

GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office

2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

MAR 22 2018

Mr. Greg Brock, Managing Director
Premier Yarn Dyers
P.O. Box 250
Adairsville, Georgia 30103

RE: Permit Issuance
Premier Yarn Dyers
Pretreatment Permit No. GAP050316
(Formally GAU050176)
Adairsville, Bartow County

Dear Mr. Brock:

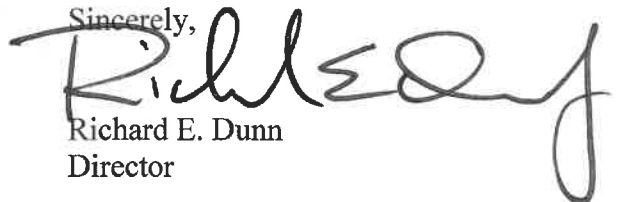
Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

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

Environmental Protection Division
Mountain District Office
P.O. Box 3250
16 Center Road (30121)
Cartersville, Georgia 30120

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 Christopher Douglas at 404.463.0932 or Christopher.Douglas@dnr.ga.gov.

Sincerely,



Richard E. Dunn
Director

RED:cd

Enclosure(s)

cc: EPD Mountain District (Cartersville) Office – Ms. Cindy Nix (email)

City of Adairsville Water Pollution Control Plant – Ms. Lisa Eury (leury@adairsvillega.net)



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Industrial Pretreatment Permit

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

Premier Yarn Dyers
P.O. Box 250
Adairsville, Georgia 30103

is authorized to discharge from a facility located at

Premier Yarn Dyers
128 George Street
Adairsville, Georgia 30103

to the sewerage system tributary to the

City of Adairsville North Water Pollution Control Plant (Coosa 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 January 23, 2017, and 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 facility is subject to the requirements of 40 CFR 410 Textile Mills Point Source Category, Pretreatment Standards for Existing Sources (PSES).

This permit shall become effective on April 1, 2018.

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



Richard E. Dunn, Director
Environmental Protection Division

PART I

A.1 Effluent Limitations and Monitoring Requirements

- a. Upon the effective date of the permit and continuing for 24 months, the permittee is authorized to discharge from outfall no(s.) 001⁽¹⁾ – ozone generating cooling water, boiler blowdown, and wastewater from the space and exhaust dyeing processes to the sewerage system and publicly owned treatment works (POTW) at City of Adairsville North Water Pollution Control Plant.

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

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements ⁽²⁾		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	0.125	0.220	--	--	Daily	Continuous	Final Effluent ⁽³⁾
BOD ₅	261	261	250	250	1/Week	Grab	Final Effluent ⁽³⁾
TSS	261	261	250	250	1/Week	Grab	Final Effluent ⁽³⁾
Oil & Grease	104	104	100	100	1/Quarter	Grab	Final Effluent ⁽³⁾
Zinc, Total	0.221	0.221	0.212	0.212	1/Quarter	Composite	Final Effluent ⁽³⁾
Lead, Total	0.041	0.041	0.039	0.039	1/Quarter	Composite	Final Effluent ⁽³⁾
Chloride, as Cl	--	--	Report	Report	1/Week	Composite	Final Effluent ⁽³⁾
Color (PCU) ⁽⁴⁾	--	--	Report ⁽⁴⁾	Report ⁽⁴⁾	1/Week	Composite	Final Effluent ⁽³⁾
Ammonia, as N	20.9	20.9	20	20	1/Week	Grab	Final Effluent ⁽³⁾
Cadmium, Total	0.039	0.039	0.038	0.038	1/Quarter	Grab	Final Effluent ⁽³⁾

The pH shall not be less than 5.5 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), 40 CFR 410.76 or EPD determinations. The Permittee will be notified in writing of any changes in the above listed discharge limitations.

¹ There shall be no discharge of floating solids or visible foam other than in trace amounts.

² 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.

³ The final effluent for purposes of sampling, monitoring and the application of pretreatment limitations is the final discharge point prior to entry into the sewerage system.

⁴ See Schedule of Compliance, Part III.B., of this permit.

A.1 Effluent Limitations and Monitoring Requirements

- b. Effective 24 months from the effective date of the permit and continuing until the expiration date of the permit, the permittee is authorized to discharge from outfall no(s.) 001⁽¹⁾ – ozone generating cooling water, boiler blowdown, and wastewater from the space and exhaust dyeing processes to the sewerage system and publicly owned treatment works (POTW) at City of Adairsville North Water Pollution Control Plant.

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

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements ⁽²⁾		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	0.125	0.220	--	--	Daily	Continuous	Final Effluent ⁽³⁾
BOD ₅	261	261	250	250	1/Week	Composite	Final Effluent ⁽³⁾
TSS	261	261	250	250	1/Week	Composite	Final Effluent ⁽³⁾
Oil & Grease	104	104	100	100	1/Quarter	Composite	Final Effluent ⁽³⁾
Zinc, Total	0.221	0.221	0.212	0.212	1/Quarter	Composite	Final Effluent ⁽³⁾
Lead, Total	0.041	0.041	0.039	0.039	1/Quarter	Composite	Final Effluent ⁽³⁾
Chloride	--	--	Report	Report	1/Week	Composite	Final Effluent ⁽³⁾
Color (PCU)	--	--	750	750	1/Week	Composite	Final Effluent ⁽³⁾
Ammonia, as N	20.9	20.9	20	20	1/Week	Grab	Final Effluent ⁽³⁾
Cadmium, Total	0.039	0.039	0.038	0.038	1/Quarter	Grab	Final Effluent ⁽³⁾

The pH shall not be less than 5.5 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), 40 CFR 410.76 or EPD determinations. The Permittee will be notified in writing of any changes in the above listed discharge limitations.

- ¹ There shall be no discharge of floating solids or visible foam other than in trace amounts.
- ² 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
- ³ The final effluent for purposes of sampling, monitoring and the application of pretreatment limitations is the final discharge point prior to entry into the sewerage system.

B. Monitoring

1. Representative Sampling

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

2. Sampling Period

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

3. Monitoring Procedures

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

4. Detection Limit

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

5. Recording of Results

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

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

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

7. Records Retention

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

8. Penalties

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

C. Definitions

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

D. Reporting Requirements

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

3. Other Reports

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

4. Other Noncompliance

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

5. Signatory Requirements

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

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

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

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

PART II

A. Management Requirements

1. Notification of Changes

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

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

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

2. Noncompliance Notification

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

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

3. Facility Operation

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

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

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

6. Sludge Disposal Requirements

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State or creating an adverse impact on the environment. Handling and disposal of such substances shall be in accordance with all applicable State and Federal regulations. Records must be maintained of the quantity (volume and concentration or mass) of such substances; the method of disposal; the location or site; and the date and time of disposal.

Sludge shall be disposed of in accordance with the regulations and guidelines established by EPD, the Federal Clean Water Act, and the Resource Conservation and Recovery Act (RCRA). Prior to disposal of sludge by any method other than co-disposal in 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:
 - a. The effluent limitations and monitoring specified in Part I A.1. are effective on the effective date of this permit, except as specified below.
 - b. The permittee shall achieve compliance with the color limitation specified in Part I A.2. of this permit in accordance with the following schedule:
 - (i) Beginning on the effective date of this permit and continuing for 24 months, the permittee shall start monitoring and reporting for color in accordance with Part I A.1 of this permit.
 - (iii) Within 24 months of the effective date of this permit, the permittee shall achieve compliance with the color limit specified in Part I A.2 of this permit.
 - c. The permittee shall submit a written progress report to EPD on June 30th and December 31st every year describing the status of achieving compliance with Part I.A.2 of this permit. The permittee shall submit the report to the EPD assigned Compliance Office.
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 Adairsville Water Pollution Control Plant;
 - b. cause pass-through of pollutants in violation of the effluent limitations specified in National Pollutant Discharge Elimination System Permit No. GA0046035;
 - 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.



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: Christopher Douglas (Christopher.Douglas@dnr.ga.gov)
404-463-0932

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.: GAP050316

1.2 Name and Address of Owner/Applicant

Premier Yarn Dyers
P.O. Box 250
Adairsville, Georgia, 30103
Bartow County

1.3 Name and Address of Facility

Premier Yarn Dyers
128 George Street
Adairsville, Georgia, 30103
Bartow County

1.4 Facility Information

- | | |
|------------------------------|---|
| a. Average Flow: 125,000 GPD | d. Max Flow: 220,000 GPD |
| b. Categorical (Y/N): Y | e. Significant Industrial User (Y/N): Y |
| c. Production Based (Y/N): N | f. Production Capacity: 11,608 lbs/day |

1.5 SIC Code & Description: 2262 – Finishers of Broadwoven Fabrics of Manmade Fiber and Silk

1.6 Description of Industrial Processes

The facility receives yarn in reels or bundles from trucks. The yarn is then unwound and organized for dyeing operations. Yarn is then dyed using various dyes, pH adjustment chemicals, and surfactants. Yarn is then dried, wound up onto spools and shipped out for purchase.

1.7 Description of the Industrial Wastewater Treatment Facility

The Premier Yarn Dyers wastewater treatment facility includes screening, flow equalization and ozonation before wastewater is sent to the POTW. To begin treatment, the waste stream is sent through static screens and a shaker screen with a 6 mm opening. The waste stream is then sent to a 400,000 gallon aerated tank. From the aerated tank, wastewater is pumped into a 10,000 gallon holding tank. The wastewater is then directed to two packed tower ozone contactors where ozone produced by a 434 lb/day generator is injected by venturi.

