

**Final Summary Page**

**Name of Facility**      Koyo Bearings NA LLC

**County**                Screven County

**Pretreatment Permit No.**    GAP050322

This permit is a reissuance for Koyo Bearings NA LLC formally GAU050008. The facility discharges a maximum of 0.20 MGD of wastewater from the manufacturing of bearings, pins, and shafts for the automotive industry. This facility discharges to the City of Sylvania WPCP in the Savannah River Basin.

The permit was placed on public notice from April 23, 2018 to June 2, 2018. Comments were received during the public notice.

**Please Note The Following Changes to the Proposed Pretreatment Permit From The Existing Permit**

**Part I.A.1**

- Revised Cadmium effluent limits from 0.008 mg/L to 1.0 mg/L based on re-evaluation of categorical guidelines and Sewer Use Ordinance (SUO). Facility is not subject to metal finishing category.
- Revised Copper effluent limits from 0.109 mg/L to 1.0 mg/L daily maximum based on re-evaluation of categorical guidelines and SUO. Facility is not subject to metal finishing category.
- Revised Cyanide effluent limits from 0.082 mg/L to 0.3 mg/L daily maximum based on re-evaluation of categorical guidelines and SUO. Facility is not subject to metal finishing category.
- Revised Lead effluent limits from 0.116 mg/L to 0.6 mg/L daily maximum based on re-evaluation of categorical guidelines and SUO. Facility is not subject to metal finishing category.
- Revised Nickel effluent limits from 0.992 mg/L to 1.0 mg/L daily maximum based on re-evaluation of categorical guidelines and SUO. Facility is not subject to metal finishing category.
- Revised Silver effluent limits from 0.24/0.43 mg/L (daily avg/daily maximum) to 1.0 mg/L daily maximum based on re-evaluation of categorical guidelines. Facility is not subject to metal finishing category.
- Revised Zinc effluent limits from 0.892 mg/L to 1.0 mg/L daily maximum based on re-evaluation of categorical guidelines and SUO. Facility is not subject to metal finishing category.
- Added effluent limits for Total Metals of 6.0 mg/L daily maximum based on the SUO.
- Added condition for monitoring for BOD once per quarter.
- Added condition for monitoring for TSS once per quarter.
- Removed TTO effluent limits based on re-evaluation of categorical effluent guidelines.

### Final Summary Page

Facility is not subject to metal finishing category.

#### 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.



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

**ENVIRONMENTAL PROTECTION DIVISION**

JUL 16 2018

**Richard E. Dunn, Director**

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

Mr. Steven Derriso, Facility Engineer  
Koyo Bearings NA LLC  
400 Friendship Road  
Sylvania, Georgia 30467

RE: Permit Issuance  
Koyo Bearings NA LLC  
Pretreatment Permit No. GAP050322  
Sylvania, Screven County

Dear Mr. Derriso:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the General Pretreatment Regulations, as amended, 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  
Coastal District Office  
400 Commerce Center Drive  
Brunswick, Georgia 31523

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 Alan Leake at 404.463.4957 or [alan.leake@dnr.ga.gov](mailto:alan.leake@dnr.ga.gov).

Sincerely,

Richard E. Dunn  
Director

RED:al  
Enclosure(s)

cc: EPD Coastal District Office -- Mr. Jonathan Dance (e-mail)

Permit No. GAP050322  
Issuance Date: JUL 16 2018



**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,

**Koyo Bearings NA LLC  
400 Friendship Road  
Sylvania, Georgia 30467**

is authorized to discharge from a facility located at

**400 Friendship Road  
Sylvania, Screven County, Georgia 30467**

to the sewerage system tributary to the

**City of Sylvania Water Pollution Control Plant (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 August 1, 2017, 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 August 1, 2018.

This permit and the authorization to discharge shall expire at midnight July 31, 2023.



**Richard E. Dunn, Director  
Environmental Protection Division**

**PART I**

**A. Effluent Limitations and Monitoring Requirements**

1. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall 001: Process wastewater from the manufacture of bearings, pins, and shafts for the automotive industry to the City of Sylvania WPCP.

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

Effluent Characteristics (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)	0.16	0.20	--	--	Daily	Continuous Recording	Final Effluent <sup>2</sup>
BOD <sub>5</sub>	--	--	Report	Report	1/Quarter	Grab	Final Effluent <sup>2</sup>
Total Suspended Solids, TSS	--	--	Report	Report	1/Quarter	Grab	Final Effluent <sup>2</sup>
Oil & Grease	--	--	100	100	1/Quarter	Grab	Final Effluent <sup>2</sup>
Cadmium, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Chromium, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Copper, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Cyanide, Total	--	--	--	0.3	1/Month	Grab	Final Effluent <sup>2</sup>
Lead, Total	--	--	--	0.6	1/Quarter	Composite	Final Effluent <sup>2</sup>
Nickel, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Silver, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Zinc, Total	--	--	--	1.0	1/Quarter	Composite	Final Effluent <sup>2</sup>
Total Metals	--	--	--	6.0	1/Quarter	Calculated	Final Effluent <sup>2</sup>
Residual Chlorine	--	--	--	1.0	1/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 daily by grab sample.

The Discharge Limitations outlined above are subject to revision if dictated by Title 40, Code of Federal Regulations Part 403, (40 CFR 403), or EPD determinations. The Permittee will be notified in writing of any changes in the above listed discharge limitations.

- <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 discharge point prior to mixing with sanitary waste.

**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 a permitted sanitary 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;
- b. 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
- c. 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: N/A
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 WPCP;
  - 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. 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. 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:** Alan Leake (Alan.Leake@dnr.ga.gov)  
404-463-4957

**Draft permit:**

<input type="checkbox"/>	first issuance
<input type="checkbox"/>	reissuance with no or minor modifications from previous permit
<input checked="" 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.:** GAP050322

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

Mr. Andrew Durrence, Plant Manager  
Koyo Bearings NA LLC  
400 Friendship Road  
Sylvania, Georgia, 30467  
Screven County

**1.3 Name and Address of Facility**

Koyo Bearings NA LLC  
400 Friendship Road  
Sylvania, Georgia, 30467  
Screven County

**1.4 Facility Information**

- |                              |   |
|------------------------------|---|
| a. Average Flow: 160,000 GPD | d. Max Flow: 200,000 GPD                |
| 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 Name and Address of Receiving POTW**

City of Sylvania WPCP  
 624 Friendship Road  
 Sylvania, Georgia 30467  
 Screven County

**1.6 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	1.51/1.9 MGD (monthly/weekly avg)	Savannah

**1.7 Receiving POTW Design Capacity: 1.9 MGD**

**1.8 Description of the POTW Wastewater Treatment Facility**

The POTW treatment facility consists of aerated pond, activated sludge, and chlorination.

**1.9 SIC Code & Description: 3562 – Ball and Roller Bearings**

**1.10 Description of Industrial Processes**

Koyo Bearings NA LLC in Sylvania Ga. is a start-to-finish manufacturer of Drawn Cup Needle Bearings and Precision Pin, Roll, and Shaft (PRS) components for the automotive and industrial market. High carbon steel is the raw material used for making cups and retainers which are two of the three primary components needed for drawn cup needle bearings. The third and final primary component needed for the bearings is rolls, which are made from High carbon low alloy steel. Other necessary components such as seals, washers, and greases are purchased. All PRS components are produced from high carbon low alloy steels. These metals are drawn (bearing cups) or stamped (Retainers) or turned (PRS components), heat-treated, washed, ground, polished and assembled if necessary.

