

## Staff Report

**REVISIONS TO INDUSTRIAL PRETREATMENT PROGRAM**

October 17, 2017

**BACKGROUND:**

All communities with wastewater treatment facilities designed to receive more than five million gallons per day of wastewater flow must implement an industrial pretreatment program consistent with the federal requirements. The program is designed to prevent the introduction of pollutants into the sanitary sewer which could interfere with the wastewater treatment process, pass through the system untreated, cause harm to personnel working with the sanitary sewer or treatment plant, or cause the City to be in non-compliance with the conditions of its National Pollutant Discharge Elimination System permit.

**The City's Industrial Pretreatment Program (IPP) has been completely rewritten to ensure that the formal document reflects the actual practices already in place. The original program was written in 1983 with a partial rewrite in 2010 to adopt the US EPA's mandatory Pretreatment Streamlining Rule. By rewriting the entire program, staff was able to put all the information into one document that has clear and consistent formatting and is updated to reflect current information for the plant.**

The content of the revised program mirrors that of a model provided by the Environmental Protection Agency (EPA) and also includes suggestions made by the EPA after a recent audit. The City was specifically asked to update the Enforcement Response Plan to reflect the Streamlining regulations changes made in 2010.

In addition, the EPA requested that the program authorize the use of the Best Management Practices permits the City has issued in lieu of regular monitoring. The Best Management Permits have been used to monitor entities that are required by federal rule to be regulated under the program but that have little to no risk to the City. One example is Iowa State University's Environmental Health and Safety (EH&S) building. The flows from this building are so low it makes it difficult for the City to accurately get a representative sample. EH&S has taken measures to prevent any discharge to the sanitary sewer. Because city staff view this facility as posing a low risk to the treatment plant, EH&S provides documentation of its preventative practices every six months in lieu of performing sampling.

The City has also implemented a Memorandum of Understanding with Iowa State University Research Park in order to better track new industries coming into the park.

This is helpful in determining if a specific industry will need further evaluation to be put on the Industrial Pretreatment Program.

Other updates to the pretreatment program include clarification of instances when two labs analyze a sample for the same parameter and how it should be handled should any parameters exceed an industries' pretreatment permit. Staff also clarified the requirement for industries to use a certified lab for analysis.

It was recently decided to move away from issuing both a 20 year contract and a 5 year permit for our industries, and has moved all of the necessary control language into the permits. It is uncommon for a utility to use two separate control documents, and almost all municipalities work off of 5 year permits. The City has three more permits to issue under this new format to bring all the industries in to the new format. The formal program document now reflects the new permit format.

### **STAFF COMMENTS:**

The full draft Industrial Pretreatment Program document can be found at [www.cityofames.org/ipp](http://www.cityofames.org/ipp). Industries were mailed a letter the week of September 18<sup>th</sup>. No comments have been received by our industrial pretreatment customers. National Centers for Animal Health have indicated they are reviewing the program and may provide comments. The program was sent to Iowa Department of Natural Resources on August 24 for review and approval. Staff anticipates comments from them within the week.

**Completing these specific changes are time sensitive, as the City has an agreement with the EPA that requires the recommendations from the audit be put into place by December 15, 2017.**

- **If Council is comfortable with the proposed Industrial Pretreatment Program document, no action will be needed at the workshop.** Staff will bring the document to Council for adoption by resolution on October 24.
- **If, however, there are things that Council wishes to handle differently than is proposed, direction on those changes would be necessary at the workshop.** That will allow staff to make the requested changes so that Council is comfortable approving the ordinance on October 24, and thus meeting the deadline set by the US EPA.

# Industrial Pretreatment Program



City of Ames, Iowa  
Water & Pollution Control Department  
2017

City of Ames, Iowa  
Pretreatment Program  
Index

|              |   |        |
|--------------|---|--------|
| Chapter 1    | Introduction .....  | 1      |
|              | A. Requirements for Program .....                                 | 1      |
|              | B. Purpose of the Program .....                                   | 1      |
|              | C. General Description of the Ames Program .....                  | 2      |
| Chapter 2    | Background.....   | 3      |
|              | A. Description of Ames .....                                      | 3      |
|              | B. Description of the Ames Water Pollution Control Facility ..... | 3      |
|              | C. WPC NPDES Permit Limitations .....                             | 5      |
|              | D. WPC Facility Operation .....                                   | 6      |
| Chapter 3    | Identifying Industrial Users .....                                | 7      |
|              | A. Historical .....   | 7      |
|              | B. Updating Industrial User List .....                            | 7      |
|              | C. 2015 -2016 Industrial Waste Survey .....                       | 7      |
| Chapter 4    | Program Implementation .....                                      | 8      |
|              | A. Administration .....   | 8      |
|              | B. General Sewer Use Requirements .....                           | 8      |
|              | C. Designation of Industrial Users .....                          | 10     |
|              | D. Pretreatment Limitations .....                                 | 11     |
|              | E. Permit Issuance Process .....                                  | 12     |
|              | F. Reporting Requirements .....                                   | 14     |
|              | G. Right of Entry – Inspection and Sampling .....                 | 23     |
|              | H. Administrative Enforcement .....                               | 24     |
|              | I. Confidential Information .....                                 | 27     |
|              | J. Publication of Users in Significant Non-Compliance .....       | 27     |
|              | K. Surcharge Program .....  | 28     |
|              | L. Hauled Waste .....   | 29     |
|              | M. Fats, Oils, and Grease (FOG) Control Program .....             | 29     |
| Chapter 5    | Program Fees .....  | 30     |
| Appendix I   | Definitions .....   | i      |
| Appendix II  | WPC Facility Layout & Technical Data for WPC Facility Units ..... | v      |
| Appendix III | Enforcement Response Plan .....                                   | viii   |
| Appendix IV  | Long Form Questionnaire .....                                     | xii    |
|              | Short Form Questionnaire .....                                    | xxv    |
| Appendix V   | Hauled Waste Tracking Form .....                                  | xxvii  |
| Appendix VI  | City of Ames W&PC Organizational Chart .....                      | xxviii |
| Appendix VII | List of Industrial Users .....                                    | xxix   |

# CHAPTER 1

## INTRODUCTION

### A. **Requirements for Program**

The City of Ames received a National Pollution Discharge Elimination System (NPDES) permit for the now abandoned (1989) municipal wastewater treatment facility in January, 1983. This permit was issued by the Iowa Department of Environmental Quality (now Iowa Department of Natural Resources) under procedures established by the U.S. Environmental Protection Agency to implement provisions to the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500). The NPDES permit included a requirement for the City of Ames to establish and implement an Industrial Pretreatment Program by July 1, 1983 in accordance with applicable provisions of the Clean Water Act (33 United States Code [U.S.C.] section 1251 et seq.) and the General Pretreatment Regulations (Title 40 of the *Code of Federal Regulations* [CFR] Part 403). Please see Appendix I for definitions of terms used throughout this document.

All communities with wastewater treatment facilities designed for or receiving more than five million gallons per day of wastewater flow must implement an industrial waste pretreatment program consistent with the federal requirements.

The City complied with the requirement and in 1983, established an Industrial Pretreatment Program. The City of Ames continues to administer the program today. However, requirements for the program have been modified by subsequent legislation or rules. The City of Ames has updated its program to meet the current requirements.

Chapter 28 of the Ames Municipal Code gives the City the legal authority to administer and enforce the Industrial Pretreatment Program. The Ames Municipal Code can be accessed at <http://www.cityofames.org/government/municipal-code> and the pertinent sections of the Code of Federal Regulations can be accessed at <http://www.ecfr.gov>.

### B. **Purpose of the Program**

This program requires adequate treatment for industrial discharge to the municipal sanitary sewer system. Wastewater discharges from industrial contributors may include toxic or deleterious materials which may not be adequately treated in publicly-owned treatment works (POTW). These materials may pass through the POTW to the receiving streams and have adverse impacts on aquatic systems; may be removed by the POTW but cause problems with the ability to recycle or reclaim treated wastewater or biosolids; or may cause inhibitions to the treatment processes; or disrupt the treatment units to the extent that the facility is not able to properly treat wastewater. This program has the following objectives:

1. To prevent the introduction of pollutants into the POTW which will interfere with the treatment plant operations;

2. To prevent the introduction of pollutants into the POTW which will pass through the system, inadequately treated, into the receiving waters, the atmosphere, or otherwise be incompatible with the system;
3. To protect both the general public and POTW personnel who may be affected by wastewater and biosolids in the course of their employment;
4. To improve the opportunity to recycle and reclaim wastewaters and biosolids from the system;
5. To enable the City to comply with its National Pollutant Discharge Elimination System permit conditions, biosolids use and disposal requirements, and any other Federal or State laws to which the POTW is subject;
6. To provide for fees for the equitable distribution for the cost of monitoring industrial discharges; and

The Industrial Pretreatment Program adopted by the City must accomplish the above goals. To meet these goals, the program must:

1. Identify the quantity and quality of industrial wastewater discharges to the POTW system from each industrial source;
2. Establish minimum criteria and define which industrial contributors are required to apply for and obtain a permit to discharge to the POTW;
3. Establish limitations on the quality and quantity of industrial wastewater that will be accepted by the City from each industrial contributor; and
4. Establish a procedure to monitor and enforce the quantity and quality limitations set for each permitted industrial contributor to the POTW.