1.8 Type of Wastewater Discharge

- | | |
|---|--|
| <input type="checkbox"/> process wastewater

<input type="checkbox"/> domestic wastewater | <input type="checkbox"/> stormwater

<input checked="" type="checkbox"/> combined – process wastewater and boiler feed |
|---|--|

1.9 Name, Address, and Permit Number of Receiving POTW

City of Adairsville North Water Pollution Control Plant
 179 Old Dixie Hwy NW
 Adairsville, Georgia, 30103
 Bartow County
 GA0046035

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

Outfall #	Receiving POTW	Receiving POTW Permit No.	Max Receiving POTW Permitted Flow	River Basin
001	Adairsville North WPCP	GA0046035	1.25 MGD (Monthly Average)	Coosa

1.11 Receiving POTW Design Capacity: 1.00 MGD

1.12 Description of the POTW Wastewater Treatment

Plant influent flows through a bar screen before entering an aeration tank where air is pumped in. From the aeration tank, wastewater is sent to a secondary clarifier for treatment. From the secondary clarifier, wastewater receives disinfection and is finally discharged into the Oothkalooga Creek Tributary to the Oostanaula River tributary. Meanwhile, sludge from the secondary clarifier is either returned to the wastewater flow before entering the aeration tank or is fed to an aerobic digester before solids disposal.

1.13 Characterization of Effluent Discharge as Reported by Applicant

The table below indicates all pollutants of concern believed present in the facility's wastewater effluent.

Outfall No. 001 – ozone generating cooling water, boiler blowdown, and wastewater from the space and exhaust dyeing processes

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.220	0.125
Chloride (mg/L)	65	39
Ammonia (mg/L)	24	7.3
Arsenic (mg/L)	0.0025	0.0025
Cadmium (mg/L)	0.0005	0.0004
Chromium, Total (mg/L)	0.12	0.0444
Copper (mg/L)	0.069	0.0473
Lead (mg/L)	0.011	0.0057
Nickel (mg/L)	0.005	0.005
Selenium (mg/L)	0.005	0.0033
Silver (mg/L)	0.005	0.0033
Zinc (mg/L)	0.46	0.1810
BOD ₅ (mg/L)	291	291
TSS (mg/L)	33	33

2.0 APPLICABLE REGULATIONS

2.1 Local Regulations

City of Adairsville Code of Ordinances Sec. 66 - Utilities (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
		40 CFR 122
	Process Water Discharges	40 CFR 125
		40 CFR 410

2.3 Industrial Effluent Limit Guideline(s)

Code of Federal Regulations, 40 CFR Part 403.

Code of Federal Regulations, 40 CFR Part 410 Subpart G

See Appendix B for Applicable Federal Regulations

3. EFFLUENT LIMITS AND PERMIT CONDITIONS

3.1 Permit Development

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

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

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

“The control authority is responsible for identifying standard(s) applicable to each IU and applying the most stringent requirements where multiple provisions exist.” EPA Guidance - *Applicability of Pretreatment Standards and Requirements*

(<https://www.epa.gov/npdes/pretreatment-standards-and-requirements>)

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

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

3.2 Conventional Pollutants

Pollutants of Concern	Basis
pH	<u>Local Limit</u> The Adairsville Sewer Use Ordinance establishes an allowable range of 5.5 s.u. – 9.5 s.u. tested via a grab sample. EPD recommends the pH limitation of 5.5 s.u. – 9.0 s.u. be retained from the previous permit in accordance with 40 CFR 122.44(l), which requires a reissued permit to be as stringent as the previous permit.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
5-Day Biochemical Oxygen Demand	<u>Local Limit</u> The City of Adairsville Sewer Use Ordinance establishes a concentration based daily average of 250 mg/L and a daily max of 250 mg/L tested via grab sample. Mass based effluent limits of 261 lbs/day daily average and 261 lbs/day daily maximum have been established based on the reported average flow.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
Total Suspended Solids	<u>Local Limit</u> The City of Adairsville Sewer Use Ordinance establishes a daily average of 250 mg/L and a daily max of 250 mg/L tested via grab sample. Mass based effluent limits of 261 lbs/day daily average and 261 lbs/day daily maximum have been established based on the reported average flow.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.
Oil and Grease	<u>Local Limit</u> The City of Adairsville Sewer Use Ordinance establishes a daily average max of 100 mg/L and a daily maximum of 100 mg/L tested via a grab sample. Mass based effluent limits of 104 lbs/day daily average and 104 lbs/day daily maximum have been established based on the reported average flow.
	<u>Categorical Limit</u> There is no applicable federally based categorical limit.

3.3 Nonconventional Pollutants

Pollutants of Concern	Basis
Ammonia, as N	<p><u>Local Limit</u> The City of Adairsville Sewer Use Ordinance does not provide any limitations for ammonia in the contributing influent; however, based on the data submitted EPD completed a local limits evaluation to ensure no toxic pollutant is discharged in a toxic amount. EPD determined the maximum concentration allowed for ammonia to prevent pass-through interference is 27.5 mg/L. EPD recommends the concentration based daily average of 20 mg/L and daily maximum of 20 mg/L be retained from the previous permit in accordance with 40 CFR 122.44(l), which requires a reissued permit to be as stringent as the previous permit. Mass based effluent limits of 20.9 lbs/day daily average and 20.9 lbs/day daily maximum have been established based on the reported average flow.</p>
	<p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Color	<p><u>Local Limit</u> The City of Adairsville has expressed a great concern with the color of discharge from Premier Yarn Dyers. The maximum acceptable color level for the North Plant's effluent is 50 Platinum-Cobalt Units (PCU) before color in the effluent becomes noticeable and may interfere with the legitimate use of the receiving water. Based on a study completed on July 6, 2017 by the City of Adairsville (See Appendix C – Color Analysis), a discharge color of 750 PCU from Premier Yarn Dyers will maintain the maximum allowable limit of 50 PCU at the North Plant's effluent. Since the completion of this study, the City of Adairsville has begun modifications to their Sewer Use Ordinance to include a color limitation of 750 PCU. EPD recommends a color limit of 750 PCU be added in preparation of the Sewer Use Ordinance modification.</p>
	<p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>

3.4 Toxics & Manmade Organic Compounds (126 priority pollutants and metals)

Pollutants of Concern	Basis
Cadmium, Total	<p><u>Local Limit</u> The City of Adairsville Sewer Use Ordinance does not provide any limitations for the contributing influent; however, based on the data submitted EPD completed a local limits evaluation to ensure no toxic pollutant is discharged in a toxic amount. EPD determined the maximum concentration allowed for cadmium to prevent pass through interference of Georgia's Water Quality Standards for the receiving water body is 0.019 mg/L. EPD recommends the daily average of 0.038 mg/L and daily maximum of 0.038 mg/L be retained from the previous permit in accordance with 40 CFR 122.44(l), which requires a reissued permit to be as stringent as the previous permit. Mass based effluent limits of 0.039 lbs/day daily average and 0.039 lbs/day daily maximum have been established based on the reported average flow.</p>
	<p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Lead, Total	<p><u>Local Limit</u> The City of Adairsville Sewer Use Ordinance does not provide any limitations for the contributing influent; however, based on the data submitted EPD completed a local limits evaluation to ensure no toxic pollutant is discharged in a toxic amount. EPD determined the maximum concentration allowed for lead to prevent pass through interference of the receiving water body is 0.322 mg/L. EPD recommends the daily average of 0.039 mg/L and daily maximum of 0.039 mg/L be retained from the previous permit in accordance with 40 CFR 122.44(l), which requires a reissued permit to be as stringent as the previous permit. Mass based effluent limits of 0.041 lbs/day daily average and 0.041 lbs/day daily maximum have been established based on the reported average flow.</p>
	<p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>
Zinc, Total	<p><u>Local Limit</u> The City of Hampton's sewer use ordinance does not provide any limitations for the contributing influent; however, based on the data submitted EPD completed a local limits evaluation to ensure no toxic pollutant is discharged in a toxic amount. EPD determined the maximum concentration allowed for lead to prevent inhibition of the POTW is 0.452 mg/L. EPD recommends the daily average of 0.212 mg/L and daily maximum of 0.212 mg/L be retained from the previous permit in accordance with 40 CFR 122.44(l), which requires a reissued permit to be as stringent as the previous permit. Mass based effluent limits of 0.221 lbs/day daily average and 0.221 lbs/day daily maximum have been established based on the reported average flow.</p>
	<p><u>Categorical Limit</u> There is no applicable federally based categorical limit.</p>

3.5 Comparison and Summary of Limits

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

Pollutant	Categorical ¹	SUO	Sludge Regulations ²	POTW NPDES-Based Limit	WQS ³ (acute & chronic)	POTW ⁴ Inhibition	Other (Current Limits)
Ammonia, as N	N/A	N/A	N/A	27.5/27.5 mg/L	N/A	613.2/613.2 mg/L	20/20 (mg/L) 20.9/20.9 (lbs/day)
5-Day Biochemical Oxygen Demand	N/A	250/250 (mg/L) 261/261 (lbs/day)	N/A	1746/1746 (mg/L)	N/A	N/A	250/250 (mg/L)
Lead, Total	N/A	N/A	N/A	N/A	0.13/0.13 (mg/L)	9.51/9.51 (mg/L)	0.039/0.039 (mg/L) 0.041/0.041 (lbs/day)
Zinc, Total	N/A	N/A	N/A	N/A	9.75/9.75 (mg/L)	0.862/0.862 (mg/L)	0.212/0.212 (mg/L) 0.221/0.221 (lbs/day)
Cadmium, Total	N/A	N/A	N/A	N/A	0.046/0.046 (mg/L)	4.78/4.78 (mg/L)	0.038/0.038 (mg/L) 0.039/0.039 (lbs/day)
Total Suspended Solids	N/A	250/250 (mg/L) 261/261 (lbs/day)	N/A	955/955 (mg/L)	N/A	N/A	250/250 (mg/L)
Oil & Grease	N/A	100/100 (mg/L) 104/104 (lbs/day)	N/A	N/A	N/A	N/A	100/100 (mg/L)
Color	N/A	750/750 (PCU)	N/A	N/A	N/A	N/A	N/A
pH	N/A	5.5 – 9.5 s.u.	N/A	N/A	N/A	N/A	5.5 – 9.0 s.u.