This facility was previously listed as a metal finisher because they performed metal plating and stripping of copper coated metal stock. The operations that made the facility subject to 40 CFR 433 have been discontinued and the facility is no longer subject to the rule. The facility also does groundwater remediation for copper/cyanide due to the previous metal finishing operations at the site. They batch treat groundwater on an as needed basis, with rainfall usually controlling the schedule. In this treatment, the cyanide is destroyed with sodium hypochlorite and use sodium sulfate to ensure no residual chlorine is present. The copper is precipitated out with Dimethyldithiocarbamate before discharge to the city. The remediation usually occurs only once per month.

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

Facility waste water is generated primarily through the tumbling of PRS components. This process uses water and polishing compounds such as emery to polish and rinse PRS components. Another major contributor is the washing process used on all products after oil quench succeeding heat treat. Other contributors include blow down from cooling towers and boilers, and plant equipment wash down prior to decommissioning. The wastewater is treated by chemical precipitation, filtration, oil & grease separation, and neutralization.

**1.12 Type of Wastewater Discharge**

- process wastewater                       stormwater  
 domestic wastewater                       combined (describe)  
 other (description) boiler feed & non-contact cooling water

**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.

**Outfall No. 001 – Final Effluent**

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.20	0.16
TSS (mg/L)	47	47
BOD <sub>5</sub> (mg/L)	120	120
Oil & Grease (mg/L)	29	29
Cadmium (mg/L)	ND*	ND*
Chromium (mg/L)	0.017	0.017
Copper (mg/L)	ND*	ND*
Lead (mg/L)	ND*	ND*
Nickel (mg/L)	ND*	ND*
Silver (mg/L)	ND*	ND*
Zinc (mg/L)	ND*	ND*
Cyanide (mg/L)	ND*	ND*

\* Not detected because of treatment.

**2.0 APPLICABLE REGULATIONS**

**2.1 Local Regulations**

City of Sylvania Code of Ordinances Article II Section 74. (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)**

Code of Federal Regulations, 40 CFR Part 403.

**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>)

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“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> The City of Sylvania Sewer Use Ordinance (SUO) establishes an allowable range of 6.0-9.0 s.u. tested via a grab sample. The current permit range is 6.0-9.0 s.u. and this limit will remain in the permit.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
Oil and Grease	<u>Local Limit</u> The City of Sylvania SUO establishes a daily average of 100 mg/L and daily maximum of 100 mg/L tested via a grab sample.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
BOD <sub>5</sub>	<u>Local Limit</u> The City of Sylvania SUO does not establish a daily average limitation for BOD but based on Best Professional Judgement (BPJ), the facility will be required to monitor for BOD.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
TSS	<u>Local Limit</u> The City of Sylvania SUO does not establish a daily average limitation for TSS but based on Best Professional Judgement (BPJ), the facility will be required to monitor for TSS.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.

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**3.3 Nonconventional Pollutants**

<b>Pollutants of Concern</b>	<b>Basis</b>
Total Chromium	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Since chromium was present in the analysis for the application and based on BPJ, the permit has a limit of 1.0 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Cadmium	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Cadmium wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Copper	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Copper wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Cyanide	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 0.3 mg/L daily maximum. Cyanide was present in the analysis for the application and based on BPJ, the permit has a limit of 0.3 mg/L.</p>
Lead	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 0.6 mg/L daily maximum. Lead wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 0.6 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Nickel	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Nickel wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Silver	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Silver wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.</p> <p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Total Zinc	<p><u>Local Limit</u> The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L</p>

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daily maximum. Zinc wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.

Categorical Limit

There is no applicable federally based categorical limit.

Residual Chlorine

Local Limit

The City of Sylvania SUO establishes a numeric limitation of 1.0 mg/L daily maximum. Residual Chlorine wasn't present in the analysis for the application but based on BPJ, the permit has a limit of 1.0 mg/L.

Categorical Limit

There is no applicable federally based categorical limit.

Total Metals

Local Limit

The City of Sylvania SUO establishes a numeric limitation of 6.0 mg/L daily maximum. Since metals were present in the analysis for the application and based on BPJ, the permit has a limit of 6.0 mg/L.

Categorical Limit

There is no applicable federally based categorical limit.

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**3.4 Comparison and Summary of Limits**

The local limits shown below indicates the allowable loading from the facility to stay under the POTW's NPDES permit limits. The most stringent limits are in the permit.

<b>Pollutant</b>	<b>Categorical<sup>1</sup> (mg/L)</b>	<b>SUO</b>	<b>Sludge Regulations<sup>2</sup></b>	<b>POTW NPDES - Based Limit</b>	<b>WQS<sup>3</sup> (acute &amp; chronic) (mg/L)</b>	<b>POTW<sup>4</sup> Inhibition (mg/L)</b>	<b>Other (describe)</b>
Oil & Grease	N/A	100 mg/L	N/A	N/A	Narrative	N/A	N/A
Total Chromium	N/A	1.0 mg/L	N/A	N/A	1.48 mg/L	41.9 mg/L	N/A
pH	N/A	6.0-9.0 s.u.	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	1.0	N/A	N/A	N/A	N/A	N/A
Total Copper	N/A	1.0 mg/L	N/A	N/A	N/A	N/A	N/A
Lead	N/A	0.6 mg/L	N/A	N/A	N/A	N/A	N/A
Total Cyanide	N/A	0.3 mg/L	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	1.0 mg/L	N/A	N/A	N/A	N/A	N/A
Total Silver	N/A	1.0 mg/L	N/A	N/A	N/A	N/A	N/A
Total Zinc	N/A	1.0 mg/L	N/A	N/A	N/A	N/A	N/A
Total Metals	N/A	6.0 mg/L	N/A	N/A	N/A	N/A	N/A
Residual Chlorine	N/A	1.0 mg/L	N/A	N/A	N/A	N/A	N/A

<sup>1</sup> If N/A, the Federal Categorical Effluent Guideline does not have numeric limits established.

<sup>2</sup> The City hauls its sludge to a landfill, hence sludge criteria doesn't apply.

<sup>3</sup> If N/A, there are no numerical water quality standards for the pollutants.

<sup>4</sup> If N/A, the POTW doesn't have activated sludge or nitrification inhibition for those pollutants.

