------------|--------------------------------|------------------------------------|---|-------------------|-------------------------------------|--------------------------------------|------------------------------------|------------------------|---------------------------|
|              |                              |                         |                                |                                    |   |                   | Allowable Headworks (lbs/day) (Lhw) | Domestic/Commercial (lbs/day) (Ldom) | Allowable Loading (lbs/day) (Lind) |                        | Local Limit (mg/l) (Cind) |
| Ammonia-N    | 0.068                        | 1.1                     | 86                             | 1.05                               | 30  | 1.034             | 64,218                              | 288,7068                             | -207,9394                          | -378.80667             | 20                        |
| Arsenic      |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| BOD          | 0.068                        | 1.1                     | 94                             | 7.5                                | 300   | 1.034             | 1148.75                             | 2587.068                             | -1689.898                          | -3033.3335             | 20                        |
| Cadmium      |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Chromium     |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Hex. Chrom.  |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| COD          |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Copper       |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Cyanide      |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Lead         |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Mercury      |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Nickel       |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Oil & Grease |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Phosphorus   |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Silver       |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| TSS          | 0.068                        | 1.1                     | 94                             | 30                                 | 300   | 1.034             | 4587                                | 2587.068                             | 1082.532                           | 1966.6667              | 20                        |
| TiO          |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |
| Zinc         |                              |                         |                                |                                    |   |                   |                                     |                                      |                                    |                        |                           |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

POTW's average influent flow in MGD.

Removed efficiency across POTW as percent.

NPDES monthly maximum permit limit for a particular pollutant in mg/L.

Domestic/commercial background flow in MGD.

Domestic/commercial background concentration for a particular pollutant in mg/l.

Minimum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

Maximum allowable industrial loading to the POTW in pounds per day.

Industrial allowable local limit for a given pollutant in mg/l.

Safety factor as a percent.

Unit conversion factor

$8.34 \cdot C_{crit} \cdot Q_{potw}$

$1 - R_{potw}$

Primary Treatment

TABLE 3

Local Limits Determination Based on Activated Sludge Inhibition Level

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

| Pollutant    | IJ POTW           |                    | Removal Efficiency (%) (Rprim) | Activated Sludge Inhibition Level (mg/l) (Ccrit) | Domestic and Commercial Conc. (mg/l) (Cdom) | Flow (MGD) (Qdom) | MAXIMUM LOADING                    |                                     |                                   | Safety Factor (%) (SF) |                           |
|--------------|-------------------|--------------------|--------------------------------|--|---|-------------------|------------------------------------|-------------------------------------|-----------------------------------|------------------------|---------------------------|
|              | Flow (MGD) (Qind) | Flow (MGD) (Qpotw) |                                |  |   |                   | Allowable Headworks (lb/day) (Lhw) | Domestic/Commercial (lb/day) (Ldom) | Allowable Loading (lb/day) (Lind) |                        | Local Limit (mg/l) (Cind) |
| Ammonia-N    | 0.088             | 1.1                | 0.85                           | 480  | 30  | 1.034             | 4441.270802                        | 258.7088                            | 3294.3088                         | 5884.8684              | 20                        |
| Arsenic      |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| BOD          |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Cadmium      |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Chromium     |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Haz. Chloro. |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| COD          |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Copper       |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Cyanide      |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Lead         |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Mercury      |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Nickel       |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Oil & Grease |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Phosphorus   |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Silver       |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| TSS          |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| TiO          |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |
| Zinc         |                   |                    |                                |  |   |                   |                                    |                                     |                                   |                        |                           |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

POTW's average influent flow in MGD.

Removal efficiency across primary treatment as percent.

Activated sludge threshold inhibition level, mg/l.

Domestic-commercial background flow in MGD.

Domestic-commercial background concentration for a particular pollutant in mg/l.

Minimum allowable headworks pollutant loading to the POTW for a particular pollutant in mg/l.