¹ The Federal Categorical Effluent Guideline does not have numeric limits established.

² The City of Adairsville sends their sludge to the City of Cartersville for treatment and disposal, hence sludge criteria doesn't apply.

³ There are no numerical water quality standards for the pollutants marked as N/A.

⁴ The POTW doesn't have activated sludge or nitrification inhibition if marked as N/A.

3.6 Example Limit Calculations

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

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

3.6.b. Sludge Regulation Calculations – N/A

3.6.c. NPDES Permit Limit Calculations

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

$$\text{Ammonia AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 9 \left(\frac{\text{mg}}{\text{L}} \right) \times 1.0 (\text{MGD})}{\left(1 - \frac{50\%}{100} \right)}$$

$$\text{Ammonia AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = 150.12$$

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

$$\text{Ammonia Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 150.12 \left(\frac{\text{lbs}}{\text{day}} \right) \times \left(1 - \frac{10\%}{100} \right) - 84.56 \left(\frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Ammonia Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 50.54$$

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

$$\text{Ammonia Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = \frac{50.54 \left(\frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.22 (\text{MGD})}$$

$$\text{Ammonia Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = 27.5 \text{ (Not most Stringent Value)}$$

3.6.d. Acute Water Quality Standard Calculations

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{Acute WQS} \left(\frac{\text{mg}}{\text{L}} \right) \times (\text{POTW Flow(MGD)} + 1\text{Q10(MGD)})}{\left(1 - \frac{\text{POTW Removal Efficiency}(\%)}{100} \right)}$$

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 0.092 \left(\frac{\text{mg}}{\text{L}} \right) \times (0.22 + 4.91(\text{MGD}))}{\left(1 - \frac{79\%}{100} \right)}$$

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = 21.55$$

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

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 21.55 \left(\frac{\text{lbs}}{\text{day}} \right) \times \left(1 - \frac{10\%}{100} \right) - 1.50 \left(\frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 17.9$$

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

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = \frac{17.9 \left(\frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.22(\text{MGD})}$$

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = 9.75 \text{ (Not most Stringent Value)}$$

3.6.e. Chronic Water Quality Standard Calculations

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times \text{Chronic WQS} \left(\frac{\text{mg}}{\text{L}} \right) \times (\text{POTW Flow (MGD)} + 1\text{Q10 (MGD)})}{\left(1 - \frac{\text{POTW Removal Efficiency}(\%)}{100} \right)}$$

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 0.093 \left(\frac{\text{mg}}{\text{L}} \right) \times (5.82 + 0.22 \text{ (MGD)})}{\left(1 - \frac{79\%}{100} \right)}$$

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = 25.07$$

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

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 0.512 \left(\frac{\text{lbs}}{\text{day}} \right) \times \left(1 - \frac{10\%}{100} \right) - 21.07 \left(\frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 21.06$$

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

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = \frac{21.06 \left(\frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.22 \text{ (MGD)}}$$

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = 11.48 \text{ (Not most Stringent Value)}$$

3.6.f. POTW Inhibition Calculations

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

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = \frac{8.34 \times 0.3 \left(\frac{\text{mg}}{\text{L}} \right) \times 1.0 (\text{MGD})}{\left(1 - \frac{27\%}{100} \right)}$$

$$\text{Zinc AHL} \left(\frac{\text{lbs}}{\text{day}} \right) = 3.43$$

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

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 3.43 \left(\frac{\text{lbs}}{\text{day}} \right) \times \left(1 - \frac{10\%}{100} \right) - 1.50 \left(\frac{\text{lbs}}{\text{day}} \right)$$

$$\text{Zinc Load} \left(\frac{\text{lbs}}{\text{day}} \right) = 1.58$$

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

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = \frac{1.58 \left(\frac{\text{lbs}}{\text{day}} \right)}{8.34 \times 0.22 (\text{MGD})}$$

$$\text{Zinc Local Limit} \left(\frac{\text{mg}}{\text{L}} \right) = 0.862 \text{ (Not most Stringent Value)}$$

4.0 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

4.1 Anti-Backsliding

The limits in this permit are in compliance with 40 C.F.R. 122.44(l). 40 C.F.R. 122.44(l)(2)(i)(B)(1) states, permit limits may be less stringent if “Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.” Premier Yarn Dyers has installed and operated significantly advanced treatments processes since the issuance of the current permit issued in April 23, 1999. The permittee has provided updated effluent data with their renewal application. EPD has evaluated the provided effluent data as stated in Section 4 of the fact sheet and based on the results of our evaluation; EPD has determined Arsenic, Chromium, Copper, Nickel, Selenium, and Silver are no longer discharged at levels of concern and therefore EPD has removed the effluent limitations. EPD has determined that the new available information meets the requirements in 40 C.F.R. 122.44(l)(2)(i)(B)(1) allowing the permitted effluent limits for Arsenic, Chromium, Copper, Nickel, Selenium, and Silver to be removed.

4.2 Compliance Schedules

The permittee has request a compliance schedule to implement any capital improvements required to accommodate the final color limit. EPD has reviewed the request and has approved the following schedule:

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:
 - a. The effluent limitations and monitoring specified in Part I.A.1 are effective on the effective date of this permit, except as specified below.
 - b. The permittee shall achieve compliance with the ammonia nitrogen limitation specified in Part I.A.2 of this permit in accordance with the following schedule:
 - (i) Beginning on the effective date of this permit and continuing for 24 months, the permittee shall start monitoring and reporting for color in accordance with Part I A.1 of this permit.
 - (ii) Within 24 months of the effective date of this permit, the permittee shall achieve compliance with the color limit specified in Part I.A.2 of this permit.
 - c. The permittee shall submit a written progress report to EPD on June 30th and December 31st every year describing the status of achieving compliance with Part I. A.1.b of this permit. The permittee shall submit the report to the EPD assigned Compliance Office.

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.

5.0 REPORTING

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

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

5.1 E-Reporting

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

6.0 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

7.0 PERMIT EXPIRATION

The permit will expire five years from the effective date.

8.0 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

8.1 Comment Period

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

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

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

8.2 Public Comments

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

8.3 Public Hearing

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

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

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

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

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

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

8.4 Final Determination

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

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

8.5 Contested Hearings

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

Petitions for a contested hearing must include the following:

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

Appendix A

City of Adairsville Sewer Use Ordinance

NUMBERING AND CROSS REFERENCES WILL BE CORRECTED AS PART OF MUNICODE CODIFICATION.

Chapter 66

UTILITIES*

* **Cross References:** Administration, ch. 2; buildings and building regulations, ch. 18; furnishing public utility connections, § 18-36; water supply and sewage disposal facilities, § 18-37; businesses, ch. 22; environment, ch. 34; floods, ch. 38; health and sanitation, ch. 42; manufactured homes, ch. 46; solid waste, ch. 54; subdivisions, app. B.

State Law References: Water Resources Center, O.C.G.A. § 12-5-1 et seq.; adoption of ordinances, rules and regulations relating to payment for street improvements and construction of water, gas and sewer connections, payment of costs of connections, O.C.G.A. § 36-39-7; authority to provide stormwater, sewage collection and disposal systems, Ga. Const. art. IX, § II, ¶ III(a)(6).

Article I. In General

Secs. 66-1--66-30. Reserved.

Article II. Sewer Use

Sec. 66-31. Definitions.
Sec. 66-32. Use of public sewers required.
Sec. 66-33. Private wastewater disposal.
Sec. 66-34. Building sewers and connections.
Sec. 66-35. Use of public sewers.
Sec. 66-36. Other agreements.
Sec. 66-37. Vandalism to facilities.
Sec. 66-38. Powers and authority of inspectors.
Secs. 66-39--66-70. Reserved.

Article III. Wellhead Protection

Sec. 66-71. Short title and purpose.
Sec. 66-72. Definitions.
Sec. 66-73. Establishment of wellhead protection zone.
Sec. 66-74. Permitted uses.
Sec. 66-75. Prohibited uses.
Sec. 66-76. Administration.

ARTICLE I.

IN GENERAL

Secs. 66-1--66-30. Reserved.

ARTICLE II.

SEWER USE

Sec. 66-31. Definitions.

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:

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

Building drain means that part of the lowest horizontal piping of a drainage system which receives the discharge from waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five feet (1.5 meters) 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, also called house connection. *Easement* means an acquired legal right for the specific use of land owned by others.

Floatable oil means oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of floatable fat if it is properly pretreated and the wastewater does not interfere with the collection system.

Garbage means the animal and vegetable waste resulting from the handling, preparation, cooking, and serving of foods.

Industrial wastes means the wastewater from industrial processes, trade, or business as distinct from domestic or sanitary wastes.