### 3.5 Example Limit Calculations or Tables

#### 3.5.a. POTW Local Limits Calculations – See Attachment C.

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

$$\text{BOD AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 23 \left( \frac{\text{mg}}{\text{L}} \right) \times 1.9 \text{ (MGD)}}{1 - \frac{95\%}{100}}$$

$$\text{BOD AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = 14,261$$

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

$$\text{BOD Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 14,261 \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{20\%}{100} \right) - 2835.6 \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$\text{BOD Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 8,573.5$$

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

$$\text{BOD Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{8,573.5 \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.2 \text{ (MGD)}}$$

$$\text{BOD Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = 5,140 \text{ mg/L (No Limit Necessary)}$$

#### 3.5.b. Acute Water Quality Standard Calculations

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{Acute WQS} \left( \frac{\text{mg}}{\text{L}} \right) \times (\text{POTW Flow (MGD)} + 1\text{Q}10 \text{ (MGD)})}{1 - \frac{\text{POTW Removal Efficiency (\%)}}{100}}$$

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 0.32 \left( \frac{\text{mg}}{\text{L}} \right) \times 1.9 \text{ (MGD)}}{1 - \frac{82\%}{100}}$$

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = 28.17$$

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

$$\text{Chromium Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 28.17 \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{20\%}{100} \right) - 0.482 \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Chromium Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 22.05$$

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

$$\text{Chromium Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{22.05 \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.02(\text{MGD})}$$

$$\text{Chromium Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = 13.22 \text{ (Not Most Stringent Value)}$$

**3.5.c. Chronic Water Quality Standard Calculations**

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{Chronic WQS} \left( \frac{\text{mg}}{\text{L}} \right) \times (\text{POTW Flow}(\text{MGD}) + 7\text{Q}10(\text{MGD}))}{1 - \frac{\text{POTW Removal Efficiency}(\%)}{100}}$$

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 0.042 \left( \frac{\text{mg}}{\text{L}} \right) \times 1.9(\text{MGD})}{1 - \frac{82\%}{100}}$$

$$\text{Chromium AHL} \left( \frac{\text{lbs}}{\text{day}} \right) = 3.7$$

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

$$\text{Chromium Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 3.7 \left( \frac{\text{lbs}}{\text{day}} \right) \times \left( 1 - \frac{20\%}{100} \right) - 0.482 \left( \frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Chromium Load} \left( \frac{\text{lbs}}{\text{day}} \right) = 2.47$$

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

$$\text{Chromium Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = \frac{2.47 \left( \frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.2(\text{MGD})}$$

$$\text{Daily Chromium Local Limit} \left( \frac{\text{mg}}{\text{L}} \right) = 1.48 \text{ (Not Most Stringent Value)}$$

**3.5.d. City of Sylvania Sewer Use Ordinance – See Attachment A.**

**4.0 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS**

**4.1 Anti-Backsliding**

Anti-backsliding does not occur because the facility was previously designated as subject to 40 CFR 433 Metal Finishing Category and major changes to the equipment and materials has made them not subject to this Federal requirement any longer.

**5.0 REPORTING**

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

Georgia Environmental Protection Division  
Coastal District Office  
400 Commerce Center Drive  
Brunswick, Georgia 31523

**5.1 E-Reporting**

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

**5.2 Compliance Schedules**

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

**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 a 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.

**Attachment A**

**City of Sylvania  
Sewer Use Ordinance**

## ARTICLE II. - WATER AND SEWER SYSTEMS

## Sec. 74-26. - Definitions.

(a)

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*BOD* (denoting biochemical oxygen demand) means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, five days at 20 degrees Celsius, expressed in milligrams per liter.

*Building drain* means that part of lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five feet outside the inner face of the building wall.

*Building sewer* means the extension from the building drain to the public sewer or other place of disposal.

*City* means the city or the governing body thereof.

*City manager* means the city manager or his authorized deputy, agent or representative.

*Garbage* means solid wastes from the domestic and commercial preparation, cooking and dispensing of food and from the handling, storage and sale of produce.

*Industrial wastes* means the liquid waste from industrial manufacturing processes, trade or business, as distinct from sanitary sewage.

*Natural outlet* means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

*pH* means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

*Properly shredded garbage* means the waste from the preparation of cooking and dispensing of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers with no particle greater than one-half inch in any dimension.

*Public sewer* means a sewer in which all owners of abutting properties have equal rights and is controlled by public authority.

*Sanitary sewer* means a sewer which carries sewage to which stormwaters, surface waters and groundwaters are not intentionally admitted.

*Sewage* means a combination of water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such groundwaters, surface waters and stormwaters as may be present.

*Sewage treatment plant* means any arrangements of the devices and structures used for treating sewage.

*Sewage works* means all facilities for collecting, pumping, treating and disposing of sewage.

*Sewer* means a pipe or conduit for carrying sewage.

*Sewer surcharge* means a charge for sewer service and treatment service for wastes having characteristics different from sanitary wastes and for which additional charges must be assessed in order for the waste to make compensation for additional expenses incurred.

*Slug* means any discharge of water, sewage or industrial waste which in concentration of any given constituent or in quantity of flow exceeds, for any period of duration longer than 15 minutes, more than five times the average 24-hour concentration proposed during normal operation.

*Standard methods* means the examination and analytical procedures set forth in the most recent edition of Standard Methods of Water, Sewage and Industrial Wastes, published jointly by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation.

*Storm drain or storm sewer* means a sewer which carries storm and surface waters and drainage but excludes sewage and industrial wastes other than unpolluted cooling water.

*Street* means streets, avenues, drives, boulevards, roads, alleys, lanes and viaducts, and all other public highways in the sanitary area.

*Suspended solids* means solids that either float on the surface of or are in suspension in water, sewage or other liquids which are removable by laboratory filtering.

*Total solids* means the sum of suspended matter, settleable matter and dissolved matter, both volatile and nonvolatile.

*Watercourse* means a channel in which flow of water occurs, either continuously or intermittently.

(b)

All other words shall be construed as having the meaning defined in Glossary Water and Sewage Control Engineering, published by the Water Pollution Control Federation, Washington, D.C., or by their general usage if undefined.

(Code 1976, § 5-1021)

Sec. 74-27. - Restriction on watering lawns.

Anyone watering their lawns, gardens and other vegetation during the months of June through September, between the hours of 12:00 noon and 8:00 p.m., shall be in violation of this Code; provided, however, that the above restrictions do not apply on Saturday, Sunday or legal holidays; nor do the above restrictions apply during the entire week of the Fourth of July.

(Ord. No. 242, 7-17-84)

Sec. 74-28. - Date charges due and payable.

All charges for water used by customers or patrons of the public waterworks of the city shall be due and payable monthly on the first day of each calendar month.

(Code 1976, § 5-1001)

Sec. 74-29. - Delinquent payments; penalty.

All charges and water rentals not paid within ten days after they become due shall be subject to a penalty of ten percent of the total amount due by the user for the given month.

(Code 1976, § 5-1002)

Sec. 74-30. - Discontinuance of service upon failure to pay charges; levy and execution.

Upon failure or refusal on the part of any user or consumer of water from the city to pay immediately upon demand the water rent or penalty or other charges by the 15th of the month, the city manager or other officer authorized to collect them shall be authorized and empowered to disconnect and suspend water service to this user. The mayor and council shall be authorized to issue an execution against this defaulting user in the name of the city to be levied and collected as provided in the city Charter for the collection of tax executions.

(Code 1976, § 5-1003)

Sec. 74-31. - Multiple meters; billing.

(a)

In no instance where one property owner has more than one meter shall the two meters be added to obtain a lower billing.

(b)

Monthly billing for sewer service shall be made with and as a part of the water system billing and payment for water service shall not be accepted without payment for any sewer service due. Nonpayment for either service shall result in discontinuance of water service.