Domestic-commercial background loading to the POTW in pounds per day (lb/day).

Maximum allowable industrial loading to the POTW in pounds per day.

Industrial allowable local limit for a given pollutant in mg/l.

Safety factor as a percent.

Unit conversion factor

$8.34 \cdot \text{Ccrit} \cdot \text{Qpotw}$

Lhw =

1 - Rprim

---

Primary Treatment

TABLE 4

Local Limits Determination Based on Nitrification Inhibition Level

**N/A - City of Syracuse does not have nitrification treatment.**

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING INDUSTRIAL

| Pollutant    | ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE |                         |                               |   | MAXIMUM LOADING INDUSTRIAL                  |   |                                    |   |                           |                        |
|--------------|--|-------------------------|-------------------------------|---|---|---|------------------------------------|---|---------------------------|------------------------|
|              | IJ Pollut. Flow (MGD) (Cind)                 | POTW Flow (MGD) (Qpotw) | Removal Efficiency (%) (Rsec) | Nitrification Inhibition Level (mg/l) (Ccrit) | Domestic and Commercial Conc. (mg/l) (Cdom) | Domestic and Commercial Flow (MGD) (Qdom) | Allowable Headworks (lb/day) (Lhw) | Domestic/Commercial Loading (lb/day) (Lind) | Local Limit (mg/l) (Cind) | Safety Factor (%) (SF) |
| Ammonia-N    | 0.068  | 1.1                     |                               |   | 30  | 1.034                                     | -                                  | 258,7068                                    | -                         | 20                     |
| Arsenic      | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| BOD          | 0.068  | 1.1                     |                               |   | 300   | 1.034                                     | -                                  | 2587,068                                    | -                         | 20                     |
| Cadmium      | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Chromium     | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Hsc. Chrom.  | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| COD          | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Copper       | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Cyanide      | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Lead         | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Mercury      | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Nickel       | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Oil & Grease | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Phosphorus   | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Silver       | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| TSS          | 0.068  | 1.1                     |                               |   | 300   | 1.034                                     | -                                  | 2587,068                                    | -                         | 20                     |
| TTO          | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |
| Zinc         | 0  | 0                       |                               |   | 0   | 0   | -                                  | 0   | -                         | 0                      |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

POTW's average influent flow in MGD.

Removal efficiency across primary treatment and secondary treatment as percent.

Nitrification threshold inhibition level, mg/l.

Domestic/commercial background flow in MGD.

Domestic/commercial background concentration for a particular pollutant in mg/l.

Minimum allowable headworks pollutant loading to the POTW in pounds per day (lb/day).

Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lb/day).

Minimum allowable industrial loading to the POTW in pounds per day.

Industrial allowable local limit for a given pollutant in mg/l.

Safety factor as a percent.

Unit conversion factor

8.34 \* Ccrit \* Qpotw

Lhw =

1 - Rsec

Primary Treatment

TABLE #  
Lead Limits Determination Based on USEPA 503 Sludge Regulations  
ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