Low flow conditions apply to non-domestic wastewater dischargers who discharge 25,000 gallons per day (gpd) or less.

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

Non-domestic user means any customer of the City sewer system that discharges any wastewater other than domestic wastewater. Domestic wastewater is considered to be the wastewater that would ordinarily be generated by a residential living unit.

pH means the logarithm of the reciprocal of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water, for example, has a Ph value of seven and a hydrogen ion concentration of 10^{-7} .

Plant Manager means the Manager of wastewater facilities, and/or of wastewater treatment works, and/or of water pollution control of the city, or his authorized deputy, agent, or representative.

Properly shredded garbage means the wastes from the preparation, cooking, and dispensing of food that have 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 1/2 inch (1.27 centimeters) in any dimension.

Public sewer means a common sewer controlled by a governmental agency or public utility.

Sanitary sewer means a sewer that carries liquid and water-carried wastes from residences, commercial

buildings, industrial plants, and institutions together with minor quantities of groundwaters, stormwaters and surface waters that are not admitted intentionally.

Sewage means the spent water of a community. See the term *wastewater*.

Sewer means a pipe or conduit that carries wastewater or drainage water.

Slug means any discharge of water or wastewater 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 or flows during normal operation which has the potential to adversely affect the collection system and/or performance of the wastewater treatment works.

Storm drain, storm sewer means a drain or sewer for conveying water, groundwater, subsurface water, or unpolluted water from any source.

Suspended solids means total suspended matter that either floats on the surface of, or is in suspension in, water, wastewater, or other liquids, and that is removable by laboratory filtering as prescribed in the Standard Methods for the Examination of Water and Wastewater and referred to as "nonfilterable residue."

Unpolluted water means water of quality equal to or better than the effluent criteria in effect or water that would not cause violation of receiving water quality standards and would not be benefitted by discharge to the sanitary sewers and wastewater treatment facilities provided.

Wastewater means the spent water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and stormwater that may be present.

Wastewater facilities means the structures, equipment, and processes required to collect, carry away, and treat domestic and industrial wastes and dispose of the effluent.

Wastewater treatment works means an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with the terms "waste treatment plant," "wastewater treatment plant" and "water pollution control plant".

Watercourse means a natural or artificial channel for the passage of water either continuously or intermittently.

(Code 1986, ch. VIII, § 3.1)

Cross References: Definitions generally, § 1-2.

Sec. 66-32. 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 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 wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this article or through the authority of a National Pollution Discharge Elimination System (NPDES) permit issued by the State of Georgia..

(c) Except as provided in this section, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of wastewater.

(d) The owners of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the city and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary of the city is hereby required at the owners' expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with this article, within 90 days after date of official notice to do so, provided that such public sewer is within 300 feet of the property line.

(Code 1986, ch. VIII, § 3.2)

Sec. 66-33. Private wastewater disposal.

(a) Where a public sanitary sewer is not available as provided under section 66-32, the building sewer shall be connected to a private wastewater disposal system complying with the provisions of the county health department and the state department of human resources.

(b) At such time as a public sewer becomes available to a property served by a private wastewater disposal system, as provided in section 66-32, a direct connection shall be made to the public sewer within 60 days in compliance with this article, and any septic tanks, cesspools, and similar private wastewater disposal facilities shall be cleaned of sludge and filled with suitable material.

(c) The owners shall operate and maintain the private wastewater disposal, treatment, or pretreatment facilities in a sanitary manner at all times, at no expense to the city. Private wastewater disposal, treatment, or pretreatment facilities shall be maintained in a functional and safe working condition at all times.

(d) No statement contained in this article shall be construed to interfere with any additional requirements that may be imposed by the health officer.

(Code 1986, ch. VIII, § 3.3)

Sec. 66-34. Building sewers and connections.

(a) No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining written permission from the City, and the City shall be notified 24 hours prior to making such connection for the purpose of allowing a City representative to observe the connection to or disturbance of any public sewer.

(b) There shall be two classes of building sewer permits: one for residential and commercial service, and one for service to establishments producing industrial wastes. (See the City's Standard Development Regulations sewer construction methods.)

Sec. 66-35. Use of public sewers.

(a) No person shall discharge or cause to be discharged any unpolluted waters such as stormwater, groundwater, roof runoff, subsurface drainage, or non-contact cooling water to any sewer, except that stormwater runoff from limited areas, which may be polluted at times, may be discharged to the sanitary sewer by permission of the City Manager.

(b) Stormwater, other than that otherwise exempted, and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the City Manager and other regulatory agencies. Unpolluted industrial cooling water or process waters may be discharged, on approval of the City Manager, to a storm sewer, or natural outlet.

(c) No person shall discharge or cause to be discharged any of the following described 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 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 waste treatment process, constitute a hazard to humans or animals, create a public nuisance, create any hazard in the receiving waters of the wastewater treatment plant, or accumulate in the sludges generated at the wastewater treatment plant in such concentrations as to render the sludge unsafe or unsatisfactory for land application.
- (3) Any waters or wastes having a pH lower than 5.5 or higher than 9.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the wastewater works.
- (4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities such as, but not limited to, ashes, bones, 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.
- (5) Wastewater which imparts color to the wastewater, such as, but not limited to dye wastes and vegetable tanning solutions, which consequently imparts color to the City's wastewater treatment plant influent in a sufficient amount to be to be notably present and visible shall be prohibited.
- (6) Non-contact cooling water.
- (7) Contact cooling water that is primarily used for the purpose of wastewater dilution rather than for cooling purposes. It is presumed that contact cooling water is used for wastewater dilution if the temperature increase of the cooling function does not exceed 10 degrees Fahrenheit.
- (8) Surfactants in such amounts that interfere with the City's wastewater treatment process or create excessive foam at the City's wastewater treatment facility or in the receiving stream.

(d) The following described substances, materials, waters, or waste shall be limited in discharges to municipal systems to concentrations or quantities which will not harm either the sewers, wastewater treatment process or equipment, will not have an adverse effect on the receiving stream, or will not otherwise endanger life, limb, public property or constitute a nuisance. The City Manager may set limitations lower than the limitations established in the regulations below if in his opinion such more severe limitations are necessary to meet the above objectives. In forming his opinion as to the acceptability, the City Manager will give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the wastewater treatment plant, degree of treatability of the waste in the wastewater treatment plant, and other pertinent factors. Suspended solids or corrosive or nuisance gasses, including hydrogen sulfide gas, which interfere with the collection system or create a condition deleterious to structures and treatment processes are prohibited..

(e) Notwithstanding the above, all major industrial contributors to the sanitary sewer system shall comply with all pretreatment requirements set forth in 40 CFR 403.

(f) 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 subsections (a), (c), (d), (e) or (l) of this section, and which in the judgment of the City Manager, may have a deleterious effect upon the wastewater facilities, processes, equipment, or receiving waters, have a five-day biochemical oxygen demand greater than 350 milligrams per liter or contain more than 350 milligrams per liter of suspended solids, or which otherwise create a hazard to life or constitute a public nuisance, the City Manager may:

- (1) Reject the wastes;
- (2) Require pretreatment to an acceptable condition for discharge to the public sewers;
- (3) Require control over the quantities and rates of discharge; and/or
- (4) Require payment to cover added cost of handling and treating the wastes not covered by existing taxes or sewer charges under subsections (k) and (l) of this section.

(g) When considering the above provisions, the City Manager shall give consideration to the economic impact of each provision on the discharger. If the City Manager permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the City Manager.

(h) Grease, oil, and sand interceptors (See Sec. 66-36, below.)

(i) Where pretreatment facilities are provided or required for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(j) When required by the City Manager, the owner of any property serviced by a building sewer carrying industrial wastes shall:

- Install proper equalization of the wastewater discharge so that the low instantaneous flow rate is never less than fifty percent (50%) of the average daily flow rate, or the high instantaneous flow rate is never greater

than 150% of the average daily flow rate .

- Install a continuous flow monitor and recorder. The recorder shall be a continuous flow chart that will be provided to the City upon request.
- Install a suitable structure (a/k/a “Monitoring Station”) together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such structure, when required, shall be accessibly and safely located and shall be constructed in accordance with plans approved by the City Manager. The structure 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. The Monitoring Station shall include the following:
 - (1) A proper flume, either Palmer-Bowlus or Parshall with flow monitor and recorder.
 - (2) A 120 V, single phase electrical outlet with GFI.
 - (3) A fence surrounding the Monitoring Station with lockable gate.
 - (4) A flood light for night-time operations

(k) The City Manager may require a user of sewer services to provide information needed to determine compliance with this article. The requirements may include:

- (1) Wastewaters discharge peak rate and volume over a specified time period.
- (2) Chemical analyses of wastewaters.
- (3) Information on raw materials, processes, and products affecting wastewater volume and quality.
- (4) Quantity and disposition of specific liquid, sludge, oil, solvent, or other materials important to sewer use control.
- (5) A plot plan of sewers of the user's property showing sewer and pretreatment facility location.
- (6) Details of wastewater pretreatment facilities.
- (7) Details of systems to prevent and control the losses of materials through spills to the municipal sewer.

(l) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this article shall be determined in restrictions on materials or characteristics of waste or wastewaters discharged to the sanitary sewer which shall not be violated without approval of the City Manager and are as follows:

- (1) Wastewater having a temperature higher than 130 degrees Fahrenheit.
- (2) Wastewater containing more than 100 milligrams per liter of petroleum oil, nonbiodegradable cutting oils, or product of mineral oil origin.