(c)

Except for incorrect billing due to a faulty water meter, no adjustments or deviations shall be made from billing for the amount of water delivered from the city water systems.

(Code 1976, § 5-1005)

Sec. 74-32. - Unauthorized withdrawal of water; discharges into sewer.

Any person who shall, without proper authority, withdraw water from an unmetered connection to the city water system, or discharge material into the city sewer system which, in the opinion of the city's professional engineers, would be detrimental to the sewage treatment plant of the city, shall be subject to punishment as provided in section 1-12 upon conviction.

(Code 1976, § 5-1006)

**Sec. 74-33. - "Water connection" construed.**

A "water connection" shall consist of and be construed as the piping of water from the nearest or most practical water main of the city water system to the nearest property line of the applicant and shall include the installation of a water meter.

(Code 1976, § 5-1011)

**Sec. 74-34. - Application for connection; approval.**

No new water connection will be made and no water furnished or provided to any property owner or other person, except upon application to and approval by the city manager and accompanied by payment of a fee or charge in the manner and amounts provided in a schedule of fees approved by the mayor and council, and on file with the city clerk.

(Code 1976, § 5-1012; Ord. No. 469, 1-18-11)

**Sec. 74-35. - Use of public sewers required.**

(a)

It shall be unlawful for any person, to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the city, or in any area under the jurisdiction of the city, any human or animal excrement, garbage or other objectionable waste.

(b)

It shall be unlawful to discharge to any natural outlet within the city or in any area under the jurisdiction of the city any sewage or other polluted waters except where suitable treatment has been provided in accordance with subsequent provisions of this article.

(c)

It shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for disposal of sewage, where public sewers are reasonably available. In the event of failure to so remove a facility, the city shall have the work done, charging the cost to the property owner.

(d)

The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purpose situated within the city and abutting on any street, alley or right-of-way in which there is now or shall be located a public sanitary sewer of the city is hereby required at his expense to install suitable toilet facilities therein, and to connect these facilities directly with the proper public sewer in accordance with the provisions of this article within 90 days after date of written notice from the city manager to the property owner requiring the property owner to make connection thereto, provided that the public sewer shall be within 100 feet of the property line.

(Code 1976, § 5-1022)

Sec. 74-36. - Fees for connection.

On all connections to the city sanitary sewer system, the schedule of fees for such connections shall be fixed and established from time to time by the mayor and council and such schedule shall be on file in the office of the city clerk.

(Code 1976, § 5-1023)

Sec. 74-37. - Inspection and approval of connections.

All sewer lines and connections made within the city shall be subject to the inspection and approval of the superintendent of the water, sewer and waste treatment plant department.

(Code 1976, § 5-1024)

Sec. 74-38. - Private sewage disposal.

(a)

Where a public sanitary sewer is not available under provisions of section 74-35(d), the building sewer shall be connected to a private sewage disposal system complying with the provisions of this section.

(b)

Before commencement of construction of a private sewage disposal system other than a septic tank, privy, privy vault or cesspool for a single-family dwelling, the owner shall first obtain a written permit signed by the city manager. The application for this permit shall be made on a form furnished by the city which the applicant shall supplement by any plans, specifications and other information as are deemed necessary by the city manager. A permit and inspection fee set by the council shall be paid to the city at the time the application for permit is filed.

(c)

A permit for private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the city manager. The city's authorized representative(s) shall be allowed to inspect the work at any stage of construction and in any event, the applicant for the permit shall notify the city when the work is ready for final inspection and before any underground portions are covered. The inspection shall be made within two working days of the receipt of notice by the city manager.

(d)

The type, capacities, location and layout of a private sewage system shall comply with all recommendations of the state department of human resources or other local or state agencies having jurisdiction. No septic tank or cesspool shall be permitted to discharge to any natural outlet.

(e)

The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times at no expense to the city.

(f)

At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in section 74-35(d), a direct connection shall be made to the public sewer in compliance with this article and any septic tanks, cesspools and similar private sewage disposal facilities shall be abandoned, cleaned of sludge and filled with clean bank-run gravel or dirt within 60 days of notification to do so by the city manager, or other county or state agency having jurisdiction over these matters.

(g)

No statement contained in this section shall be construed to nullify any additional requirements that may be imposed by the appropriate state or county regulatory agencies having jurisdiction over these matters.

(Code 1976, § 5-1025)

Sec. 74-39. - Building sewers and connections.

(a)

No person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the city manager.

(b)

There shall be two classes of building sewer permits: residential and commercial service; and for service to establishments producing industrial wastes. In either case the owner or his agent shall make application on a special form furnished by the city. The permit application shall be supplemented by any plans, specification or other information considered pertinent in the judgment of the city manager. A permit and inspection fee set by the mayor and council for a building sewer shall be paid to the city when the application is filed.

(c)

All costs and expenses incident to the installation and connection of the building sewer to the property line shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(d)

A separate and independent building sewer shall be provided for every building. Where one building stands to the rear of another on a single lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, courtyard or driveway, the city may grant permission for the building sewer from the front building to be extended to the rear building and the whole considered as one building sewer, upon a showing by the applicant that it is not feasible that the two buildings so connected will ultimately be on separate building lots.

(e)

Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the city manager, to meet all of the requirements of this article.

(f)

The size, slope, alignment, materials of construction of a building sewer and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply.

(g)

Whenever possible, the building sewer shall be brought to the building at an elevation below the basement or first floor. No building sewer shall be made parallel to or within three feet of any bearing wall, which might thereby be weakened. The depth shall be sufficient to afford protection from live loads (automobiles, etc.) which may be superimposed. The building sewer shall be made at uniform grade and in straight alignment insofar as possible. The building sewer shall be constructed to such point as directed by the city manager.

(h)

No person shall maintain or make a connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

(i)

Before any underground portions thereof are covered, the applicant of the building sewer permit shall notify the city when the building sewer is ready for inspection and connection to the public sewer. The connection thereof shall be made to the public sewer by an authorized representative of the city and only after inspection.

(j)

All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazards. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the city.

(k)

The city manager shall keep a permanent and accurate record of the location, depth and direction of all new sewer connections, including such land marks as may be necessary to make an adequate description.

(Code 1976, § 5-1026)

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:

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

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)

Sec. 74-41. - Authority of city to reject wastes, require pretreatment, etc.

(a)

If any waters or wastes are discharged or are proposed to be discharged to the public sewers which waters contain the substances or possess the characteristics enumerated in section 74-40(c), which in

the judgment of the city manager may have a deleterious act upon the sewage works, processes, equipment or receiving water, or which otherwise create a hazard to life or constitute a public nuisance, the city may:

(1)

Reject wastes.

(2)

Require pretreatment to an acceptable condition with discharge to the public sewers.

(3)

Require control over the quantities and rates of discharge.

(4)

Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges, under the provisions of section 74-43(d).

(b)

If the city permits the pretreatment or equalization of waste flows, the design and installation of the plant and equipment shall be subject to the review and approval of the city manager subject to the requirements of all applicable codes, ordinances and laws.

(Code 1976, § 5-1028)

Sec. 74-42. - Grease traps and interceptors for oil and sand.