| Pollutant    | IU Pollut. Flow (MGD) |         | Sludge Flow (MGD) (Qsl/dg) | Percent Solids (%) (PS) | Removal Efficiency (%) (Rpot/w) | 503 Sludge Criteria (mg/kg) | Domestic and Conc. (mg/l) (Cbom) | Commercial Flow (MGD) (Cbom) | Allowable Headworks (lb/day) (Lhw) | Domestic/Commercial (lb/day) (Ldom) | Allowable Loading (lb/day) (Lind) | Local Limit (mg/l) (Clnd) | Safety Factor (%) (SF) |
|--------------|-----------------------|---------|----------------------------|-------------------------|---------------------------------|-----------------------------|----------------------------------|------------------------------|------------------------------------|-------------------------------------|-----------------------------------|---------------------------|------------------------|
|              | (Qind)                | (Qpotw) |                            |                         |                                 |                             |                                  |                              |                                    |                                     |                                   |                           |                        |
| Ammonia-N    | 0.066                 | 1.1     |                            |                         | 85                              |                             | 30                               | 1.034                        |                                    | 288.7088                            |                                   |                           | 20                     |
| Arsenic      | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| BOD          | 0.066                 | 1.1     |                            |                         | 94                              |                             | 300                              | 1.034                        |                                    | 2587.0688                           |                                   |                           | 20                     |
| Cadmium      | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Chromium     | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Haz. Chrom.  | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| COD          | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Copper       | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Cyanide      | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Lead         | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Mercury      | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Nickel       | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Oil & Grease | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Phosphorus   | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Silver       | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| TSS          | 0.068                 | 1.1     |                            |                         | 94                              |                             | 300                              | 1.034                        |                                    | 2587.0688                           |                                   |                           | 20                     |
| TTO          | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |
| Zinc         | 0                     | 0       |                            |                         | 0                               |                             | 0                                | 0                            |                                    | 0                                   |                                   |                           | 0                      |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.  
 POTW's average influent flow in MGD.  
 Sludge flow to be disposed in MGD.  
 Percent solids of sludge to be disposed.  
 Removal efficiency across POTW as a percent.  
 503 sludge criteria in mg/kg dry sludge.  
 Domestic/commercial background flow in MGD.  
 Domestic/commercial background concentration for a particular pollutant in mg/l.  
 Maximum allowable headworks pollutant loading to the POTW in pounds per day (lb/day).  
 Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lb/day).  
 Maximum allowable industrial loading to the POTW in pounds per day.  
 Industrial allowable local limit for a given pollutant in mg/l.  
 Safety factor as a percent.  
 Unit conversion factor  
 Lhw = 8.34 \* Cpotw \* (PS/100) \* Qsl/dg  
 Rpotw

WA - City of Spokane sends sludge to permitted landfill  
 MAXIMUM LOADING INDUSTRIAL

Primary Treatment

TABLE 6

Local Limits Determination Based on State Sludge Criteria ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

PA - City of Sylvania needs sludge to potential landfill

MAXIMUM LOADING INDUSTRIAL

| Pollutant    | IU Pollut. Flow (MGD) (Cind) | POTW Flow (MGD) (Opotw) | Sludge Flow (MGD) (Oslidg) | Percent Solids (%) (PS) | Removal Efficiency (%) (Rpotlw) | State Sludge Criteria (mg/kg) (Calcrit) | Domestic and Commercial Conc. (mg/l) (Cdom) | Commercial Flow (MGD) (Cdom) | Allowable Headworks Commercial Loading (lb/day) (Lhw) | Domestic Commercial Loading (lb/day) (Ldbrn) | Allowable Loading (lb/day) (Lind) | Local Limit (mg/l) (Cind) | Safety Factor (%) (SF) |
|--------------|------------------------------|-------------------------|----------------------------|-------------------------|---------------------------------|---|---|------------------------------|---|--|-----------------------------------|---------------------------|------------------------|
|              |                              |                         |                            |                         |                                 |   |   |                              |   |  |                                   |                           |                        |
| Ammonia-N    | 0.066                        | 1.1                     | 0                          | 0                       | 65                              | 0                                       | 30  | 1,034                        | -   | 258,7068                                     | -                                 | 20                        | 0                      |
| Arsenic      | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| BOD          | 0.066                        | 1.1                     | 0                          | 0                       | 94                              | 0                                       | 300   | 1,034                        | -   | 2587.068                                     | -                                 | 20                        | 0                      |
| Cadmium      | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Chromium     | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Haz. Chrom.  | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| COD          | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Copper       | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Cyanide      | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Lead         | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Mercury      | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Nickel       | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Oil & Grease | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Phosphorus   | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Silver       | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| TSS          | 0.066                        | 1.1                     | 0                          | 0                       | 94                              | 0                                       | 300   | 1,034                        | -   | 2587.068                                     | -                                 | 20                        | 0                      |
| TTO          | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |
| Zinc         | 0                            | 0                       | 0                          | 0                       | 0                               | 0                                       | 0   | 0                            | -   | 0  | -                                 | 0                         | 0                      |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.  
 POTW's average influent flow in MGD.  
 Sludge flow to disposal in MGD.  
 Percent solids of sludge to disposal.  
 Removal efficiency across POTW as a percent.  
 State sludge criteria in mg/kg dry sludge.  
 Domestic/commercial background flow in MGD.  
 Domestic/commercial background concentration for a particular pollutant in mg/l.  
 Maximum allowable headworks pollutant loading to the POTW in pounds per day (lb/day).  
 Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lb/day).  
 Maximum allowable industrial loading to the POTW in pounds per day.  
 Industrial allowable local limit for a given pollutant in mg/l.  
 Safety factor as a percent.  
 Unit conversion factor  
 $Lhw = 8.34 * Calcrit * (PS/100) * Cslidg$   
 Rpotlw