### **C. General Description of the Ames Program**

Few industrial contributors in Ames meet the federal definition of Significant Industrial User or Categorical Industrial User. While there is not a serious problem from industrial discharges, it is the general consensus that a uniform procedure for administering this program for all industrial contributors is in the best interests of the City. Therefore, the general procedures described in this document will be followed by the City.

The general intent of the Industrial Pretreatment Program is to establish a program to protect the POTW and require pretreatment where it is necessary. In all cases, pretreatment limitations will be established where appropriate, based on the most stringent requirements of applicable local, state, or federal standards.

## CHAPTER 2 BACKGROUND

### A. Description of Ames

The City of Ames consists primarily of small- to medium-sized commercial and light industrial facilities. In addition, a number of local, state, and federal government agencies are located within the City. Ames is also home to the Iowa State Research Park, which aids in the development and expansion of science- and technology-related business.

Census data for the City of Ames was compiled from Census Bureau publications and Iowa State University offices. The following population statistics for Ames are provided:

|                       | 1990 Data | 2000 Data | 2010 Data |
|-----------------------|-----------|-----------|-----------|
| Total City Population | 47,198    | 50,731    | 58,685    |
| ISU Spring Enrollment | 23,522    | 24,333    | 26,283    |

The Ames Planning and Housing Department compiled the following land-use data in 1994 for the area within the corporate limits of Ames:

| Land Use           | Area (Acres) | % of Total |
|--------------------|--------------|------------|
| Residential        | 2,834        | 28         |
| Commercial         | 643          | 6          |
| Industrial         | 315          | 3          |
| Public/Semi-Public | 5,133        | 50         |
| Agricultural       | 1,096        | 11         |
| Vacant             | 250          | 2          |
| Total              | 10,271       | 100        |

This data shows the primarily domestic, commercial, and light industrial nature of the Ames community. It follows that the wastewater characteristics are primarily domestic.

### B. Description of the Ames Water Pollution Control Facility

The Water Pollution Control (WPC) facility, completed in 1989, was designed to treat the following parameters:

| Parameter      | Avg. Annual | Avg. Wet Weather | Max. Wet Weather |
|----------------|-------------|------------------|------------------|
| Flow, mgd      | 8.6         | 12.1             | 20.4             |
| cBOD5, mg/L    | 173         | 160              | 140              |
| cBOD5, lbs/day | 12,430      | 16,150           | 23,740           |
| TKN, mg/L      | 47          | 49               | 41               |

|              |       |       |       |
|--------------|-------|-------|-------|
| TKN, lbs/day | 3,540 | 4,950 | 6,930 |
|--------------|-------|-------|-------|

Actual WPC Facility loadings were as follows:

| Parameter      | 2014 Average | 2015 Average | 2016 Average |
|----------------|--------------|--------------|--------------|
| Flow, mgd      | 6.27         | 7.16         | 6.54         |
| cBOD5, mg/L    | 167          | 157          | 175          |
| cBOD5, lbs/day | 8,125        | 8,768        | 9,367        |
| TSS, mg/L      | 210          | 187          | 212          |
| TSS, lbs/day   | 10,553       | 10,667       | 11,276       |
| NH3, mg/L      | 25.2         | 23.8         | 22.5         |
| NH3, lbs/day   | 1,247        | 1,337        | 1,203        |

For normal flows, Mode 4 plant components include climber screens/grinders, raw wastewater pumping station, equalization basins, grit removal, trickling filter pump station, primary clarifiers, first-stage trickling filters, solids contact/aeration basins, intermediate clarifiers, second-stage trickling filters, final clarifiers, ultraviolet disinfection, and a cascade aerator. In high rate Mode 5, both final clarifiers are converted to intermediate clarifiers.

Solids are stabilized in primary and secondary digestion tanks. Anaerobically digested solids are stored in a lined lagoon until disposed of on cropland in accordance with state land application regulations (IAC 567-67). The figure included in Appendix IV outlines the relative location of these individual units at the plant site and indicates the direction of wastewater flow through the plant. Technical data concerning the size of each unit are also listed in Appendix IV.

The City of Ames Biosolids Land Application Plan complies with the Iowa Department of Natural Resources rules set forth in IAC 567-67 and must meet the following limits:

| Parameter      | Maximum Ceiling Concentration, mg/kg | Ceiling Concentration, mg/kg (If all parameters are below these limits cumulative loading limits do not apply.) | Cumulative Pollutant Loading, kg/hectare | Cumulative Pollutant Loading, lbs/acre |
|----------------|--------------------------------------|---|--|--|
| Arsenic        | 75                                   | 41  | 41                                       | 36                                     |
| Cadmium        | 85                                   | 39  | 39                                       | 34                                     |
| Copper         | 4,300                                | 1,500   | 1,500                                    | 1,335                                  |
| Lead           | 840                                  | 300   | 300                                      | 267                                    |
| Mercury        | 57                                   | 17  | 17                                       | 15                                     |
| Molybdenum     | 75                                   |   |  |  |
| Nickel         | 420                                  | 420   | 420                                      | 373                                    |
| Selenium       | 100                                  | 100   | 100                                      | 89                                     |
| Zinc           | 7,500                                | 2,800   | 2,800                                    | 2,490                                  |
| Total Nitrogen |                                      |   | Agronomic loading rate                   | Agronomic loading rate                 |



**C. WPC NPDES Permit Limitations**

The 2013 Amended NPDES Permit for the Ames WPC Facility contains the following limits. This permit is the most recently issued permit for the WPC Facility.

Average wet-weather flow: 12.1 mgd  
 Maximum wet-weather flow: 20.4 mgd

| Effluent Parameter                   | 7-Day Average |         | 30-Day Average |         | Maximum Day |         |
|--------------------------------------|---------------|---------|----------------|---------|-------------|---------|
|                                      | mg/L          | lbs/day | mg/L           | lbs/day | mg/L        | lbs/day |
| <b>cBOD5</b>                         |               |         |                |         |             |         |
| January                              | 30            | 3,027   | 20             | 2,018   |             |         |
| February                             | 30            | 3,027   | 20             | 2,018   |             |         |
| March                                | 30            | 3,027   | 20             | 2,018   |             |         |
| April                                | 30            | 3,027   | 20             | 2,018   |             |         |
| May                                  | 30            | 3,027   | 20             | 2,018   |             |         |
| June                                 |               |         | 20             | 2,018   | 30          | 3,027   |
| July                                 |               |         | 20             | 2,018   | 30          | 3,027   |
| August                               |               |         | 20             | 2,018   | 30          | 3,027   |
| September                            |               |         | 20             | 2,018   | 30          | 3,027   |
| October                              | 30            | 3,027   | 20             | 2,018   |             |         |
| November                             | 30            | 3,027   | 20             | 2,018   |             |         |
| December                             | 30            | 3,027   | 20             | 2,018   |             |         |
| <b>Total Suspended Solids (TSS)</b>  | 45            | 4,541   | 30             | 3,027   |             |         |
| <b>Ammonia Nitrogen (as N)</b>       |               |         |                |         |             |         |
| January                              |               |         | 5.2            | 521     | 15.2        | 1,533   |
| February                             |               |         | 5.7            | 575     | 14.2        | 1,433   |
| March                                |               |         | 4.5            | 454     | 14.7        | 1,482   |
| April                                |               |         | 2.1            | 212     | 15.7        | 1,584   |
| May                                  |               |         | 1.8            | 182     | 15.2        | 1,533   |
| June                                 |               |         | 1.3            | 131     | 11.5        | 1,161   |
| July                                 |               |         | 1.1            | 109     | 8.5         | 858     |
| August                               |               |         | 1.0            | 99      | 10.0        | 1,009   |
| September                            |               |         | 1.5            | 150     | 16.5        | 1,664   |
| October                              |               |         | 2.3            | 232     | 15.7        | 1,584   |
| November                             |               |         | 3.4            | 343     | 14.7        | 1,482   |
| December                             |               |         | 4.0            | 399     | 16.0        | 1,611   |
| <b>Dissolved Oxygen (Min. Value)</b> | 5.0 mg/L      |         |                |         |             |         |

|            |                          |  |
|------------|--------------------------|--|
| pH (Range) | 6.5 – 9.0 Standard Units |  |
|------------|--------------------------|--|

Actual WPC Facility effluent characteristics were as follows:

| Parameter              | 2014 Average | 2015 Average | 2016 Average |
|------------------------|--------------|--------------|--------------|
| Flow, mgd              | 6.27         | 7.16         | 6.54         |
| cBOD5, mg/L            | 4.1          | 4.4          | 4.8          |
| TSS, mg/L              | 5.5          | 6.0          | 7.7          |
| Ammonia Nitrogen, mg/L | 0.25         | 0.16         | 0.16         |

**D. WPC Facility Operation**

The WPC Facility is currently meeting the design limitations. However, as Ames grows and future effluent limits become more stringent, proactive programs will be essential to the efforts of the City to meet environmental standards and requirements. Thus, the Industrial Pretreatment Program’s attempts to regulate the quality and quantity of contributions and reduce the level of contamination at the source will be vital elements to successful compliance.