(a)

All new business entities in the city that generate waste water containing oil or sand must collect this waste water and discharge it into the city's sanitary sewer system. A city approved oil/sand interceptor must be installed on the sanitary sewer service line. The location of the oil/sand interceptor must be as per the standard plumbing code. Existing businesses must install interceptors or be in compliance within six months from the enactment of this section, provided that such existing businesses shall continue to be subject to the former section 74-42 during such six-month period.

(b)

All food service operations in the city that discharge waste water containing grease must install a grease trap or interceptor.

(c)

All grease traps and interceptors must be designed using standard engineering principles for sedimentation and floatation in gravity separators. All grease traps and interceptors must be approved by the utility department of the city.

(d)

All newly constructed food service establishments shall be required to install a grease interceptor sized at 20 gallons per food service seat, but not less than 1,000 gallons capacity.

(e)

All existing food service establishments shall be required to install and establish grease handling traps and interceptors. Existing establishments operating without grease traps and interceptors shall have six months from the date of this section to render their establishment in compliance with this section. If an existing food service establishment cannot meet the outdoor type grease interceptor requirements, an alternate under-the-counter grease trap and interceptor may be used, if approved by the director of utilities.

(f)

Each entity or establishment governed by this section shall maintain a service log reflecting the maintenance of their grease trap and interceptor and/or oil or sand interceptor. The service log shall be available in a conspicuous location for appropriate review by city personnel.

(g)

Food service operations that do not generate grease will not require a grease trap or interceptor. These facilities include, but are not limited to, the following:

Bagel shops;

Bakeries with no deep frying;

Canteens;

Coffee shops;

Delicatessens that do not require a grease hood;

Fish shops;

Fruit and vegetable markets;

Juice bars;

Meat sales;

Muffin shops;

Pretzel shops;

Sandwich shops that do not deep fry.

Any other establishment not included in the above categories that do not generate waste water containing grease or solids may request an exemption from the city manager.

(h)

Failure to comply with this section shall be punishable as provided by section 1-12

(Ord. No. 443, 3-6-07)

**Editor's note—**

Ord. No. 443, adopted March 6, 2007, amended § 74-42 in its entirety to read as herein set out. Formerly, § 74-42 pertained to interceptors, and derived from the Code of 1976, § 5-1029.

**Sec. 74-43. - Private preliminary treatment facilities; control manhole; tests, sampling, etc.; special agreements.**

(a)

Where preliminary treatment or flow-equalizing facilities is provided for any waters or wastes, it shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(b)

It shall be required by the city that the owner of any property serviced by a building sewer carrying industrial wastes install a suitable control manhole. When deemed necessary, the city may require additional meters and other appurtenances in the building sewer to facilitate observation, sampling and measurement of the waste. This manhole shall be accessibly and safely located and shall be constructed in accordance with plans approved by the city manager. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

(c)

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in this article shall be determined in accordance with the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at the control manhole. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards of life, limb and property.

(d)

No statement contained in sections 74-40 through 74-43 shall be construed as preventing any agreement or arrangement between the city and any industrial concern whereby industrial waste of unusual strength or character may be accepted by the city for treatment, subject to payment therefor by the industrial concern.

(Code 1976, § 5-1030)

**Sec. 74-44. - Removal, transportation and disposition of scavenger wastes.**

(a)

The city may require a formal permit for discharge of scavenger wastes after submission of an application on forms supplied by the city. Scavenger wastes shall mean putrid or offensive matter, the

contents of all privies, septic tanks and cesspools. All other materials and substances, chemicals or chemical compounds and/or industrial wastes will not be permitted to be discharged into the public sewerage system except as heretofore provided. The discharge of these wastes shall be made only at a location in the sewage treatment plant as shall be designated by the city manager.

(b)

Scavenger wastes will be admitted into the sewage system only by approval of the city and subject to payment of fees or charges fixed by the city. This fee or charge shall be based upon the full capacity of each scavenger vehicle for each discharge.

(c)

The applicant shall be the owner of the vehicle discharging these wastes. Any false, misleading or untruthful statements as to the nature of material shall be cause for rejection of any further discharge from the applicant. Discharges may also be suspended or terminated at any time by the city manager for willful, continued or persistent violations of these rules and regulations or upon such grounds as the city may deem proper.

(d)

All equipment (trucks, tanks, pumps and hose used in the collection and/or transportation of scavenger wastes) shall be modern equipment in good repair. When more than one vehicle is used by an applicant, each vehicle shall bear an identifying number.

(e)

All applicants for a permit shall furnish information with each application:

(1)

Name and address of applicant.

(2)

Volume of scavenger waste for each numbered vehicle.

(3)

Number of scavenger vehicles in collection service.

(Code 1976, § 5-1031)

Sec. 74-45. - Powers and authority of inspectors.

(a)

The city manager and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling and testing in accordance with the provisions of this article. The city manager or his representative shall have no authority to inquire into any processes, including metallurgical,

chemical, oil refining, ceramic, paper or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.

(b)

While performing the necessary work on private properties referred to in subsection (a) above, the city manager or duly authorized employees of the city, shall observe all safety rules applicable to the premises established by the company, and the company shall be held harmless for injury or death to the city employees. The city shall indemnify the company against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging, sampling operations, except as this may be caused by negligence or failure of the company to maintain safe conditions as required in section 74-43(b).

(c)

The city manager and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the sewage works lying within the easement. All entry and subsequent work, if any, on the easement shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

(Code 1976, § 5-1032)

Sec. 74-46. - Protection from damage.

No unauthorized person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the sewage works. Any person violating this section shall be subject to immediate arrest under charge of disorderly conduct.

(Code 1976, § 5-1033)

Sec. 74-47. - Penalties.

(a)

Any person found to be violating any provision of this article except section 74-46 shall be served by the city with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in this notice, permanently cease all violations.

(b)

Any person who shall continue any violation beyond the time limit provided for in subsection (a) above, shall be guilty of a misdemeanor and on conviction thereof shall be fined, for each violation as provided in section 1-12. Each day in which this violation shall continue shall be deemed a separate offense.

(c)

Any person violating any of the provisions of this article shall become liable to the city for any expense, loss or damage occasioned the city by reason of the violation.

(Code 1976, § 5-1034)

Sec. 74-48. - Grievances and arbitration.

(a)

Upon formal request by the sewer user, the mayor and council may hear any required arbitration of differences or grievances between the sewer user and the city manager on matters concerning interpretation and execution of the provisions of this article.

(b)

If deemed appropriate by the mayor and council, an independent hearing board may be appointed for arbitration purposes. This board shall consist of at least three persons, one of whom shall be a lawyer and the other two shall have a technical knowledge of the provisions of this article. The cost of arbitration shall be equally divided between the city and the sewer user.

(Code 1976, § 5-1035)

Sec. 74-49. - Self-inspection by master plumbers or utility contractors not applicable.

Pursuant to the authority contained in Section 3 of Act 1046 Ga. L., 1996, P. 1632, O.C.G.A. § 8-2-26 (d), relating to the self-inspection of water and sewer projects by master plumbers or utility contractors, shall not be applicable within the city.

(Ord. No. 347, 9-23-96)

Secs. 74-50—74-70. - Reserved.