Primary Treatment

TABLE 7  
 Local Limits Determination Based on Chronic Water Quality Standards  
 ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE  
 Maximum Discharge is not comprised of any pollutants which have a WQS.  
 HYDRAULIC LOADING  
 DOMESTIC COMMERCIAL  
 INDUSTRIAL

| Pollutant    | Local Limits Determination Based on Chronic Water Quality Standards |                                      | Upstream Flow (MGD) (Q <sub>up</sub> ) | Upstream Conc. (mg/l) (C <sub>up</sub> ) | Removal Efficiency (%) (R <sub>potw</sub> ) | Chronic WQS (mg/l) (C <sub>crit</sub> ) | Domestic and Commercial Conc. (mg/l) (C <sub>dom</sub> ) | Commercial Flow (MGD) (Q <sub>com</sub> ) | Allowable Hydraulic Loading (lb/day) (L <sub>hw</sub> ) | Domestic Commercial Loading (lb/day) (L <sub>dom</sub> ) | Allowable Loading (lb/day) (L <sub>ind</sub> ) | Local Limit (mg/l) (C <sub>ind</sub> ) | Safety Factor (%) (SF) |
|--------------|---|--------------------------------------|--|--|---|---|--|---|---|--|--|--|------------------------|
|              | Flow (MGD) (Q <sub>ind</sub> )                                      | POTW Flow (MGD) (Q <sub>potw</sub> ) |  |  |   |   |  |   |   |  |  |  |                        |
| Ammonia-N    | 0.066   | 1.1                                  | 0.13                                   |  | 85  |   | 30   | 1.034                                     |   | 2587.098   |  |  | 20                     |
| Arsenic      |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| BOD          | 0.066   | 1.1                                  | 0.13                                   |  | 94  |   | 300  | 1.034                                     |   | 2587.098   |  |  | 20                     |
| Cadmium*     |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Chromium*    |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Hex. Chrom.  |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| COD          |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Copper*      |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Cyanide      |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Lead*        |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Mercury      |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Nickel*      |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Oil & Grease |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Phosphorus   |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Silver       |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| TSS          | 0.066   | 1.1                                  | 0.13                                   |  | 94  |   | 300  | 1.034                                     |   | 2587.098   |  |  | 20                     |
| TTO          |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |
| Zinc*        |   |                                      |  |  |   |   |  |   |   |  |  |  |                        |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.  
 POTW's average influent flow in MGD.  
 Receiving stream (upstream) 7Q10 flow in MGD.  
 Receiving stream background level in mg/l.  
 Removal efficiency across POTW as percent.  
 State chronic water quality standard for a particular pollutant in mg/l (expressed in dissolved fraction \* at hardness = 50).  
 Domestic/commercial background flow in MGD.  
 Domestic/commercial background concentration for a particular pollutant in mg/l.  
 Maximum allowable hydraulic loading to the POTW in pounds per day (lbs/day).  
 Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).  
 Maximum allowable industrial loading to the POTW in pounds per day.  
 Industrial allowable local limit for a given pollutant in mg/l.  
 Safety factor as a percent.  
 Unit conversion factor  
 $8.34 * (C_{crit} * Q_{potw}) - (C_{up} * Q_{up})$   
 1 - R<sub>potw</sub>