## **CHAPTER 3 IDENTIFYING INDUSTRIAL USERS**

### **A. Historical**

In 1983, the U.S. EPA provided a list of potential industrial discharges based on a 1980 computer search of applicable Standard Industrial Classification (SIC) codes in Dun and Bradstreet. City staff then identified an additional seven potential discharges for consideration. Nine facilities, either out of business or not connected to the municipal sewer system, were eliminated from further investigation. The remaining 24 facilities were contacted and asked to complete and return an industrial waste information questionnaire.

### **B. Updating Industrial User List**

The City has several methods for updating the list of industrial users to be included in the Industrial Pretreatment Program. Water & Pollution Control staff members are active on the Development Review Committee. This committee meets to review plans for development within the City of Ames. Pertinent information from these meetings is communicated to the City's Environmental Specialist.

The Water & Pollution Control Department also has a Memorandum of Understanding in place with the Iowa State University Research Park Corporation. This document states that tenant information will be provided to the City biannually and that new tenants and tenants of interest will submit an Industrial Waste Information Questionnaire upon moving locations or occupying new space within the Research Park.

Also, every five years the Water & Pollution Control Department will perform an Industrial Waste Survey (IWS). The initial list for the IWS will be determined by obtaining a list of commercial utility accounts in the City. This list will be reduced by eliminating accounts that pose no reasonable threat to the sanitary sewer, Water Pollution Control Facility, or staff members. The IWS will include both a short form and long form Industrial Waste Information Questionnaire. The short form will be distributed to all potential Industrial Users. Staff will review the responses and the long form will be distributed to those users being considered for inclusion on the Industrial Pretreatment Program. Upon receipt of the long form responses, staff will perform sampling and/or inspections, as necessary, to determine if an industry should be added to the program.

### **C. 2015-2016 Industrial Waste Survey**

During the 2015-2016 Industrial Waste Survey, the short form Industrial Waste Information Questionnaire was mailed to 98 utility customers. Responses were received from 74 customers and the remaining 24 were investigated further by City staff and determined that no follow-up was necessary. The long form Industrial Waste Information Questionnaire was sent to 3M Company, New Link Genetics, BASF (2 locations), and

Boehringer Ingelheim Vetmedica, Inc. (2 locations). After review of all submissions, City staff determined that none of these sites needed to be added to the Industrial Pretreatment Program.

## **CHAPTER 4 PROGRAM IMPLEMENTATION**

### **A. Administration**

The Director of the Water & Pollution Control Department is responsible to administer and enforce the City of Ames Industrial Pretreatment Program. The day-to-day responsibilities of the program are assigned to the Environmental Specialist who is the designated pretreatment coordinator. The duties of the pretreatment coordinator include, but are not limited to, the following:

1. Review the requirements of the Industrial Pretreatment Program and recommend appropriate changes to the City Council.
2. Periodically conduct industrial waste surveys to identify new Industrial Users.
3. Review and revise local discharge limits.
4. Issue Pretreatment Permits for all applicable Industrial Users.
5. Review all self-monitoring data and reports required from Industrial Users.
6. Review and responds to special discharge requests from local facilities.
7. Investigate current and potential Industrial Users for harmful discharges.
8. Periodically monitor and inspect all Industrial Users to verify self-monitoring data and compliance with discharge limitations.
9. Enforce the provisions of this ordinance, all Pretreatment Permits, and any other Pretreatment Standards and Requirements.

The Laboratory Services Division assists with the sampling and analysis of industrial user's discharges. A majority of the analysis is performed by this state certified laboratory, but outside labs are used on an as-needed basis. Appendix 6 includes an organizational chart for the Water & Pollution Control Department.

### **B. General Sewer Use Requirements**

1. General Prohibitions. No User shall introduce or cause to be introduced into the POTW any liquid, solid, or gas in sufficient quantity, either singly or in combination with other wastes, to cause Interference, Pass Through, acute worker health and/or safety issues, or create a toxic effect in the receiving stream. These general prohibitions apply to all Users of the POTW whether or not they are

subject to Categorical Pretreatment Standards or any other Federal, State or local Pretreatment Standards or Requirements.

2. Specific Prohibitions. No User shall introduce or cause to be introduced into the POTW the following pollutants, substances, or wastewater:
  - a. Any liquid, solid or gases which may cause fire or explosion either alone or in combination with other substances, or any waste streams with a closed cup flashpoint of less than 140°F using the methods in 40 CFR 261.21;
  - b. Solid or viscous substances which may cause obstruction to the flow in the sewer or other interference with the operation of the treatment facility;
  - c. Any wastewater which has a pH less than 6.0 or higher than 10;
  - d. Any wastewater containing anything in liquid, solid or vapor form, in sufficient quantity, either singly or in combination, to inhibit or interfere with any wastewater treatment or biosolids disposal process, constitute a hazard to humans or animals, create toxic gases, vapors or fumes that may cause acute worker health and/or safety problems, create a toxic effect in the receiving stream, or by Pass Through; exceed any standard set by the Iowa Department of Natural Resources or the U.S. Environmental Protection Agency;
  - e. Any substance which either singly or in combination is sufficient to create a public nuisance or hazard to life or interferes with the possible reclamation or reuse of the wastewater or biosolids;
  - f. Any trucked or hauled pollutants, except at discharge points designated by the City when delivered by licensed haulers;
  - g. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
  - h. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW exceeds 40°C (104°F);
  - i. Any pollutant, including oxygen demanding pollutants released in a discharge at a flow rate and/or concentration which will cause Interference with the POTW;

- j. Any wastewater which the Director of the Water & Pollution Control Department determines to be unacceptable based on a case-by-case analysis;
- k. Any additive or emulsifier designed for the purpose of reducing the accumulation of fats, oils, and grease in plumbing, grease removal equipment, or the POTW, except those approved for such use by the Director of Water & Pollution Control;
- l. Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye or pigment wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent.

### C. **Designation of Industrial Users**

An Industrial User is defined as a contributor of pollutants to the Publicly Owned Treatment Works (POTW) that is non-domestic in nature. Many commercial or industrial facilities discharge only domestic waste, and do not require a Pretreatment Permit. Other contributors discharge such small volumes of non-domestic waste that their discharge is insignificant. These facilities will also be exempt from obtaining a Pretreatment Permit. Industrial Users that are required to obtain a Pretreatment Permit will be classified based on their discharge to the POTW.

The following classifications are used by the Industrial Pretreatment Program.

1. Categorical Industrial User (CIU) - An Industrial User subject to a Categorical Pretreatment Standard as defined in 40 CFR Chapter 1, Subchapter N, Parts 405-471.
2. Significant Industrial User (SIU) – Except as provided in paragraphs (3) and (4) of this section, an SIU is:
  - a. An Industrial User subject to Categorical Pretreatment Standards; or
  - b. An Industrial User that:
    - i. Discharges an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);
    - ii. Contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or

- iii. Is designated as such by the City on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or Requirement.
3. Non-Significant Categorical Industrial User – The City may determine that an Industrial User subject to Categorical Pretreatment Standards is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
- a. The Industrial User, prior to the City's finding, has consistently complied with all applicable Categorical Pretreatment Standards and Requirements;
  - b. The Industrial User annually submits the certification statement required in 40 CR 403.12(q), together with any additional information necessary to support the certification statement; and
  - c. The Industrial User never discharges any untreated concentrated wastewater.
4. Non-Significant Industrial User – Upon a finding that an Industrial User meeting the criteria of a SIU has no reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or Requirement, the City may at any time, on its own initiative or in response to a petition received from an Industrial User, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that the Industrial User should not be considered a Significant Industrial User.

**D. Pretreatment Limitations**

1. The City is authorized to establish Local Limits pursuant to 40 CFR 403.5(c). The objectives of the program set out in Chapter 1, Section B (1-5) were used as guidance to establish the Local Limits for industrial discharges and a number of factors are used to determine the Local Limits. The current Local Limits are included in Chapter 28 of the Ames Municipal Code.
- a. Prior to adoption of a new or revised Local Limit(s), the City will notify all permitted Industrial Users of the proposed limit(s) and provide an opportunity for comment. Upon adoption of new or revised limit(s), the City will provide the contributor a reasonable period of time in which to comply with the new limit(s). The City may establish and enforce deadlines for meeting the revised pretreatment standards.