- (3) Wastewater from industrial plants containing floatable oils, fat, or grease.
- (4) Any garbage that has not been properly shredded. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in kitchens for the purpose of consumption on the premises or when served by caterers (see the term "properly shredded garbage" defined in section 66-31).
- (5) Any waters or wastes containing iron, chromium, copper, zinc, and similar objectionable or toxic substances to such degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the City Manager for such materials.
- (6) Any waters or wastes containing odor-producing substances such as sulfur, sulfides or sulfates exceeding limits which may be established by the City Manager or by EPD.
- (7) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City Manager in compliance with applicable state or federal regulations.
- (8) Quantities of flow, concentrations, or both which constitute a slug as defined in section 66-31.
- (9) Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such degree that the wastewater treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.
- (10) Any water or wastes which, by interaction with other water or wastes in the public sewer system, release toxic or inhibitory compounds.

(m) All persons discharging non-domestic wastewater into the public sewers shall be charged and assessed a surcharge, in addition to any sewer service charges, if these wastes have a concentration greater than the following normal concentrations:

- (1) A five-day, 20-degree Celsius biochemical oxygen demand (BOD) of 250 mg/l, or, suspended solids content of 250 mg/l, as determined by laboratory analysis in accordance with Standard Methods for the Examination of Water and Wastewater.. (Except for certain low flow, non-domestic dischargers. See paragraph (t), below.)

(n) Surcharges Imposed for Certain non-domestic Wastewater. Non-domestic wastewater dischargers may be imposed surcharges, at the sole discretion of the City, for biochemical oxygen demand (BOD) and/or total suspended solids (TSS) that exceeds 250 mg/l. The amount of such surcharge, which is hereby charged and assessed against all persons discharging non-domestic wastewater into the public sewers, shall reflect the cost incurred by the city in handling the excess BOD and TSS. This surcharge shall include a proportionate share of the following:

- (1) Fixed charges for maintenance and operation of the sewerage system to include sewer, plants, pumping stations and other necessary appurtenances including depreciation and other incidental expense.

- (2) Formula determining surcharge. When either or both the total suspended solids and BOD of water or waste accepted for admission to the city sewerage works exceeds the values of these constituents for normal sewage, the excess concentration in either or both, as the case may be, shall be evaluated in terms of normal sewerage and be subject to a surcharge on the amount derived in accordance with the following formula:

$$\text{Amount of surcharge} = (A-B) \times Q \times 8.34 \times C \times D$$

Where: "A" – The actual BOD or TSS (average for month) mg/l

Where: "B" - 250 mg/l.

"C" - The cost per pound of BOD or TSS above the established maximum of 250 mg/l.

"D" – The days of the month.

"Q" – The average daily flow MGD.

(o) The rates of surcharge for each of the aforementioned constituents at present shall be as follows: for biochemical oxygen demand (BOD) - 50¢/lb.; for total suspended solids - 50¢/lb.

(p) For those situations in which BOD or TSS are in excess of 350 mg/, a surcharge will not be levied, and the BOD and TSS levels exceeding 350 mg/l will be a violation which will be punished as a misdemeanor, and violators will be charged up to a maximum \$1,000 (one thousand dollars) per violation.

(q) The rates of surcharge shall be reviewed annually by the City, at the sole discretion of the City, in order that the above factors may correctly represent current treatment costs. If changes are deemed advisable, they may be made effective January 1 of each year, when approved by the mayor and city council.
(Code 1986, ch. VIII, § 3.5)

(r) Surcharges will be based on composite wastewater samples collected by the City from time-to-time taken of the non-domestic user's wastewater discharge. The surcharge for a particular sample that exceeds 250 mg/l will remain in effect for the entire subsequent month following the month in which the sample was taken. If the City collects multiple samples in a given month, then the sample results for that month will be averaged for the surcharge applicability and/or amount. The calculated surcharge amount will be added to the non-domestic user's water and sewer bill for the applicable months. For any months for which no samples are collected, the most immediate past sample or samples will remain in effect.

(s) Any sample collected by the City, or reported by the non-domestic user, that exceeds 350 mg/l of BOD or TSS will be considered to be a violation of the City Ordinances subject to a fine of \$1,000 per violation. The non-domestic user will be notified of all such violations by a written Notice of Violation (NOV). The \$1,000 fine will be imposed on the non-domestic user's subsequent water and sewer bill following the issuance of the NOV. Any non-domestic user who receives three or more NOVs in a given month will be subject to the

termination of sewer service.

(t) Mass Limits. It is acknowledged by the City that non-domestic wastewater dischargers whose flows are low will not adversely impact the City's sewer system. In that regard, there will be no BOD or TSS violations imposed for non-domestic users whose flows are less than 25,000 gpd, and whose mass loadings for BOD and TSS are less than 73 pounds per day.

Sec 66-36 Commercial Wastewater Pretreatment

A. Requirements for installation of a sand and oil/grease interceptor shall be as follows:

- (1) All users involved in the preparation of food for commercial purposes shall provide oil/grease interceptors or traps. This requirement shall apply to all restaurants, cafeterias, fast-food establishments, schools, and other facilities such as churches and medical centers where food may be prepared.
- (2) All users whose wastewater stream is associated with unusually large quantities of grit, sand, or gravel shall be required to install a sand trap. All car/truck wash systems shall be required to install sand traps.
- (3) The requirements of this SUO section shall not apply to private living quarters or dwelling units.

B. Design criteria for required sand and oil/grease interceptors at restaurants and other eating establishments shall be as follows:

- (1) All interceptors shall have a capacity of 15 gallons per seat.
- (2) No grease trap shall be smaller than 750 gallons nor larger than 3000 gallons.

C. Design criteria for required sand and oil/grease interceptors for establishments other than eating establishments shall be as follows:

- (1) All interceptors shall have a capacity that will provide not less than ten (10) minutes nor more than (30) minutes retention time at the peak eight (8) hour flow rate.
- (2) Flow through velocities shall not exceed one foot per second at the peak eight (8) hour flow rate.

D. Maintenance requirements

- (1) All grease, oil, and sand interceptors or traps shall be maintained by the user at the user's expense. The frequency of removal shall be such as to ensure that no overflows of oil, grease, or sand into the wastewater system ever results.
- (2) All grease, oil, and sand interceptors or traps shall provide continuous efficient operation.
- (3) Users shall be responsible for the proper removal and disposal by appropriate means of the captured material, and shall maintain records of the dates, means of disposal which are subject to review by the City.
- (4) At a minimum, grease, oil, and sand interceptors or traps shall be maintained at the following intervals:

- a. Monthly for establishments serving an average of 200 or more customers per day;
 - b. Quarterly for establishments serving an average of 100-200 customers per day; and
 - c. Every six months for establishments serving an average of 100 or fewer customers per day.
- (5) Within thirty (30) days of a pumping or maintenance activity, each user shall submit records of proper maintenance and disposal of wastes to the City. The following information, as applicable, must be provided as a minimum:
- a. Generator information
 - Name and physical address of facility
 - Volume of waste pumped
 - Date and time of pumping activity
 - Signature of authorized representative
 - b. Transporter Information
 - Name and address of hauler
 - Permit number
 - Name and signature of driver
 - c. Receiver Information
 - Name and physical address of facility
 - Permit number
 - Volume of waste received
 - Date and time waste was received
 - Signature of authorized representative

Sec. 66-37. Other agreements.

No statement contained in this article shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the city for treatment.

(Code 1986, ch. VIII, § 3.6)

Sec. 66-38. Vandalism to facilities.

No 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 wastewater facilities. Any person violating this article shall be subject to immediate arrest and shall be punished as provided by section 1-11.

(Code 1986, ch. VIII, § 3.7)

Sec. 66-39. 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 purposes of inspection, observation, measurement, sampling, and testing pertinent to discharge to the community system in accordance with the provisions of this article.

(b) The City Manager or other duly authorized employees are authorized to obtain information concerning industrial processes which have a direct bearing on the kind and source of discharge to the wastewater collection system. The industry may withhold information considered confidential. The industry must establish that the revelation to the public of the information in question might result in an advantage to competitors.

(c) While performing the necessary work on private properties referred to in subsection (a) of this section, 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, and 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 and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

(d) 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 wastewater facilities lying within such easement. All entry and subsequent work, if any, on such easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

(Code 1986, ch. VIII, § 3.8)

Secs. 66-40--66-70. Reserved.

ARTICLE III.

WELLHEAD PROTECTION

Sec. 66-71. Short title and purpose.

(a) This article shall be known as the "Wellhead Protection Ordinance."

(b) The purpose of this article is to ensure the provisions of a safe and sanitary drinking water supply for the city by establishment of wellhead protection zones surrounding the wellheads for all wells or springs which are the supply sources for the city water system and by the designation and regulation of property uses and conditions which may be maintained within such zones.

(Ord. of 12-11-2003, § 1)

Sec. 66-72. Definitions.

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:

Hazardous waste or material means any waste or material which because of its quantity, concentration or physical, chemical or infectious characteristics may:

- (1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation reversible illness; or
- (2) Pose a substantial present or potential hazard to human health or to the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Sanitary landfill means a disposal site where solid wastes, including putrescible wastes, or hazardous wastes, is disposed of on land by placing earth cover thereon.

Wellhead means the upper terminal of a well, including adapters, ports, seals, valves and other attachments.

(Ord. of 12-11-2003, § 2)

Cross References: Definitions generally, § 1-2.

Sec. 66-73. Establishment of wellhead protection zone.