**Attachment B**

**Local Limits Evaluation**

Local Limits Determination Based on NPDES Daily Effluent Limits TABLE 1

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING

INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Daily Limit (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)	
Ammonia-N	0.2	1.9	55	3	7	1.7	105.64	98.246	-4.17	-2.5	10	
Arsenic	0.2	1.9	45			1.7		0			20	
BOD	0.2	1.9	95	45	200	1.7	14261.4	2835.6	8573.52	5140	20	
Cadmium	0.2	1.9	70		0.008	1.7		0.113424			20	
Chromium	0.2	1.9	82		0.034	1.7		0.482052			20	
Hex. Chrom.	0.2	1.9	63		0	1.7		0			20	
COD	0.2	1.9	95		0	1.7		0			10	
Copper	0.2	1.9	99.99		0.109	1.7		1.545402			20	
Cyanide	0.2	1.9	32		0.082	1.7		1.162596			20	
Lead	0.2	1.9	52		0.116	1.7		1.644648			20	
Mercury	0.2	1.9	67		0.002	1.7		0.028356			20	
Nickel	0.2	1.9	17		0.85	1.7		12.0513			20	
Oil & Grease	0.2	1.9	95		100	1.7		1417.8			0	
Phosphorus	0.2	1.9	90		5	1.7		70.89			20	
Silver	0.2	1.9	75		0.019	1.7		0.269382			20	
TSS	0.2	1.9	98	45	300	1.7	35653.5	4253.4	24269.4	14550	20	
TTO	0.2	1.9	0		0	1.7		0			0	
Zinc	0.2	1.9	78		0.212	1.7		3.005736			10	
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.											
(Qpotw)	POTW's average influent flow in MGD.											
(Rpotw)	Removal efficiency across POTW as percent. (in this case = to Rprim)											
(Ccrit)	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 headworks 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)	Maximum 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											
Lhw =	8.34 * Ccrit * Qpotw											
::	1 - Rpotw											

Local Limits Determination Based on NPDES Monthly Effluent Limits

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 Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)	
Ammonia-N	0.16	1.51	55	2	7	1.35	55.97068667	78.813	-28.4394	-21.3125	10	
Arsenic	0.16	1.51	45		0	1.35	-	0	-	-	20	
BOD	0.16	1.51	95	30	200	1.35	7556.04	2251.8	3793.032	2842.5	20	
Cadmium	0.16	1.51	70		0.008	1.35	-	0.090072	-	-	20	
Chromium	0.16	1.51	82		0.034	1.35	-	0.382806	-	-	20	
Hex. Chrom.	0.16	1.51	63		0	1.35	-	0	-	-	20	
COD	0.16	1.51	95		0	1.35	-	0	-	-	10	
Copper	0.16	1.51	99.99		0.109	1.35	-	1.227231	-	-	20	
Cyanide	0.16	1.51	32		0.082	1.35	-	0.923238	-	-	20	
Lead	0.16	1.51	52		0.116	1.35	-	1.306044	-	-	20	
Mercury	0.16	1.51	67		0.002	1.35	-	0.022518	-	-	20	
Nickel	0.16	1.51	17		0.021	1.35	-	0.236439	-	-	20	
Oil & Grease	0.16	1.51	95		100	1.35	-	1125.9	-	-	0	
Phosphorus	0.16	1.51	90		5	1.35	-	56.295	-	-	20	
Silver	0.16	1.51	75		0.019	1.35	-	0.213921	-	-	20	
TSS	0.16	1.51	98	30	300	1.35	18890.1	3377.7	11734.38	8793.75	20	
TTO	0.16	1.51	0		0	1.35	-	0	-	-	0	
Zinc	0.16	1.51	78		0.212	1.35	-	2.386908	-	-	10	
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.											
(Qpotw)	POTW's average influent flow in MGD.											
(Rpotw)	Removal efficiency across POTW as percent.											
(Ccrit)	NPDES monthly 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.											
(Lhw)	Maximum allowable headworks 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.											
(Lind)	Maximum allowable industrial loading to the POTW for a particular pollutant 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											
Lhw =	8.34 * Ccrit * Qpotw											
	1 - Rpotw											
::												

TABLE 3 Local Limits Determination Based on Activated Sludge Inhibition Level NA - not activated sludge											
ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE											
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
MAXIMUM LOADING											
INDUSTRIAL											
Ammonia-N	0.2	1.9	0		14	1.7	-	198,492	-	-	10
Arsenic	0.2	1.9	45		0	1.7	-	0	-	-	20
BOD	0.2	1.9	98		200	1.7	-	2835.6	-	-	20
Cadmium	0.2	1.9	67		0.008	1.7	-	0.113424	-	-	20
Chromium	0.2	1.9	82		0.034	1.7	-	0.482052	-	-	20
Hex. Chrom.	0.2	1.9	0		0	1.7	-	0	-	-	20
COD	0.2	1.9	80		0	1.7	-	0	-	-	10
Copper	0.2	1.9	86		0.109	1.7	-	1,545,402	-	-	20
Cyanide	0.2	1.9	69		0.082	1.7	-	1,162,596	-	-	20
Lead	0.2	1.9	61		0.116	1.7	-	1,644,648	-	-	20
Mercury	0.2	1.9	60		0.002	1.7	-	0,028,356	-	-	20
Nickel	0.2	1.9	50		0.021	1.7	-	0,297,738	-	-	20
Oil & Grease	0.2	1.9	50		100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9	0		5	1.7	-	70.89	-	-	20
Silver	0.2	1.9	75		0.019	1.7	-	0,269,382	-	-	20
TSS	0.2	1.9	80		300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9	0		0	1.7	-	0	-	-	0
Zinc	0.2	1.9	79		0.212	1.7	-	3,005,736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant										
(Qpotw)	POTW's average influent flow in MGD.										
(Rprim)	Removal efficiency across primary treatment as percent										
(Ccrit)	Activated sludge threshold inhibition level, mg/l.										
(Qdom)	Domestic/commercial background flow in MGD.										
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.										
(Lhw)	Maximum allowable headworks 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)	Maximum 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										
Lhw =	8.34 * Ccrit * Qpotw										
	1 - Rprim										
::											