2. Categorical Industrial Users are required to comply with the Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405–471.
  - a. Upon promulgation of a Federal Categorical Pretreatment Standard for a particular industrial category, the Federal Standard, if more stringent than the Local Limit, will supersede the limitations imposed previously in the Pretreatment Permit for all industries included in the federal category.
  - b. When wastewater subject to a Categorical Pretreatment Standard is mixed with wastewater not regulated by the same Standard, the City shall impose an alternate limit in accordance with 40 CFR 403.6(e).
3. The City may develop Best Management Practices, by ordinance or in individual Pretreatment Permits, in addition to or in place of other pretreatment limitations.
4. No Industrial User shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement. The City may impose mass limitations on Industrial Users who are using dilution to meet applicable Pretreatment Standards or Requirements or in other cases when the imposition of mass limitations is appropriate.

**E. Permit Issuance Process**

All Industrial Users which are required to obtain a Pretreatment Permit must obtain the permit from the City prior to discharging industrial pollutants to the POTW. An application (Long Form Industrial Waste Questionnaire) for a permit may be obtained from the Water & Pollution Control Department, 1800 E. 13<sup>th</sup> Street, Ames, IA 50010; (515) 239-5150, [www.cityofames.org/water](http://www.cityofames.org/water), or may be copied from Appendix IV. The completed Long Form Industrial Waste Questionnaire must be submitted six (6) months prior to the planned discharge.

The City will evaluate the data furnished by the Industrial User and may require additional information to determine whether to issue a permit and the requirements of the Pretreatment Permit. A Pretreatment Permit shall include such conditions as are deemed reasonably necessary by the City to prevent Interference or Pass Through, protect the quality of the receiving stream, protect worker health and safety, facilitate biosolids management and disposal, and protect against damage to the POTW.

1. Pretreatment Permits must contain:
  - a. A statement that indicates the Pretreatment Permit issuance date, effective date, and expiration date;

- b. A statement that the Pretreatment Permit is nontransferable without prior notification to the City and provisions for furnishing the new owner or operator with a copy of the existing Pretreatment Permit;
  - c. Effluent limits, including Best Management Practices, based on applicable Pretreatment Standards;
  - d. Self-monitoring, sampling, reporting, notification, and record-keeping requirements. These requirements shall include an identification of pollutants (or Best Management Practices) to be monitored, sampling location, sampling frequency, and sample type based on Federal, State, and local law;
  - e. The process for seeing a waiver from monitoring for a pollutant neither present nor expected to be present in the discharge in accordance with Section F(4)(b);
  - f. A statement of applicable civil and criminal penalties for violation of Pretreatment Standards and Requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable Federal, State, or local law;
  - g. Requirements to control Slug Discharge, if determined by the City to be necessary;
  - h. Any grant of the monitoring waiver by the City must be included as a condition in the Industrial User's Pretreatment Permit.
2. Pretreatment Permits may contain, but need not be limited to, the following conditions:
- a. Limits on the average and/or maximum concentration of pollutants discharged to the POTW;
  - b. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works. Any expenses incurred are the responsibility of the User;
  - c. Requirements for the development and implementation of spill control plans or other special conditions including Best Management Practices to adequately prevent accidental, unanticipated, or non-routine discharges;
  - d. Requirements for installation and maintenance of inspection and sampling facilities and equipment, including flow measurement devices;

- e. A statement that compliance with the Pretreatment Permit does not relieve the Permittee of responsibility for compliance with all applicable Federal and State Pretreatment Standards, including those which become effective during the term of the Pretreatment Permit; and
- f. Other conditions as deemed appropriate by the City to ensure compliance with this ordinance, and State and Federal laws, rules, and regulations.

The permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. Industrial Users must resubmit the Long Form Industrial Waste Questionnaire at least one hundred eighty (180) days prior to the expiration of their Pretreatment Permit. In addition, notice of an anticipated significant change in quantity of discharge or increase in pollutants contributed must be given by the User to the City six (6) months in advance of the change or increase to allow for reevaluation and reissuance of the permit.

The City may also utilize Memorandums of Understanding, when appropriate. As described in Chapter 3, the City has a Memorandum of Understanding in place with the Iowa State University Research Park Corporation. This agreement outlines the responsibilities of both parties which are designed to protect the POTW and provide open communication regarding the tenants of the Research Park.

## F. **Reporting Requirements**

### 1. Baseline Monitoring Reports

- a. Within either one hundred eighty (180) days after the effective date of a Categorical Pretreatment Standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing Categorical Industrial Users currently discharging to or scheduled to discharge to the POTW shall submit to the City a report which contains the information listed in Section F(1)(b). At least ninety (90) days prior to the commencement of their discharge, New Sources, and sources that become Categorical Industrial Users subsequent to the promulgation of an applicable Categorical Standard, shall submit to the City a report which contains the information listed in Section F(1)(b). A new Source shall report the method of pretreatment it intends to use to meet applicable Categorical Standards. A New Source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.
- b. Users described above shall submit the information set forth below.
  - i. The name and address of the facility, including the name of the operator and owner.

- ii. A list of any environmental control permits held for the facility.
- iii. A brief description of the nature, average rate of production (including each product produced by type, amount, processes, and rate of production), and standard industrial classification of the operation(s) carried out by such user. This description should include a schematic process diagram, which indicates points of discharge to the POTW from the regulated process.
- iv. Information showing the measured average daily and maximum flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined wastestream formula set out in 40 CFR 403.6(e).
- v. The Categorical Pretreatment Standards applicable to each regulated process and any new categorically regulated processes for Existing Sources.
- vi. The results of sampling and analysis identifying the nature and concentration, and/or mass, where required by the Standard or by the City, of regulated pollutants in the discharge from each regulated process.
- vii. Instantaneous, Daily Maximum, and long-term average concentrations, or mass, where required, shall be reported.
- viii. Documentation showing that sample collected is representative of the daily operations and was collected and analyzed in accordance with procedures set out in Section F(9) and (10).
- ix. A statement, reviewed by the User's Authorized Representative and certified by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required to meet the Pretreatment Standards and Requirements.
- x. If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the User will provide such additional pretreatment and/or O&M must be provided. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard. The schedule must meet the requirements set out in Section F(2).



maximum daily flows for the reporting period. In cases where the Pretreatment Permit or Pretreatment Standard requires compliance with a Best Management Practice or pollution prevention alternative, the User must submit documentation required by the City or the Pretreatment Standard necessary to determine the compliance status of the User. These periodic reports must be submitted to the City within ten (10) days of the end of the reporting period.

If a User monitors more frequently than specified in the permit, the results of this monitoring shall be submitted to the City within ten (10) days of receipt by the User.

If a collected sample is split between the User and the City, the results from the respective laboratories will be averaged to determine if a violation has occurred. When a result for a parameter is less than the reporting limit, the reporting limit will be used to average the result with the other lab's data.

- b. The City may authorize an Industrial User subject to a Categorical Pretreatment Standard to forego sampling of a pollutant regulated by a Categorical Pretreatment Standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the Discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. This authorization is subject to the following conditions:
  - i. The waiver may be authorized where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable Categorical Standard and otherwise includes no process wastewater.
  - ii. The monitoring waiver is valid only for the duration of the effective period of the Pretreatment Permit, but in no case longer than 5 years. The Industrial User must submit a new request for the waiver before the waiver can be granted for each subsequent Pretreatment Permit.
  - iii. In making a demonstration that a pollutant is not present, the Industrial User must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewater from all processes.

- iv. The request for a monitoring waiver must be signed by the User's Authorized Representative, and include the certification statement in Section F(13)(a).
  - v. Non-detectable sample results may be used only as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.
  - vi. Any grant of the monitoring waiver by the City must be included as a condition in the Industrial User's Pretreatment Permit. The reasons supporting the waiver and any information submitted by the Industrial User in its request for the waiver must be maintained by the City for three (3) years after expiration of the waiver.
  - vii. Upon approval of the monitoring waiver and revision of the Industrial User's Pretreatment Permit by the City, the Industrial User must certify on each report with the statement in Section F(13)(c), that there has been no increase in the pollutant in its wastestream due to activities of the Industrial User.
  - viii. In the event that a waived pollutant is found to be present or is expected to be present because of changes that occur in the Industrial User's operations, the User must immediately notify the City and comply with the requirements of Section F(4)(a) or other more frequent monitoring requirements imposed by the City.
  - ix. This provision does not supersede certification processes and requirements established in Categorical Pretreatment Standards, except as otherwise specified in the Categorical Pretreatment Standard.
- c. All periodic compliance reports must be signed and certified in accordance with Section F(13)(a).
  - d. All wastewater samples must be representative of the User's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a User to keep its monitoring facility in good working order shall not be grounds for the User to claim that sample results are unrepresentative of its discharge.