There is hereby established a use district known as a wellhead protection zone, identified and described as all the area within a circle the center of which is the center of any city water supply wellhead and the radius of which is 500 feet.

(Ord. of 12-11-2003, § 3)

Sec. 66-74. Permitted uses.

The following uses shall be permitted within wellhead protection areas:

- (1) Any use permitted within existing agricultural or single family residential districts, except that the minimum residential lot size for a lot portion of which lies within the wellhead protection zone shall not be less than one acre; and
- (2) Any open land use where any building located on the property is incidental and accessory to the primary open land use.

(Ord. of 12-11-2003, § 4)

Sec. 66-75. Prohibited uses.

The following uses or conditions shall be and are hereby prohibited within wellhead protection zones, whether or not such use or condition may otherwise be ordinarily included as a part of a use permitted under section 66-74:

- (1) Surface use or storage of hazardous material, expressly including commercial use of agricultural pesticides;
- (2) Septic tanks or drain fields appurtenant thereto;

- (3) Impervious surfaces other than roofs of buildings and streets and driveways and walks serving buildings permitted under section 66-74;
- (4) Sanitary landfills;
- (5) Hazardous waste disposal sites;
- (6) Storm water infiltration basins;
- (7) Underground storage tanks;
- (8) Sanitary sewer lines within 150 feet of a wellhead.

(Ord. of 12-11-2003, § 5)

Sec. 66-76. Administration.

The policies and procedures for administration of any wellhead protection zone established under this article, including without limitation those applicable to nonconforming uses, exceptions, enforcement and penalties, shall be the same as provided in the existing zoning ordinance for the city, as the same is presently enacted or may from time to time be amended.

(Ord. of 12-11-2003, § 6)

Appendix B

Federal Effluent Regulations

Subpart G—Stock and Yarn Finishing Subcategory

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§410.70 Applicability; description of the stock and yarn finishing subcategory.

The provisions of this subpart are applicable to process wastewater discharges resulting from the following types of textile mills: Stock or yarn dyeing or finishing, which may include any or all of the following unit operations and processes: Cleaning, scouring, bleaching, mercerizing, dyeing and special finishing.

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§410.71 Specialized definitions. [Reserved]

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§410.72 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Pollutant or pollutant property	BPT limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
BOD ₅	6.8	3.4
COD	84.6	42.3
TSS	17.4	8.7
Sulfide	0.24	0.12
Phenol	0.12	0.06
Total chromium	0.12	0.06
pH	(¹)	(¹)

¹Within the range 6.0 to 9.0 at all times.

(b) [Reserved]

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§410.73 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

Pollutant or pollutant property	BAT limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
COD	84.6	42.3
Sulfide	0.24	0.12
Phenols	0.12	0.06
Total chromium	0.12	0.06

[⬆ Back to Top](#)**§410.74 Pretreatment standards for existing sources (PSES).**

Any existing source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

[⬆ Back to Top](#)**§410.75 New source performance standards (NSPS).**

Any new source subject to this subpart must achieve the following new source performance standards (NSPS):

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
BOD5	3.6	1.9
COD	33.9	21.9
TSS	9.8	4.4
Sulfide	0.24	0.12
Phenols	0.12	0.06
Total chromium	0.12	0.06
pH	(¹)	(¹)

¹Within the range 6.0 to 9.0 at all times.

NOTE: Additional allocations for "commission finishers" are not available to new sources.

[⬆ Back to Top](#)**§410.76 Pretreatment standards for new sources (PSNS).**

Any new source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

Appendix C
Color Analysis

Adairsville, Georgia Water Reclamation Facility Color Analysis July 6, 2017

The Adairsville North Wastewater Reclamation Facility ("North Plant") receives the industrial wastewater discharge from Premier Yarn Dyers ("Premier Yarn"). The wastewater from Premier Yarn contains color which is reduced through pretreatment by Premier Yarn, principally by ozonation. The City of Adairsville has determined the following two important points with regard to color:

- The Adairsville activated sludge process at the North Plant reduces wastewater color.
- The maximum acceptable color level with regard to the North Plant effluent is 50 Platinum-Cobalt Units (PCU), above which the color in the effluent becomes noticeable, and is detrimental to aquatic life and the aesthetics in the receiving stream.

Graph A depicts the relationship between six samples of the color from the Premier Yarn effluent versus the color in the North Plant Effluent. As can be seen, a Premier Yarn discharge color of 750 PCU will provide a North Plant effluent color of slightly less than 50 PCU.

Table 1 provides 21 data points of the removal of color by Premier Yarn based on the percent of ozonation provided. There were three data points in this data set which were considered to be "outliers" (highlighted in yellow) which were not considered in the analysis. Graph B shows the color removal efficiency of the Premier Yarn ozonation system based on percentage of power settings. As indicated, the greater the ozonation percentage, the greater the color removal.

Table 2 shows the Premier Yarn effluent color sampling results in ascending order from lowest to highest. Based on these color results, the Graph B ozonation results, and the Graph A results indicating that a limit of 750 PCU for Premier Yarn will yield an effluent color at the North Plant of less than 50 PCU, the Table 2 results were developed. Table 2 shows the following:

- Five of the Premier Yarn samples would require no ozonation.
- Two of the Premier Yarn samples would require ozonation in the range of 7–10%.
- Twenty percent ozonation would reduce all samples to less than 750 PCU.
- The highest sample color collected from the Premier Yarn effluent (2066 PCU) would be reduced to 750 utilizing an ozone power setting of 17–18%.

Therefore, as shown in Table 3, based on the samples collected, Premier Yarn would need no ozonation 28% of the time, 7-10 % ozonation 11% of the time, and 10-18% ozonation 61% of the time.

TABLE 1

Premier Yarn Color Removal Data using Ozonation

Note: Color measured in Platinum-Cobalt Units

20% Ozone Power

	date	EQ color	After Ozonation	% Removal
1	4/5/2017	1624	1272	21.7%
2	4/10/2017	1168	262	77.6%
3	4/11/2017	1130	388	65.7%
4	4/17/2017	462	142	69.3%
5	5/8/2017	378	87	77.0%
6	5/15/2017	692	147	78.8%
7	5/22/2017	1616	426	73.6%
				66.2%
				73.6% w/o No. 1

10% Ozone Power

8	4/6/2017	1604	720	55.1%
9	4/7/2017	1520	1110	27.0%
10	4/12/2017	994	778	21.7%
11	4/18/2017	1598	1914	18.1%
12	4/19/2017	1844	1634	11.4%
13	4/20/2017	1792	1498	16.4%
14	5/10/2017	443	297	33.0%
15	5/23/2017	1616	1372	15.1%
				20.0%
				25.7% w/o No. 11

7% Ozone Power

16	2/15/2017	2066	1856	10.2%
17	2/16/2017	1940	1718	11.4%
18	2/17/2017	1594	1260	21.0%
				14.2%

5% Ozone Power

19	2/14/2017	1947	1340	31.2%
20	3/23/2017	946	840	11.2%
21	4/13/2017	556	520	6.5%
				16.3%
				8.8% w/o No. 19

TABLE 2

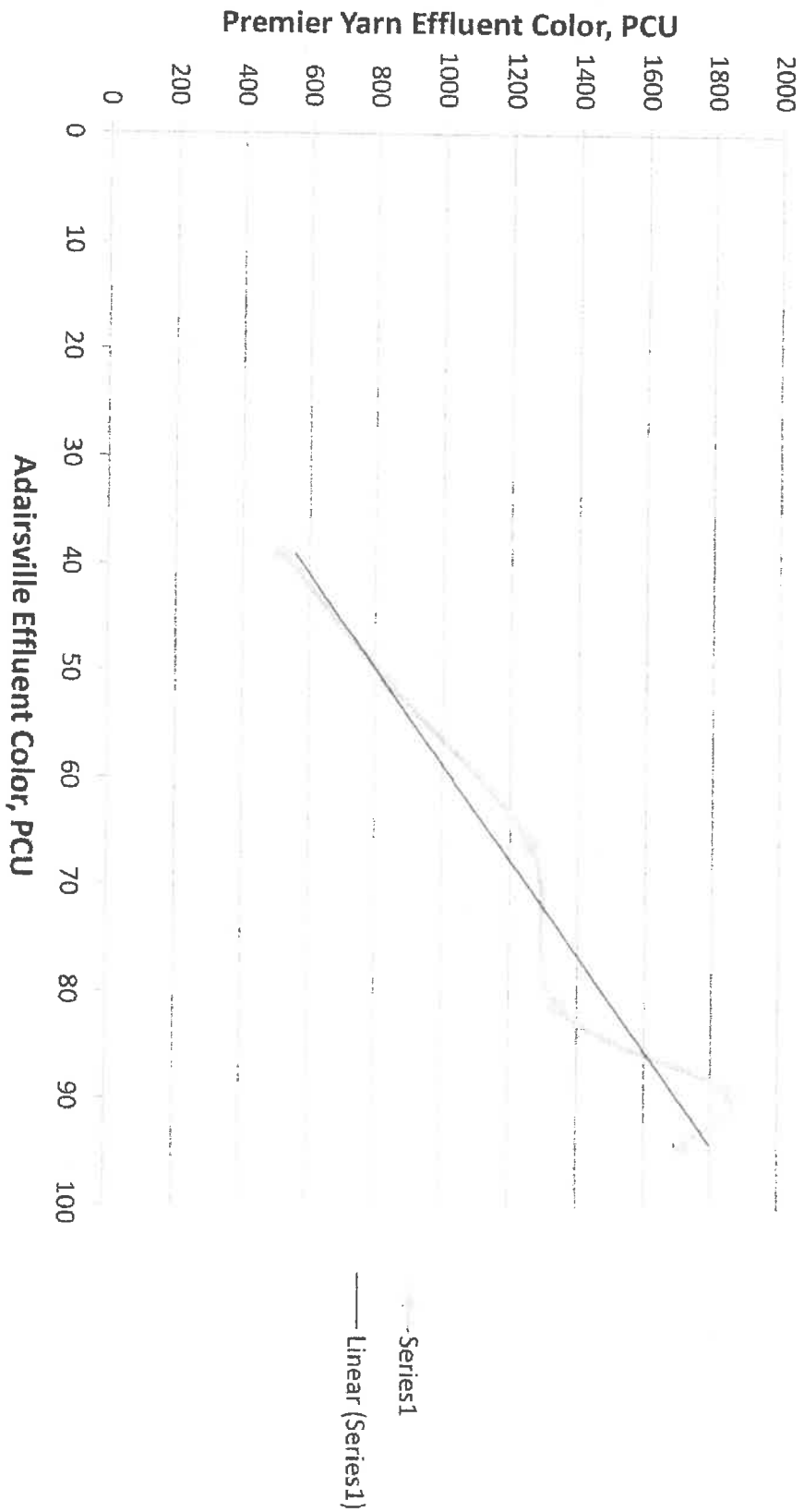
	5%	7%	10%	20%	
	8.8%	14.2%	25.7%	73.6%	
378					87
443					142
462					147
556					262
692					297
946	863	812	703	250	388
994	907	853	739	262	426
1130	1031	970	840	298	520
1168	1065	1002	868	308	720
1520	1386	1304	1129	401	778
1594	1454	1368	1184	421	840
1604	1463	1376	1192	423	1110
1616	1474	1387	1201	427	1260
1616	1474	1387	1201	427	1372
1792	1634	1538	1331	473	1498
1844	1682	1582	1370	487	1634
1940	1769	1665	1441	512	1718
2066	1884	1773	1535	545	1856