Local Limits Determination Based on Nitrification Inhibition Level - N/A - No Nitrification at POTW											
TABLE 4											
ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE											
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rsec)	Nitrification Inhibition Level (mg/l) (Ccrit)	Domestic and Commercial Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.2	1.9	0	0	7	1.7	-	99.246	-	-	10
Arsenic	0.2	1.9	0	0	0	1.7	-	0	-	-	20
BOD	0.2	1.9	0	0	200	1.7	-	2835.6	-	-	20
Cadmium	0.2	1.9	0	0	0.008	1.7	-	0.113424	-	-	20
Chromium	0.2	1.9	0	0	0.034	1.7	-	0.482052	-	-	20
Hex Chrom.	0.2	1.9	0	0	0	1.7	-	0	-	-	20
COD	0.2	1.9	0	0	0	1.7	-	0	-	-	10
Copper	0.2	1.9	0	0	0.109	1.7	-	1.545402	-	-	20
Cyanide	0.2	1.9	0	0	0.082	1.7	-	1.162596	-	-	20
Lead	0.2	1.9	0	0	0.116	1.7	-	1.644648	-	-	20
Mercury	0.2	1.9	0	0	0.002	1.7	-	0.028356	-	-	20
Nickel	0.2	1.9	0	0	0.021	1.7	-	0.297738	-	-	20
Oil & Grease	0.2	1.9	0	0	100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9	0	0	5	1.7	-	70.89	-	-	20
Silver	0.2	1.9	0	0	0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9	0	0	300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9	0	0	0	1.7	-	0	-	-	0
Zinc	0.2	1.9	0	0	0.212	1.7	-	3.005736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.										
(Qpotw)	POTW's average influent flow in MGD.										
(Rsec)	Removal efficiency across primary treatment and secondary treatment as percent.										
(Ccrit)	Nitrification threshold inhibition level, mg/l.										
(Qdom)	Domestic/commercial background flow in MGD.										
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.										
(Lhw)	Maximum allowable headworks 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)	Maximum allowable industrial loading to the POTW for a particular pollutant 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										
Lhw =	8.34 * Ccrit * Qpotw										
	1 - Rsec										
::											

TABLE 5

Local Limits Determination Based on USEPA 503 Sludge Regulations - NA

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE				Landfilled			MAXIMUM LOADING			INDUSTRIAL		
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qslgd)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	503 Sludge Criteria (mg/kg)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.2	1.9		5	55		7	1.7	-	99.246	-	-	10
Arsenic	0.2	1.9		5	45		0	1.7	-	0	-	-	20
BOD	0.2	1.9		5	95		200	1.7	-	2835.6	-	-	20
Cadmium	0.2	1.9		5	70		0.008	1.7	-	0.113424	-	-	20
Chromium	0.2	1.9		5	82		0.034	1.7	-	0.482052	-	-	20
Hex. Chrom.	0.2	1.9		5	63		0	1.7	-	0	-	-	20
COD	0.2	1.9		5	95		0	1.7	-	0	-	-	10
Copper	0.2	1.9		5	99.99		0.109	1.7	-	1.545402	-	-	20
Cyanide	0.2	1.9		5	32		0.082	1.7	-	1.162596	-	-	20
Lead	0.2	1.9		5	52		0.116	1.7	-	1.644648	-	-	20
Mercury	0.2	1.9		5	67		0.002	1.7	-	0.028356	-	-	20
Nickel	0.2	1.9		5	95		0.85	1.7	-	12.0513	-	-	20
Oil & Grease	0.2	1.9		5	95		100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9		5	90		5	1.7	-	70.89	-	-	20
Silver	0.2	1.9		5	75		0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9		5	98		300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9		5	0		0	1.7	-	0	-	-	0
Zinc	0.2	1.9		5	78		0.212	1.7	-	3.005736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qslgd)	Sludge flow to disposal in MGD.												
(PS)	Percent solids of sludge to disposal.												
(Rpotw)	Removal efficiency across POTW as a percent.												
(Cslcrt)	503 sludge criteria in mg/kg dry sludge.												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks 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)	Maximum allowable industrial loading to the POTW for a particular pollutant in pounds per day (lbs/day).												
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.												
(SF)	Safety factor as a percent.												
8.34	Unit conversion factor												
Lhw =	8.34 * Cslcrt * (PS/100) * Qslgd												
..	Rpotw												

TABLE 6

Local Limits Determination Based on State Sludge Criteria - N/A, Sludge is Landfilled

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE					MAXIMUM LOADING					INDUSTRIAL		
	IU Pollut. Flow (MGD) (Cind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	State Sludge Criteria (mg/kg) (Cslcrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.2	1.9	0		55	0	7	1.7	-	98,246	-	-	10
Arsenic	0.2	1.9	0		45	0	0	1.7	0	0	-	-	20
BOD	0.2	1.9	0		95	0	200	1.7	-	2835.6	-	-	20
Cadmium	0.2	1.9	0		70	0	0.008	1.7	-	0.113424	-	-	20
Chromium	0.2	1.9	0		82	0	0.034	1.7	-	0.482052	-	-	20
Hex. Chrom.	0.2	1.9	0		63	0	0	1.7	-	0	-	-	20
COD	0.2	1.9	0		95	0	0	1.7	-	0	-	-	10
Copper	0.2	1.9	0		99.99	0	0.109	1.7	-	1,545,402	-	-	20
Cyanide	0.2	1.9	0		32	0	0.082	1.7	-	1,162,596	-	-	20
Lead	0.2	1.9	0		52	0	0.116	1.7	-	1,644,648	-	-	20
Mercury	0.2	1.9	0		67	0	0.002	1.7	-	0.028356	-	-	20
Nickel	0.2	1.9	0		95	0	0.85	1.7	-	12,0513	-	-	20
Oil & Grease	0.2	1.9	0		96	0	100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9	0		90	0	5	1.7	-	70.89	-	-	20
Silver	0.2	1.9	0		75	0	0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9	0		98	0	300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9	0		0	0	0	1.7	-	0	-	-	0
Zinc	0.2	1.9	0		78	0	0.212	1.7	-	3,005,736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qsldg)	Sludge flow to disposal in MGD.												
(PS)	Percent solids of sludge to disposal.												
(Rpotw)	Removal efficiency across POTW as a percent.												
(Cslcrit)	State sludge criteria in mg/kg dry sludge.												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks 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)	Maximum 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.												
6.34	Unit conversion factor												
Lhw =	8.34 * Cslcrit * (PS/100) * Qsldg												
..	Rpotw												

TABLE 7

Local Limits Determination Based on Chronic Water Quality Standards  
ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

Only chromium above detection level  
MAXIMUM LOADING

INDUSTRIAL

Pollutant	IU Pollut.		POTW	Upstream	Upstream	Removal	Chronic	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
	Flow	(MGD)	(MGD)	Flow	Conc.	Efficiency	WQS	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(Qind)	(Qpotw)	(Qstr)	(Qstr)	(mg/l)	(Rpotw)	(Ccrit)	(mg/l)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(mg/l)	(SF)
Ammonia-N	0.2	1.9	0	0		55		7	1.7	-	99.246	-	-	10
Arsenic	0.2	1.9	0	0		45		0	1.7	-	0	-	-	20
BOD	0.2	1.9	0	0		95		200	1.7	-	2835.6	-	-	20
Cadmium*	0.2	1.9	0	0		70		0.008	1.7	-	0.113424	-	-	20
Chromium*	0.2	1.9	0	0		82	0.042	0.034	1.7	3.6974	0.482052	2.475868	1.484333	20
Hex. Chrom.	0.2	1.9	0	0		63		0	1.7	-	0	-	-	20
COD	0.2	1.9	0	0		95		0	1.7	-	0	-	-	10
Copper*	0.2	1.9	0	0		86		0.14	1.7	-	1.98492	-	-	20
Cyanide	0.2	1.9	0	0		32		0.082	1.7	-	1.162596	-	-	20
Lead*	0.2	1.9	0	0		61		0.058	1.7	-	0.822324	-	-	20
Mercury	0.2	1.9	0	0		67		0.002	1.7	-	0.028356	-	-	20
Nickel*	0.2	1.9	0	0		98		0.85	1.7	-	12.0513	-	-	20
Oil & Grease	0.2	1.9	0	0		95		100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9	0	0		90		5	1.7	-	70.89	-	-	20
Silver	0.2	1.9	0	0		75		0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9	0	0		98		300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9	0	0		0		0	1.7	-	0	-	-	0
Zinc*	0.2	1.9	0	0		78		0.212	1.7	-	3.005736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.													
(Qpotw)	POTW's average influent flow in MGD.													
(Qstr)	Receiving stream (upstream) 7Q10 flow in MGD.													
(Cstr)	Removal stream background level in mg/l.													
(Rpotw)	Removal efficiency across POTW as percent.													
(Ccrit)	State chronic water quality standard for a particular pollutant in mg/l. (expressed in dissolved fraction * at hardness = 50)													
(Qdom)	Domestic/commercial background flow in MGD.													
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.													
(Lhw)	Maximum allowable headworks 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)	Maximum allowable industrial loading to the POTW for a particular pollutant in pounds per day (lbs/day).													
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.													
(SF)	Safety factor as a percent.													
8.34	Unit conversion factor													
Lhw =	8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))													
::	1 - Rpotw													