## 5. Reports of Changed Conditions

Each Industrial User must notify the City of any significant changes to the User's operations or system which might alter the nature, quality, or volume of its wastewater at least six (6) months before the change.

- a. The City may require the User to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of the Long Form Industrial Waste Questionnaire located in Appendix IV.
- b. The City may modify or revoke an existing Pretreatment Permit under Section E in response to changed conditions or anticipated changed conditions.

#### 6. Reports of Potential Problems

- a. In the case of any discharge, including, but not limited to, accidental discharges, discharges of a non-routine, episodic nature, a non-customary batch discharge, a Slug Discharge or Slug Load, that might cause potential problems for the POTW, the User shall immediately telephone and notify the City of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the User.
- b. Within five (5) days following such discharge, the User shall, unless waived by the City, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the User to prevent similar future occurrences. Such notification shall not relieve the User of any expense, loss, damage, or other liability which might be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the User of any fines, penalties, or other liability which may be imposed pursuant to this ordinance.
- c. A notice shall be permanently posted on the User's bulletin board or other prominent place advising employees who to call in the event of a discharge described in Section F(6)(a). Employers shall ensure that all employees, who could cause such a discharge to occur, are advised of the emergency notification procedure.
- d. Significant Industrial Users are required to notify the City immediately of any changes at its facility affecting the potential for a Slug Discharge.

#### 7. Notice of Violation/Repeat Sampling and Reporting



If sampling performed by a User indicates a violation, the User must notify the City within twenty-four (24) hours of becoming aware of the violation. The User shall also repeat the sampling and analysis and submit the results of the repeat analysis to the City within thirty (30) days after becoming aware of the violation. Resampling by the Industrial User is not required if the User or the City performs sampling and analysis for the parameter found to be in violation at the User's facility between the time when the initial sampling was conducted and the time when the City receives the results of this sampling.

If sampling performed by the City indicates a violation, the City shall repeat the sampling and analysis. The results of this repeat analysis shall be submitted to the Pretreatment Coordinator within thirty (30) days after originally becoming aware of the violation. Resampling by the City is not required if the City or the User performs sampling and analysis for the parameter found to be in violation at the User's facility between the time when the initial sampling was conducted and the time when the City receives the results of this sampling.

When resampling indicated a repeated violation, the User may be required by the City to investigate the cause of the violations and report any findings.

#### 8. Notification of the Discharge of Hazardous Waste

The City must approve on a case-by-case basis any discharge to the POTW of any waste that, if disposed of in another manner, would be a considered hazardous waste. Hazardous wastes are defined under the Resource Conservation and Recovery Act in 40 CFR Part 261. Requests for disposal of hazardous wastes must be made fifteen (15) days prior to the anticipated date of discharge. The discharge request must include the name of the hazardous waste under 40 CFR Part 261, the EPA hazardous waste number, the type of discharge (continuous, batch, or other), and an estimation of the mass and concentration of the hazardous constituents in the discharge.

#### 9. Analytical Requirements

All pollutant analyses, including sampling techniques, to be submitted as part of a Pretreatment Permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the City determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures acceptable to the City.

In addition, all analysis shall be performed by a laboratory certified by the State of Iowa. If analysis is performed by a laboratory outside of the State of Iowa the laboratory shall hold similar certification showing that it is capable of performing such analysis.

## 10. Sample Collection

Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that is representative of conditions occurring during the reporting period.

- a. Except as indicated in Section F(10)(b-c), the User must collect wastewater samples using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the City. Where time-proportional composite sampling or grab sampling is authorized by the City, the samples must be representative of the discharge. Composite samples for parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the City, as appropriate. In addition, grab samples may be required to show compliance with Instantaneous Limits.
- b. Samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.
- c. For sampling required in support of baseline monitoring and 90-day compliance reports required in Section F(1) and (3), a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the City may authorize a lower minimum. For the reports required by Section F(4), the Industrial User is required to collect the number of grab samples necessary to assess and assure compliance by with applicable Pretreatment Standards and Requirements.

## 11. Recordkeeping

Users subject to the reporting requirements of this ordinance shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this ordinance, any additional records of information obtained pursuant to monitoring activities undertaken by the User independent of such requirements, and documentation associated with Best Management Practices. Records shall include the date, exact place, method,

and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the User or the City, or where the User has been specifically notified of a longer retention period by the City.

## 12. Spill Prevention and Control Plans

All Significant Industrial Users will be evaluated at least annually and Non-Significant Industrial Users will be evaluated at least once every two years to determine if a Slug Control Plan is required. A Slug Control Plan is intended to assist the User in evaluating their current practice in prevention and control of slug discharges. Additionally, completion of a Slug Control Plan will allow the City to properly assess the User's potential to impact the POTW, as well as the User's ability to prevent and remediate slug discharges. The Slug Discharge Prevention and Control Plan shall contain, at a minimum, the following elements:

- a. A description of discharge practices, including non-routine batch discharges;
- b. A listing of stored chemicals, including the manner and location in which they are stored;
- c. Procedures for immediately notifying the City of slug discharges, including any discharge that would violate prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days; and
- d. If necessary, procedures to prevent adverse impact to the POTW from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, and/or measures and equipment for emergency response.

## 13. Certification Statements

- a. Certification of Permit Applications, User Reports and Initial Monitoring Waiver - The following certification statement is required to be signed and submitted by Users submitting permit applications; Users submitting baseline monitoring reports; Users submitting reports on compliance with the Categorical Pretreatment Standard deadlines; Users submitting periodic compliance reports, and Users submitting an initial request to

forego sampling of a pollutant. The following certification statement must be signed by an Authorized Representative:

*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.*

- b. Annual Certification for Non-Significant Categorical Industrial Users - A facility determined to be a Non-Significant Categorical Industrial User by the City must annually submit the following certification statement signed by the Authorized Representative:

*Based on my inquiry of the person or persons directly responsible for managing compliance with the Categorical Pretreatment Standards under 40 CFR \_\_\_\_\_, I certify that, to the best of my knowledge and belief that during the period from \_\_\_\_\_, \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_:*

(a) *The facility described as \_\_\_\_\_ met the definition of a Non-Significant Categorical Industrial User as described in 40 CFR 403.3(v)(2);*

(b) *The facility complied with all applicable Pretreatment Standards and requirements during this reporting period; and*

(c) *The facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period.*

- c. Certification of Pollutants Not Present - Users that have an approved monitoring waiver must certify on each report with the following statement that there has been no increase in the pollutant in its wastestream due to activities of the User.

*Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR \_\_\_\_\_, I certify that, to the best of my knowledge and*

*belief, there has been no increase in the level of \_\_\_\_\_ in the wastewaters due to the activities at the facility since \_\_\_\_\_.*

If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization must be submitted to the City prior to or together with any reports to be signed by an Authorized Representative.

**G. Right of Entry - Inspection and Sampling**

All Significant Industrial Users and Categorical Industrial Users will be inspected at least annually and Non-Significant Industrial Users will be inspected at least once every two (2) years. Representatives of the City shall have the right to enter the premises of any User to determine whether the User is complying with all requirements of this ordinance and any Pretreatment Permit or order issued hereunder. Users shall allow representatives of the City ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

1. Where a User has security measures in force which require proper identification and clearance before entry into its premises, the User shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, representatives of the City shall be permitted to enter without delay for the purposes of performing specific responsibilities.
2. The City shall have the right to set up on the User's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the User's operations.
3. The City may require the User to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the User at its own expense. All devices used to measure wastewater flow and quality shall be calibrated at least once per year to ensure their accuracy.
4. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the User at the written or verbal request of the City and shall not be replaced. The costs of clearing such access shall be borne by the User.
5. Unreasonable delays in allowing representatives of the City access to the User's premises shall be a violation of this ordinance.

If a representative of the City has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City designed to verify compliance with this ordinance or any Pretreatment Permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, the City may seek issuance of a search warrant from a court of competent jurisdiction.

#### H. **Administrative Enforcement**

When the City finds that a User has violated, or continues to violate, any provision of this ordinance, a Pretreatment Permit, or any other Pretreatment Standard or Requirement, the City may serve upon that User an enforcement response for the violation(s). Instances of violations may be identified through, but are not limited to, required reports submitted by the User, inspections or sampling performed by City or other governmental staff, or by notifications from the public.