63.7% Removal
17-18 % Power to get highest

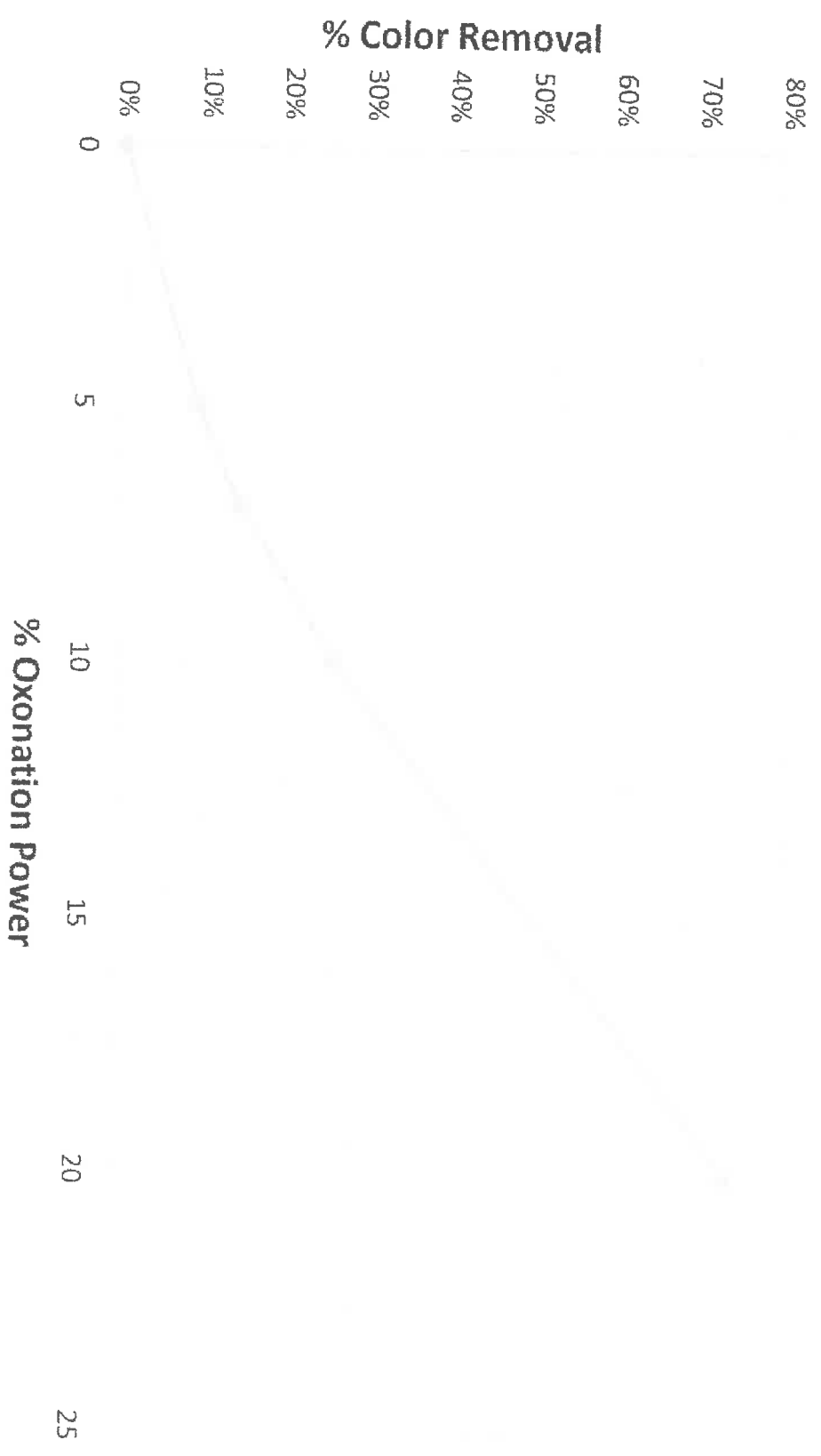
Table 3

28%	no ozonation
11%	7 - 10 % ozonation
61%	10-18 % ozonation

**Graph A - Adairsville WWTP Effluent Color vs. Premier
Yarn Discharge Color**



**Graph B - Premier Yarn Average % Color Removal
Using Oxonation**



Appendix D

Effluent Limit Calculations

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 loadwrt (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.22	1	50	13.5	13		0.78	225.18	118.0944	64.364	10
Arsenic											
BOD	0.22	1	95	45	200		0.78	7506	5454.36	2972.7	10
Cadmium											
Chromium											
Hex. Chrom.											
COD											
Copper											
Cyanide											
Lead											
Mercury											
Nickel											
Oil & Grease											
Phosphorus											
Silver											
TSS	0.22	1	95	45	350		0.78	7506	2276.82	2440.9	10
TTO											
Zinc											

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

POTW's average influent flow in MGD.

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

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

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

 $8.34 * Ccrit * Qpotw$

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)	Allowabl headworl (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.22	1	50	9	13		0.78	150.12	50.5404	27.545	10
Arsenic							-	-	-	-	0
BOD	0.22	1	95	30	200		0.78	5004	3202.56	1745.5	10
Cadmium							-	-	-	-	0
Chromium							-	-	-	-	0
Hex. Chrom.							-	-	-	-	0
COD							-	-	-	-	0
Copper							-	-	-	-	0
Cyanide							-	-	-	-	0
Lead							-	-	-	-	0
Mercury							-	-	-	-	0
Nickel							-	-	-	-	0
Oil & Grease							-	-	-	-	0
Phosphorus							-	-	-	-	0
Silver							-	-	-	-	0
TSS	0.22	0.7	95	30	350		0.48	3502.8	1401.12	954.55	10
TTO							-	-	-	-	0
Zinc							-	-	-	-	0

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

POTW's average influent flow in MGD.

Removal efficiency across POTW as percent.

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

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

 $8.34 * Ccrit * Qpotw$ $1 - Rpotw$

::

TABLE 3

Local Limits Determination Based on Activated Sludge Inhibition Level

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING

INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD)	POTW Flow (Qpotw) (MGD)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowabl leadwork (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.22	1	30	480	13		0.78	5718.9	5062.40383	2759.1	10
Arsenic	0.22	1	45	0.1	0.007		0.78	1.5164	1.47082724	0.8016	0
BOD											
Cadmium	0.22	1	15	1	0.008		0.78	9.8118	8.77854664	4.7845	10
Chromium	0.22	1	27	1	0.034		0.78	11.425	10.061015	5.4834	10
Hex. Chrom.											
COD											
Copper	0.22	1	22	1	0.14		0.78	10.692	8.71234892	4.7484	10
Cyanide											
Lead	0.22	1	57	1	0.001		0.78	19.395	17.4493088	9.5102	10
Mercury											
Nickel	0.22	1	14	1	0.047		0.78	9.6977	8.42216258	4.5902	10
Oil & Grease											
Phosphorus											
Silver											
TSS											
TTO											
Zinc	0.22	1	27	0.3	0.231		0.78	3.4274	1.5027012	1.58195633	0.8622

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

POTW's average influent flow in MGD.

Removal efficiency across primary treatment as percent.

Activated sludge threshold inhibition level, mg/l.

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

 $8.34 * C_{crit} * Q_{potw}$

1 - Rprim

::

Local Limits Determination Based on Nitrification Inhibition Level

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 Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable loadwork (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N											
Arsenic											
BOD											
Cadmium											
Chromium											
Hex. Chrom.											
COD											
Copper											
Cyanide											
Lead											
Mercury											
Nickel											
Oil & Grease											
Phosphorus											
Silver											
TSS											
TTO											
Zinc											

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

POTW's average influent flow in MGD.