Primary Treatment

TABLE 6

Local Limits Determination Based on Acute Water Quality Standards  
 ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE  
 Hardness: 50

| Pollutant    | Upstream          |                    | Upstream          |                     | Removal Efficiency (%) (Rpotw) | Acute WQS (mg/l) (Ccrit) | Domestic and Commercial |                     | Allowable Headworks (lbs/day) (Lhw) | Domestic/Commercial (lbs/day) (Ldom) | Allowable Loading (lbs/day) (Lind) | Local Limit (mg/l) (Cind) | Safety Factor (%) (SF) |
|--------------|-------------------|--------------------|-------------------|---------------------|--------------------------------|--------------------------|-------------------------|---------------------|-------------------------------------|--------------------------------------|------------------------------------|---------------------------|------------------------|
|              | Flow (MGD) (Qind) | Flow (MGD) (Qpotw) | Flow (MGD) (Qstr) | Conc. (mg/l) (Cstr) |                                |                          | Flow (MGD) (Qdom)       | Conc. (mg/l) (Cdom) |                                     |                                      |                                    |                           |                        |
| Ammonia-N    | 0.066             | 1.1                | 0.13              | 0                   | 0                              |                          | 30                      | 1.034               | 258.7068                            | -                                    | -                                  | 20                        |                        |
| Arsenic      |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| BOD          | 0.086             | 1.1                | 0.13              | 0                   | 0                              |                          | 300                     | 1.034               | 2587.068                            | -                                    | -                                  | 20                        |                        |
| Cadmium*     |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Chromium*    |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Hex. Chrom.  |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| COD          |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Copper*      |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Cyanide      |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Lead*        |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Mercury      |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Nickel*      |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Oil & Grease |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Phosphorus   |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Silver       |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| TSS          | 0.066             | 1.1                | 0.13              | 0                   | 0                              |                          | 300                     | 1.034               | 2587.068                            | -                                    | -                                  | 20                        |                        |
| TTO          |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |
| Zinc         |                   |                    |                   |                     |                                |                          |                         |                     |                                     |                                      |                                    |                           |                        |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

POTW's average influent flow in MGD.

Receiving stream (upstream) 1Q10 flow in MGD.

Receiving stream background level in mg/l.

Removal efficiency across POTW as percent.

State acute water quality standard for a particular pollutant in mg/l (expressed in dissolved fraction \* of hardness = 50)

Domestic/commercial background flow in MGD.

Domestic/commercial background concentration for a particular pollutant in mg/l.

Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

Maximum allowable industrial loading to the POTW in pounds per day.

Industrial allowable local limit for a given pollutant in mg/l.

Safety factor as a percent.

Unit conversion factor

$$8.34 * (Qstr + Qpotw) - (Cstr * Ccrit)$$

$$1 - Rpotw$$

Primary Treatment

TABLE 9  
Local Limits Determination Based on Anaerobic Digester Inhibition Level