Examples of the enforcement responses include, but are not limited to, the following:

1. Notice of Violation – The City will issue a written Notice of Violation (NOV) to the User within 10 days of becoming aware of the violation. The NOV will include a description of the violation and any steps the User needs to take to determine the cause of the violation and/or correct the violation. An NOV will typically be the first enforcement response taken, but the City is not precluded from escalating the response when it is deemed necessary.
2. Consent Order – The City is empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the user responsible for any noncompliance. Such orders will include specific action to be taken by the user to correct noncompliance within a time period specified by the order.
3. Show Cause Hearing – The City may order a User which has violated, or continues to violate, any provision of this ordinance, a Pretreatment Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, to appear before the City and show cause why the proposed enforcement action should not be taken. Notice shall be served on the User specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action, and a request that the User show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least fifteen (15) days prior to the hearing. Such notice may be served on any Authorized Representative of the User.

4. Municipal Infractions – When the City finds that a User has violated, or continues to violate, any provision of this ordinance, a Pretreatment Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, the City may fine such User in an amount not to exceed \$1,000. Such fines shall be assessed on a per-violation, per-day basis. In the case of monthly or other long-term average discharge limits, fines may be assessed for each day during the period of violation.

The City may also recover from the User damages to the City caused by any instance of non-compliance, including, but not limited to, any penalties, fines, additional City staff time or resources, or damages for which the City becomes liable as a result of the non-compliance.

5. Criminal Prosecution – The City will pursue criminal charges against any user who willfully or negligently violates any provision of this ordinance, a Pretreatment Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement.
6. Injunctive Relief – When the City finds that a User has violated, or continues to violate, any provision of this ordinance, a Pretreatment Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, the City may petition a court of competent jurisdiction through the City’s Attorney for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the Pretreatment Permit, or other requirement imposed by this ordinance on activities of the User. The City may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the User to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a User.
7. Emergency Suspensions – The City may immediately suspend a User’s discharge, after informal notice to the User, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons, the POTW, or the environment.
  - a. Any User notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a User’s failure to immediately comply voluntarily with the suspension order, the City may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The City may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the City that the period of endangerment has passed, unless Termination of Service proceedings are initiated against the User.

- b. A User that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the City prior to the date of any show cause or termination hearing.

Nothing in this section shall be interpreted as requiring a hearing prior to any Emergency Suspension under this section.

8. Termination of Service – In addition to the enforcement actions of this ordinance listed above, any User who violates, or continues to violate, any provisions of this ordinance, a Pretreatment Permit, or order issued hereunder, or any other Pretreatment Standard or Requirement, is subject to discharge termination. Such User will be notified of the proposed termination of its discharge and be offered an opportunity to show cause of why the proposed action should not be taken. Exercise of this option by the City shall not be a bar to, or a prerequisite for, taking any other actions against the User.

The enforcement actions provided for in this ordinance are not exclusive. The City may take any, all, or any combination of these actions against a noncompliant User. Enforcement of pretreatment violations will generally be in accordance with the City's Enforcement Response Plan included in Appendix III. However, the City may take other action against any User when the circumstances warrant. Further, the City is empowered to take more than one enforcement action against any noncompliant User.

I. **Confidential Information**

In accordance with 40 CFR Part 2, any information submitted to the City as required by a Pretreatment Permit shall be considered public information and shall be made available to the public without further notice unless the User claims such information as being confidential. If such a claim is asserted and the City receives a request for such information, the User will be notified by the City. The User will then bear the burden to obtain an injunction to prevent the release of the information. Wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302 shall not be recognized as confidential information and shall be available to the public without restriction.

J. **Publication of Users in Significant Non-Compliance**

The City shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdiction served by the POTW, a list of the Industrial Users which, at any time during the previous twelve (12) months, were in Significant Non-Compliance with applicable Pretreatment Standards and Requirements. The term Significant Non-Compliance shall be applicable to all Significant Industrial



Users (or any other Industrial User that violates paragraphs (3), (4), or (8) of this Section) and shall mean:

1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of all the measurements taken for the same pollutant parameter during six- (6-) month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including Instantaneous Limits as defined in Chapter 28 of the Ames Municipal Code;
2. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent (33%) or more of wastewater measurements taken for each pollutant parameter taken during a six- (6-) month period equals or exceeds the product of the numeric Pretreatment Standard or Requirement including Instantaneous Limits, as defined by Chapter 28 of the Ames Municipal Code multiplied by the applicable criteria (1.4 for cBOD<sub>5</sub>, TSS, fats, Oil & Grease, and 1.2 for all other pollutants except pH);
3. Any other violation of a Pretreatment Standard or Requirements that the City determines has caused, alone or in combination with other discharges, Interference or Pass Through, including endangering the health of POTW personnel or the general public;
4. Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment, or has resulted in City's exercise of its emergency authority to halt or prevent such a discharge.
5. Failure to meet, within ninety (90) days after the scheduled date, a compliance schedule milestone contained in a Pretreatment Permit or enforcement order for starting construction, completing construction, or attaining final compliance.
6. Failure to provide, within forty five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with Categorical Pretreatment Standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules.
7. Failure to accurately report non-compliance.
8. Any other violation(s), which may include a violation of Best Management Practices, which the City determines will adversely affect the operation of the POTW or implementation of the local pretreatment program.

**K. Surcharge Program**

In 1989, the City began implementation of a system to assess a sewer surcharge to any contributor discharging wastewater that is higher in concentrations of COD, TSS, TKN,

cBOD<sub>5</sub>, Ammonia, and/or Oil & Grease than normal domestic wastewater. Concentrations of normal domestic wastewater are defined as follows; COD – 550 mg/L, TSS – 300 mg/L, TKN – 45 mg/L, cBOD<sub>5</sub> – 25 mg/L, Ammonia – 30 mg/L, and Oil & Grease – 300 mg/L.

Surcharges are calculated at least every six months and are based on data from samples collected by the City and/or by the User during the previous six (6) months. A minimum of three data sets is used to determine the rate. If three samples were not collected in the previous six (6) months, the three (3) most recent data sets are used. The rates used in the surcharge program are located in Appendix Q of the Ames Municipal Code.

**L. Hauled Waste**

All deliveries of hauled waste to the Water Pollution Control (WPC) facility must be accompanied by a complete waste tracking form. The Waste Hauler Tracking Form is included in Appendix 5. Each load is sampled and will be analyzed at the discretion of the WPC Superintendent. If a disruption occurs in the treatment process and/or the analyses determine that any wastes are incompatible, we will notify the hauler and the source of the waste that we will no longer accept those wastes or any loads containing wastes from that source. The WPC facility does not accept hauled hazardous wastes.

**M. Fats, Oils, and Grease (FOG) Control Program**

The City has implemented a program to aid in the prevention of sanitary sewer blockages and obstructions from contribution and accumulation of FOG into the POTW. Such discharges from commercial kitchens, restaurants, and all other food service establishments, where FOG of vegetable or animal origin is discharged directly or indirectly into the POTW, can contribute to line blockages and/or spills in violation of 40 CFR, Part 403.

## **CHAPTER 5 PROGRAM FEES**

The City of Ames Industrial Pretreatment Program is funded through regular community sewer billing, although the City may collect reasonable fees for reimbursement of costs of operating the City's Industrial Pretreatment Program, which may include:

1. Fees for monitoring, inspection, and surveillance procedures including the cost of collection and analyzing an Industrial User's discharge;
2. Fees for responding to accidental discharges; and
3. Fees to cover the cost of any damage to the POTW incurred as a result of an industrial user's discharge.

Each industrial user will be billed in January and July for actual costs incurred by the City during the previous six months. Costs will vary depending on the amount of sampling, analysis, and maintenance effort required.

## **APPENDIX I**

### **Definitions**

**Definitions**

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this ordinance, shall have the meanings hereinafter designated.

- A. Act or “the Act:” The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. section 1251 et seq.
- B. Authorized or Duly Authorized Representative of the User:
  - 1. If the User is a corporation:
    - a. The president, secretary, treasurer, or a vice-president of the corporation in charge of the principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
    - b. The manager of one or more manufacturing, production, or operating facilities; provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual Pretreatment Permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - 2. If the User is a partnership or sole proprietorship: a general partner or proprietor, respectively.
  - 3. If the User is a Federal, State, or local government facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.
  - 4. The individuals described in paragraphs 1 through 3 above, may designate a Duly Authorized Representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the City.