Removal efficiency across primary treatment and secondary treatment as percent.

Nitrification threshold inhibition level, mg/l.

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

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

1 - Rsec

Primary Treatment

5

TABLE

Local Limits Determination Based on USEPA 503 Sludge Regulations
ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

1 - POTW sends sludge offsite to City of Cartersville for treatment and disposal
MAXIMUM LOADINGS INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qsldg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	503 Sludge Criteria (mg/kg)	Domes Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic Flow (MGD) (Qdom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N													
Arsenic													
BOD													
Cadmium													
Chromium													
Hex. Chrom.													
COD													
Copper													
Cyanide													
Lead													
Mercury													
Nickel													
Oil & Grease													
Phosphorus													
Silver													
TSS													
TTO													
Zinc													

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

POTW's average influent flow in MGD.

Sludge flow to disposal in MGD.

Percent solids of sludge to disposal.

Removal efficiency across POTW as a percent.

503 sludge criteria in mg/kg dry sludge.

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

$8.34 \times C_{slcrit} \times (PS/100) \times Q_{sldg}$

Rpotw

::

Primary Treatment

6

TABLE

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

POTW sends sludge offsite to City of Cartersville for treatment and disposal
MAXIMUM LOADINGS INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow (MGD) (Qslidg)	Percent Solids (%) (PS)	Removal Efficiency (%) (Rpotw)	State Sludge Criteria (mg/kg) (Cslcrit)	Domest Conc. (mg/l) (Cdom)	Domest 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													
Arsenic													
BOD													
Cadmium													
Chromium													
Hex. Chrom.													
COD													
Copper													
Cyanide													
Lead													
Mercury													
Nickel													
Oil & Grease													
Phosphorus													
Silver													
TSS													
TTO													
Zinc													
(Qind)													
(Qpotw)													
(Qslidg)													
(PS)													
(Rpotw)													
(Cslcrit)													
(Qdom)													
(Cdom)													
(Lhw)													
(Ldom)													
(Lind)													
(Cind)													
(SF)													
8.34													
Lhw =													
Rpotw													
8.34 * Cslcrit * (PS/100) * Qslidg													

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

POTW's average influent flow in MGD.

Sludge flow to disposal in MGD.

Percent solids of sludge to disposal.

Removal efficiency across POTW as a percent.

State sludge criteria in mg/kg dry sludge.

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

8.34 * Cslcrit * (PS/100) * Qslidg

Rpotw

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TABLE

Local Limits Determination Based on Chronic Water Quality Standards

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADIN INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Chronic WQS (mg/l) (Ccrit)	Domestic Conc. (mg/l) (Cdom)	Domestic Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic Commerce (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.22	1	5.82	0	45	0.150	0.007	0.78	15.5124	0.0455	13.9156236	7.58427273	10
Arsenic													
BOD	0.22	1	5.82	0	75	0.0002	0.0008	0.78	0.04582312	0.0049	0.036296859	0.01978246	10
Cadmium*	0.22	1	5.82	0	82	0.059	0.034	0.78	18.5036075	0.2212	16.43206994	8.95578261	10
Chromium*													
Hex. Chrom.													
COD													
Copper*	0.22	1	5.82	0	86	0.007	0.14	0.78	2.84553718	0.9107	1.650255459	0.89941981	10
Cyanide													
Lead*	0.22	1	5.82	0	61	0.002	0.001	0.78	0.26797029	0.0065	0.234668063	0.12789844	10
Mercury													
Nickel*	0.22	1	5.82	0	42	0.0408	0.047	0.78	3.99836297	0.3057	3.292782273	1.79462736	10
Oil & Grease													
Phosphorus													
Silver	0.22	1	5.82	0		0.000	0.019	0.78	-	0.1236	-	-	10
TSS													
TTO													
Zinc*	0.22	1	5.82	0	79	0.093	0.231	0.78	25.0763184	1.5027	21.06598538	11.4813524	10
Selenium	0.22	1	5.82	0	50	0.005	0	0.78	0.568788	0	0.5119092	0.279	10

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

POTW's average influent flow in MGD.

Receiving stream (upstream) 7Q10 flow in MGD.

Removal efficiency across POTW as percent.

State chronic water quality standard for a particular pollutant in mg/l. (expressed in dissolved fraction * at hardness = 50)

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

 $8.34 * (C_{crit} * (Q_{str} + Q_{potw}) - (C_{str} * Q_{str}))$ $1 - R_{potw}$

::

Primary Treatment

TABLE 8

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

MAXIMUM LOADIN INDUSTRIAL

Pollutant	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)	Domest Conc. (mg/l) (Cdom)	Domest Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic Commerce (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.22	1	4.91	0	45	0.340	0.007	0.78	30.4698109	0.0455	27.37729342	14.9211322	10
Arsenic													
BOD	0.22	1	4.91	0	75	0.002	0.008	0.78	0.30012621	0.052	0.21807199	0.11885328	10
Cadmium*	0.22	1	4.91	0	82	0.450	0.034	0.78	123.268129	0.2212	110.7201396	60.3445278	10
Chromium*													
Hex. Chrom.													
COD													
Copper*	0.22	1	4.91	0	86	0.010	0.14	0.78	3.60810221	0.9107	2.336563991	1.27347067	10
Cyanide													
Lead*	0.22	1	4.91	0	61	0.047	0.058	0.78	5.95902695	0.3773	4.985822652	2.71736574	10
Mercury													
Nickel*	0.22	1	4.91	0	42	0.3671	0.047	0.78	31.195501	0.3057	27.7702065	15.1352771	10
Oil & Grease													
Phosphorus													
Silver	0.22	1	4.91	0		0.000	0.019	0.78	-	0.1236	-	-	
TSS													
TTO													
Zinc	0.22	1	4.91	0	79	0.092	0.231	0.78	21.5540468	1.5027	17.89594094	9.75361944	10

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

POTW's average influent flow in MGD.

Receiving stream (upstream) 1Q10 flow in MGD.

Receiving stream background level in mg/l.

Removal efficiency across POTW as percent.

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

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

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

1 - Rpotw

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Local Limits Determination Based on Anaerobic Digester Inhibition Level

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

MAXIMUM LOADING INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow to Digester (MGD) (Qdig)	Removal Efficiency (%) (Rpotw)	Anaerobic Digester Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Qdom)	Comme 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	0.22	1	0.05	50	1500	0.13	0.78	1251	0.845676	1125.1	613.1754545	10
Arsenic	0.22	1	0.05	45	1.6	0.007	0.78	1.482666667	0.0455364	1.2889	0.702454545	10
BOD												
Cadmium	0.22	1	0.05	75	20	0.008	0.78	11.12	0.0520416	9.956	5.426181818	10
Chromium	0.22	1	0.05	82	130	0.034	0.78	66.1097561	0.2211768	59.278	32.30739246	10
Hex. Chrom.												
COD												
Copper	0.22	1	0.05	86	40	0.14	0.78	19.39534884	0.910728	16.545	9.017378436	10
Cyanide	0.22	1	0.05	69	1		0.78	0.604347826	0	0.5439	0.296442688	10
Lead	0.22	1	0.05	61	340	0.058	0.78	232.4262295	0.3773016	208.81	113.8033055	10
Mercury												
Nickel	0.22	1	0.05	42	10	0.047	0.78	9.928571429	0.3057444	8.63	4.703493506	10
Oil & Grease												
Phosphorus												
Silver	0.22	1	0.05	75	13	0.019	0.78	7.228	0.1235988	6.3816	3.478090909	10
TSS												
TTO												
Zinc	0.22	1	0.05	79	400	0.231	0.78	211.1392405	1.5027012	188.52	102.7483188	10

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

POTW's average influent flow in MGD.

Sludge flow to digester in MGD.

Removal efficiency across POTW as percent.

Anaerobic digester threshold inhibition level in mg/l.

Domestic/commercial background flow in MGD.

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

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

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

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

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

Safety factor as a percent.

Unit conversion factor

8.34 * Ccrit * Qdig

Rpotw

**dissolved metal inhibition

TABLE
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 (lbs/day)	Categorical Standards (mg/l)	Sewer Use Ordinance (mg/l)	Current Permit Limits (mg/L)	Reported Concentration	% of Current Limit
Ammonia-N	27.5	P	50.5404	N/A		20	24	120
Arsenic	0.702	I	1.2888636	N/A		0.236	0.0025	1.05932203
BOD	1745.5	P	3202.56	N/A	250	250		
Cadmium	0.020	W	0.036296859	N/A		0.038	0.0004	2.02199312
Chromium	5.5	I	10.06101498	N/A		2.439	0.12	4.9200492
Hex. Chrom.								
COD								
Copper	0.9	W	1.650255459	N/A		0.949	0.069	7.27081138
Cyanide	0.3	I	0.543913043	N/A				
Lead	0.1	W	0.234668063	N/A		0.039	0.0110	28.2051282
Mercury	0.0							
Nickel	1.8	W	3.292782273	N/A		2.416	0.005	0.20695364
Oil & Grease	0.0				100	100.000		
Phosphorus	0.0							
Silver	3.5	I	6.3816012	N/A		0.591	0.005	0.84602369
TSS	954.5	P	1751.4	N/A	250	250		
TTO	0.0							
Zinc	0.9	I	1.581956334	N/A		0.212	0.46	216.981132
Selenium	0.3	W	0.5119092	N/A		0.25	0.005	2

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