| Pollutant     | ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE |                                       |                                |  | MAXIMUM LOADING                             |                              |                                    |                                     | INDUSTRIAL                        |                           |                        |
|---------------|--|---------------------------------------|--------------------------------|--|---|------------------------------|------------------------------------|-------------------------------------|-----------------------------------|---------------------------|------------------------|
|               | POTW Flow (MGD) (Clnd)                       | Sludge Flow to Digester (MGD) (Odlig) | Removal Efficiency (%) (Rpotw) | Anaerobic Digester Inhibition Level (mg/l) (Ccrit) | Domestic and Commercial Conc. (mg/l) (Cdom) | Commercial Flow (MGD) (Qdom) | Allowable Headworks (lb/day) (Lhw) | Domestic/Commercial (lb/day) (Ldom) | Allowable Loading (lb/day) (Lind) | Local Limit (mg/l) (Clnd) | Safety Factor (%) (SF) |
| Ammonia-N     | 0.068  | 1.1                                   | 0.85                           | 1500   | 30  | 0.5                          | 73588.2353                         | 125.1                               | 58745.488                         | 106724.6                  | 20                     |
| Arsenic       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| BOD           | 0.088  | 1.1                                   | 94                             |  | 300   | 1.034                        |                                    | 2887.068                            |                                   |                           | 20                     |
| Cadmium       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Chromium      |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Haz. Chrom.   |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| COD           |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Copper        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Cyanide       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Lead          |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Mercury       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Nickel        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Oil & Greases |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Phosphorus    |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Silver        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| TSS           | 0.068  | 1.1                                   | 94                             |  | 300   | 1.034                        |                                    | 2887.068                            |                                   |                           | 20                     |
| TTO           |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Zinc          |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Clnd)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Qpotw)       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Odlig)       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Rpotw)       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Ccrit)       |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Qdom)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Cdom)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Lhw)         |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Ldom)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Lind)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (Clnd)        |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| (SF)          |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| 8.34          |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
| Lhw =         |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |
|               |  |                                       |                                |  |   |                              |                                    |                                     |                                   |                           |                        |

Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

POTW's average influent flow in MGD.

Sludge flow to digester in MGD.

Removal efficiency across POTW as percent.

Anaerobic digester freefield inhibition level in mg/l.

Domestic/commercial background flow in MGD.

Domestic/commercial background concentration for a particular pollutant in mg/l.

Minimum allowable headworks pollutant loading to the POTW in pounds per day (lb/day).

Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lb/day).

Minimum allowable industrial loading to the POTW in pounds per day.

Industrial allowable local limit for a given pollutant in mg/l.

Safety factor as a percent.

Unit conversion factor

$8.34 = \text{Ccrit} \cdot \text{Qdig}$

Rpotw =

Disolved metal inhibition

TABLE 10  
Local Limits Determination Based on Most Stringent Criteria or Domestic Levels

MONTHLY AVERAGE INDUSTRIAL EFFLUENT LIMITS - USING TOTAL INDUSTRIAL FLOW

| Pollutant    | Local Limit (mg/l) | Beals In Derivative of Limit | Local Limit Loading (kg/day) |
|--------------|--------------------|------------------------------|------------------------------|
| Ammonia-N    | 30                 | D                            | 7.5042                       |
| Arsenic      |                    |                              |                              |
| BOD          | 300                | D                            | 75.042                       |
| Cadmium      |                    |                              |                              |
| Chromium     |                    |                              |                              |
| Haz. Chrom.  |                    |                              |                              |
| COD          |                    |                              |                              |
| Copper       |                    |                              |                              |
| Cyanide      |                    |                              |                              |
| Lead         |                    |                              |                              |
| Mercury      |                    |                              |                              |
| Nickel       |                    |                              |                              |
| Oil & Grease |                    |                              |                              |
| Phosphorus   |                    |                              |                              |
| Silver       |                    |                              |                              |
| TSS          | 300                | D                            | 75.042                       |
| TTO          |                    |                              |                              |
| Zinc         |                    |                              |                              |

D Local Limit based on domestic or default values.  
 I Local Limit based on activated sludge, nitrification or digester inhibition levels.  
 P Local Limit based on NPDES Permit effluent limits.  
 S Local Limit based on sludge regulations or criteria.  
 W Local Limit based on chronic or acute water quality standards.  
 C Local Limit based on Categorical Standard