TABLE 8

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

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE				Only chromium above detection level				INDUSTRIAL				
	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Acute WQS (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)		Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)
Ammonia-N	0.2	1.9	0	0	55		7	1.7	-	99.246	-	-	10
Arsenic	0.2	1.9	0	0	45		0	1.7	-	0	-	-	20
BOD	0.2	1.9	0	0	95		200	1.7	-	2835.6	-	-	20
Cadmium*	0.2	1.9	0	0	70		0.008	1.7	-	0.113424	-	-	20
Chromium*	0.2	1.9	0	0	82	0.32	0.034	1.7	28.170667	0.482052	22.054481	13.22211	20
Hex. Chrom.	0.2	1.9	0	0	63		0	1.7	-	0	-	-	20
COD	0.2	1.9	0	0	95		0	1.7	-	0	-	-	10
Copper*	0.2	1.9	0	0	86		0.109	1.7	-	1.545402	-	-	20
Cyanide	0.2	1.9	0	0	32		0.082	1.7	-	1.162596	-	-	20
Lead*	0.2	1.9	0	0	52		0.116	1.7	-	1.644648	-	-	20
Mercury	0.2	1.9	0	0	67		0.002	1.7	-	0.028356	-	-	20
Nickel*	0.2	1.9	0	0	98		0.85	1.7	-	12.0513	-	-	20
Oil & Grease	0.2	1.9	0	0	95		100	1.7	-	1417.8	-	-	0
Phosphorus	0.2	1.9	0	0	90		5	1.7	-	70.89	-	-	20
Silver	0.2	1.9	0	0	75		0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9	0	0	98		300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9	0	0	0		0	1.7	-	0	-	-	0
Zinc	0.2	1.9	0	0	78		0.212	1.7	-	3.005736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qstr)	Receiving stream (upstream) 1Q10 flow in MGD.												
(Cstr)	Receiving stream background level in mg/l.												
(Rpotw)	Removal efficiency across POTW as percent.												
(Ccrit)	State acute water quality standard for a particular pollutant in mg/l. (expressed in dissolved fraction * at hardness = 50)												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks 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)	Maximum 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												
Lhw =	$8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))$												
::	$1 - R_{potw}$												

TABLE 9

Local Limits Determination Based on Anaerobic Digester Inhibition Level - N/A - No Anaerobic Digester at the POTW

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING INDUSTRIAL

Pollutant	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE				MAXIMUM LOADING INDUSTRIAL							
	IU Pollut. Flow (MGD) (Qind)	POTW Flow to Digester (MGD) (Qdig)	Sludge Flow to Digester (MGD) (Qdig)	Removal Efficiency (%) (Rpotw)	Anaerobic Digester Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.2	1.9		55		7	0.5	-	29.19	-	-	10
Arsenic	0.2	1.9		45		0	1.7	-	0	-	-	20
BOD	0.2	1.9		95		200	1.7	-	2835.6	-	-	20
Cadmium	0.2	1.9		70		0.008	1.7	-	0.113424	-	-	20
Chromium	0.2	1.9		82		0.034	1.7	-	0.482052	-	-	20
Hex Chrom.	0.2	1.9		63		0	1.7	-	0	-	-	20
COD	0.2	1.9		95		0	1.7	-	0	-	-	10
Copper	0.2	1.9		99.99		0.109	1.7	-	1.545402	-	-	20
Cyanide	0.2	1.9		32		0.082	1.7	-	1.162596	-	-	20
Lead	0.2	1.9		52		0.116	1.7	-	1.644648	-	-	20
Mercury	0.2	1.9		67		0.002	1.7	-	0.028356	-	-	20
Nickel	0.2	1.9		95		0.85	1.7	-	12.0513	-	-	20
Oil & Grease	0.2	1.9		95		1	1.7	-	14.178	-	-	0
Phosphorus	0.2	1.9		90		5	1.7	-	70.89	-	-	20
Silver	0.2	1.9		75		0.019	1.7	-	0.269382	-	-	20
TSS	0.2	1.9		98		300	1.7	-	4253.4	-	-	20
TTO	0.2	1.9		0		0	1.7	-	0	-	-	0
Zinc	0.2	1.9		78		0.212	1.7	-	3.005736	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.											
(Qpotw)	POTW's average influent flow in MGD.											
(Qdig)	Sludge flow to digester in MGD.											
(Rpotw)	Removal efficiency across POTW as percent.											
(Ccrit)	Anaerobic digester threshold inhibition level in mg/l.											
(Qdom)	Domestic/commercial background flow in MGD.											
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.											
(Lhw)	Maximum allowable headworks 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)	Maximum 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											
Lhw =	8.34 * Ccrit * Qdig											
	Rpotw											

\*\*dissolved metal inhibition

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)	Basis in Derivation of Limit	Local Limit Loading (kg/day)	Categorical Standards (mg/l)	Sewer Use Ordinance (mg/l)	Current Limits (mg/L)	New Limits (mg/L)	
Ammonia-N	7	D	5.308	na				
Arsenic	0	D	0	na	0.05			
BOD	2842.5	P	2154.615	na			monitor	
Cadmium	0.008	D	0.006064	na	1.0	0.008/0.008		
Chromium	1.484333	W	1.1251247	na	1.0	1.0/1.0	1.0/1.0	
Hex. Chrom.	0	D	0	na				
COD	0	D	0	na				
Copper	0.109	D	0.082622	na	1.0	0.109/0.109		
Cyanide	0.082	D	0.062156	na	0.3	0.082/0.082		
Lead	0.116	D	0.087928	na	0.6	0.116/0.116		
Mercury	0.002	D	0.001516	na				
Nickel	0.85	D	0.6443	na	1.0	0.992/0.992		
Oil & Grease	100	D	75.8	na	100	100/100	100/100	
Phosphorus	5	D	3.79	na				
Silver	0.019	D	0.014402	na	1	0.24/0.43	monitor	
TSS	8793.75	P	6665.6625	na				
TTO	0	D	0	na				
Zinc	0.212	D	0.160696	na	1.0	2.13/2.13		
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							