## Appendix I

- C. Best Management Practices or BMPs: Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMPs may include, but are not limited to, treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
- D. Categorical Pretreatment Standard or Categorical Standard: Any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. section 1317) that apply to a specific category of Users and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.
- E. City or “the City:” City of Ames, Iowa
- F. Fats, Oils, and Grease or FOG: Organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures in 40 CFR 136, as may be amended from time to time. All are sometimes referred to herein as “grease,” “greases,” and “oil and grease.”
- G. Indirect Discharge or Discharge: The introduction of pollutants into the POTW from any nondomestic source.
- H. Industrial User or User: A source of indirect discharge.
- I. Interference: A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of City’s NPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder, or any more stringent State or local regulations: section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.
- J. Local Limits: Discharge limits set by the City as described in Chapter 28 of the Ames Municipal Code.
- K. New Source:
  - 1. Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the

## Appendix I

Act that will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

- a. The building, structure, facility, or installation is constructed at a site at which no other source is located; or
  - b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an Existing Source; or
  - c. The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an Existing Source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the Existing Source, should be considered.
2. Construction on a site at which an Existing Source is located results in a modification rather than a New Source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section 1 b. or c. above but otherwise alters, replaces, or adds to existing process or production equipment.
3. Construction of a New Source as defined under this paragraph has commenced if the owner or operator has:
- a. Begun, or caused to begin, as part of a continuous onsite construction program
    - i. any placement, assembly, or installation of facilities or equipment; or
    - ii. significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
  - b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

## Appendix I

- L. Pass Through: A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirements of the City's NPDES permit, including an increase in the magnitude or duration of a violation.
- M. Pretreatment Requirement: Any substantive or procedural requirement related to pretreatment imposed on a User, other than a Pretreatment Standard.
- N. Pretreatment Standards or Standards: Pretreatment Standards shall mean prohibited discharge standards, categorical Pretreatment Standards, and Local Limits.
- O. Publicly Owned Treatment Works or POTW: A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by the City. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances, which convey wastewater to a treatment plant.
- P. Slug Discharge: Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations or permit conditions.



## **APPENDIX II**

### **WPC Facility Layout & Technical Data for WPC Facility Units**

Appendix II

Technical Data for the Various Unit Processes  
Used in the Ames Water Pollution Control Facility

|   | <b>Unit Sizes</b> |              |
|---|-------------------|--------------|
|   | <b>per Unit</b>   | <b>Total</b> |
| <b>Equalization Basins (2 units)</b>            |                   |              |
| Bottom Dimension, ft.                           | 100 x 200         |              |
| Effective Depth, ft.                            | 10                |              |
| Storage Volume, cu. ft.                         | 300,800           | 601,600      |
| <b>Mechanically Raked Screen (2 units)</b>      |                   |              |
| Bar Spacing, in.                                | 0.5               | -            |
| Angle of Inclination, deg.                      | 80                | -            |
| <b>Grit Removal (4 units)</b>                   |                   |              |
| Diameter, in.                                   | 94                | -            |
| Particle Size, micron                           | 100               | -            |
| <b>Primary Clarifiers (4 units)</b>             |                   |              |
| Diameter, ft.                                   | 70                |              |
| Surface Area, sq. ft.                           | 3,848             | 15,392       |
| Sidewater Depth, ft.                            | 9                 | -            |
| <b>First-Stage Trickling Filters (2 units)</b>  |                   |              |
| Diameter, ft.                                   | 80                | -            |
| Media Depth, ft.                                | 26                | -            |
| Maximum Hydraulic Loading, gal/min/sq. ft.      | 2.09              | -            |
| <b>Second-Stage Trickling Filters (2 units)</b> |                   |              |
| Diameter, ft.                                   | 80                | -            |
| Media Depth, ft.                                | 26                | -            |
| Maximum Hydraulic Loading, gal/min/sq. ft.      | 2.09              | -            |
| <b>Solids Contact Basins (2 units)</b>          |                   |              |
| Sidewater Depth, ft.                            | 15                | -            |
| Volume, cu. ft.                                 | 48,600            | 97,200       |
| <b>Sludge Re-Aeration Basins (2 units)</b>      |                   |              |
| Sidewater Depth, ft.                            | 15                | -            |
| Volume, cu. ft.                                 | 11,760            | 23,520       |

Appendix II

|                                    | <b>Unit Sizes</b> |              |
|------------------------------------|-------------------|--------------|
|                                    | <b>per Unit</b>   | <b>Total</b> |
| <b>Final Clarifiers*</b> (4 units) |                   |              |
| Diameter, ft.                      | 100               | -            |
| Surface Area, sq. ft.              | 7,854             | 31,416       |
| Sidewater Depth, ft.               | 14                | -            |

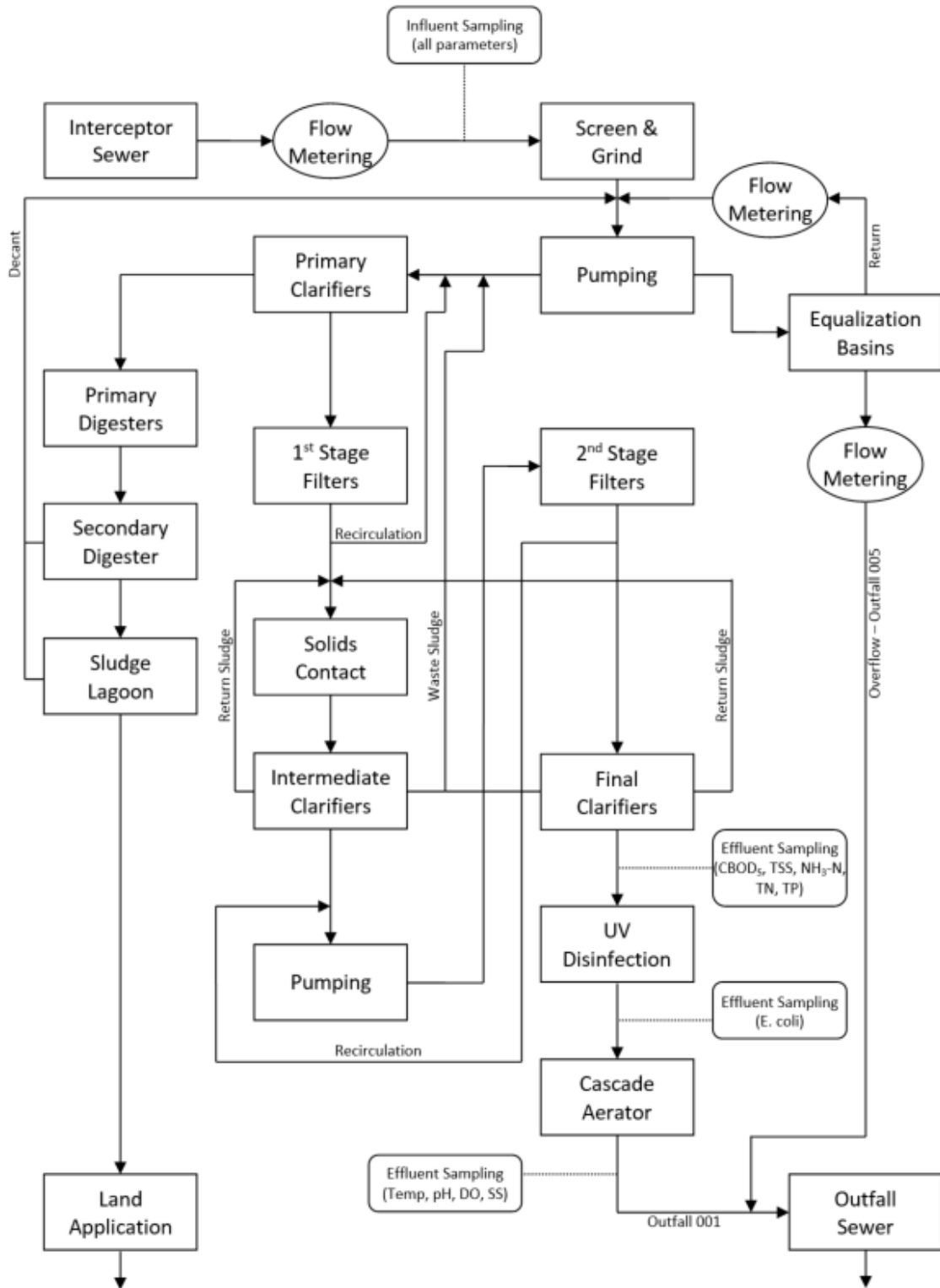
\* 2 units can be used as intermediate clarifiers

|                                      |         |         |
|--------------------------------------|---------|---------|
| <b>Anaerobic Digestion System</b>    |         |         |
| Primary Digesters (2 units)          |         |         |
| Diameter, ft.                        | 65      | -       |
| Sidewater Depth, ft.                 | 29      | -       |
| Volume (w/o cone), cu. ft.           | 96,000  | 192,000 |
| Secondary Digester (1 unit)          |         |         |
| Diameter, ft.                        | 80      | -       |
| Sidewater Depth, ft.                 | 24.6    | -       |
| Volume (w/o cone), cu. ft.           | 124,000 | -       |
| Gas Holder Storage Capacity, cu. ft. | 36,000  |         |

|   |         |   |
|---|---------|---|
| <b>Sludge Lagoon</b> (80 ft. x 160 ft. at 2-ft depth) |         |   |
| Minimum Liquid Depth, ft.                             | 2       | - |
| Maximum Liquid Depth, ft.                             | 17      | - |
| Freeboard, ft.  | 3       | - |
| Sideslope, Horizontal:Vertical                        | 3:1     | - |
| Volume, cu. ft.                                       | 415,000 |   |

|   |         |        |
|---|---------|--------|
| <b>Ultraviolet Disinfection</b> (2 units) |         |        |
| Lamps                                     | 112     | 224    |
| Dosage Output, uW/cm <sup>2</sup>         | 16232.5 | 32,465 |

|                                       |      |   |
|---------------------------------------|------|---|
| <b>Effluent Re-Aeration Structure</b> |      |   |
| Minimum Total Liquid Fall, ft.        | 4.24 | - |



Process Flow Schematic for the Water & Pollution Control Facility (Mode 4)

**APPENDIX III**

**Enforcement Response Plan**

### **General Purpose**

Federal regulations (40 CFR 403.8(f)(5)) require that the City develop an Enforcement Response Plan (ERP) containing detailed procedures for investigation and response to instances of Industrial User non-compliance with pretreatment regulations. Chapter 28 of the Ames Municipal Code gives the Director of the Ames Water & Pollution Control Department and any designee the authority to implement and enforce the ERP.

Examples of non-compliance with pretreatment program requirements include, but are not limited to, unpermitted discharges, exceeding discharge limits, failure to follow required Best Management Practices (BMPs), failure to monitor as required, and/or failure to report as required.

Instances of non-compliance may be identified through self-monitoring reports submitted by Industrial Users, City monitoring results, inspections by City or other governmental staff, or through notification of non-compliant situations (such as spills, illegal discharges, etc.) by the contributor, City staff, other governmental employees, or by concerned citizens.

Suspected non-compliance will generally be investigated by the Environmental Specialist within five (5) working days. If the Environmental Specialist is unavailable, the Director of the Water & Pollution Control Department will assign this task to another staff member within the department. Any alleged violation which has the potential to threaten public health, safety, property, or environmental quality will be investigated immediately.

Upon confirmation of a violation, the City will issue an enforcement action within ten (10) working days. Examples of the types of escalating enforcement actions the City will take are outlined in the ERP. The ERP is intended to be a guide and will be followed as closely as individual circumstances allow. However, in instances where the City deems it necessary, the enforcement action used may exceed the enforcement response prescribed in the ERP.

The enforcement actions available for use by the City include, but are not limited to, those described in Chapter 4, Section H – Administrative Enforcement.

In addition to the formal enforcement actions, the City may require a violator to make immediate corrective or preventive measures to stop or prevent future violations. Also, the City is authorized by the Municipal Code (Section 28.307(4-5)) to assess the violator any costs for fines levied by State or Federal agencies and additional staff time or resources necessary as a result of the violation.

#### **A. Prohibited Discharges**

1. A routine discharge that violates the prohibitions included in Chapter 4, Section B – General Sewer Use Requirements, the Local Limits listed in Chapter 28 of the Ames Municipal Code, a User’s Pretreatment Permit, or any Categorical Standard will result in a Notice of Violation. Enforcement for repeated violations and/or

violations that cause Interference, Pass Through, acute worker health and/or safety issues, a toxic effect in the receiving stream, or potential or actual harm to the POTW may include, but are not limited to, Municipal Infractions and/or Termination of Service. In addition, the User must perform the investigation as described in Chapter 4, Section F(7).

2. A non-routine, accidental, or Slug Discharge that violates the prohibitions included in Chapter 4, Section B – General Sewer Use Requirements, the Local Limits listed in Chapter 28 of the Ames Municipal Code, a User’s Pretreatment Permit, or any Categorical Standard will result in a Notice of Violation. Enforcement for repeated violations and/or violations that cause Interference, Pass Through, acute worker health and/or safety issues, a toxic effect in the receiving stream, or potential or actual harm to the POTW may include, but are not limited to, Municipal Infractions and/or Termination of Service. In addition, the User must perform the required actions described in Chapter 4, Section F(7).
3. Use of process water, or any attempt to dilute a discharge, as a partial or complete substitute for adequate treatment will result in a Notice of Violation. Any repeated violation will result in a Municipal Infraction.
4. Failure to implement required Best Management Practices (BMPs) which are intended to control, limit, or improve a User’s discharge will result in a Notice of Violation. Any ongoing failure to implement the required BMPs may include, but is not limited to, issuance of a Municipal Infraction.

**B. Reporting Requirements**

1. Submission of a report that is improperly signed or fails to contain any required certification will result in a Notice of Violation. Any repeated violation may result in additional Notices of Violation or a Municipal Infraction.
2. Late submission of any required report by five (5) or more days will result in a Notice of Violation. Repeated late submissions and/or submissions that are thirty (30) or more days late will result in additional Notices of Violation or a Municipal Infraction.
3. Falsification of any report will result in a Municipal Infraction and/or Termination of Service.
4. Failure to report any non-routine, accidental, or Slug Discharge that violates the prohibitions included in Chapter 4, Section B – General Sewer Use Requirements, the Local Limits listed in Chapter 28 of the Ames Municipal Code, a User’s Pretreatment Permit, or any Categorical Standard will result in a Notice of Violation.

*Note: This Notice of Violation would be in addition to the Notice of Violation for the unintended discharge.*

## Appendix III

5. Failure to notify the City six (6) months in advance of any anticipated increase in discharge quantity or increase in pollutants discharged will result in a Notice of Violation.
6. Failure to retain and/or make available any records from the previous three (3) years pertaining to the User's discharge will result in a Notice of Violation. Any ongoing or intentional violations of this nature will result in a Municipal Infraction.
7. Failure to submit a progress report required by a compliance schedule within fourteen (14) days of the scheduled progress milestone will result in a Notice of Violation. Any recurring violation of this nature may result in additional Notices of Violation or a Municipal Infraction.
8. Failure to meet a progress milestone required by a compliance schedule by thirty (30) days or less will result in a Notice of Violation. Repeated failures and/or missing a progress milestone by more than thirty (30) days may result in additional Notices of Violation or a Municipal Infraction.

### **C. Monitoring Requirements**

1. Failure to monitor all parameters as required by a Pretreatment Permit will result in a Notice of Violation. Any ongoing failure may result in additional Notices of Violation or a Municipal Infraction.
2. Failure to monitor the correct sampling location, use of incorrect sampling technique, or use of incorrect sample type will result in a Notice of Violation. Any ongoing failure may result in additional Notices of Violation or a Municipal Infraction.
3. Delayed installation any required monitoring equipment will result in a Notice of Violation. Any delay that exceeds thirty (30) days may result in an additional Notice of Violation or a Municipal Infraction

### **D. Other Requirements**

1. Denial of entry to City personnel for pretreatment sampling and/or compliance inspections will result in a Notice of Violation. Any ongoing or willful hindrance will result in a Municipal Infraction.
2. Failure to properly operate and/or maintain a pretreatment system will result in a Notice of Violation.  
Note: This Notice of Violation would be in addition to any Notice of Violation for a prohibited discharge to the sanitary sewer resulting from any improper operation/maintenance.



## Appendix III

3. Failure to mitigate non-compliance or halt violating operations will result in a Notice of Violation. The Notice of Violation may be escalated to a Municipal Infraction or Termination of Service if the violation causes Interference, Pass Through, acute worker health and/or safety issues, a toxic effect in the receiving stream, or potential or actual harm to the POTW.

Any other violation of the Ames Industrial Pretreatment Program or any other Federal, State, or local Pretreatment Standard or Requirement that is not covered in the ERP above will be addressed on a case-by-case basis.

**CITY OF AMES, IOWA  
WATER AND POLLUTION CONTROL DEPARTMENT**

**Industrial Waste Questionnaire – Long Form**

City of Ames Water Plant  
1800 E. 13<sup>th</sup> Street  
Ames, IA 50010

Main: (515) 239-5150  
Fax: (515) 239-5251

For questions, contact:  
Dustin Albrecht  
dalbrecht@cityofames.org

Christina Murphy  
cmurphy@cityofames.org

**I. GENERAL INFORMATION – 40CFR 403.12(b)(1)**

A. Contributing Facility: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Address of Facility Discharging Wastewater if Different from Above:

\_\_\_\_\_  
\_\_\_\_\_

B. Authorized Representative  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

C. Immediate Contacting Official  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Emergency or Cell Phone: \_\_\_\_\_

D. Certification  
I understand that official correspondence may be sent by e-mail. I agree to promptly inform the City of changes in correspondence information. The information contained in this questionnaire is familiar to me; and, to the best of my knowledge and belief, such information is true, complete, and accurate.

\_\_\_\_\_  
Signature of Industrial User Authorized Representative

Name of Signee (print) \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_ Fax: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**II. PLANT OPERATIONAL CHARACTERISTICS – 40CFR 403.12(b)(3)**

*Complete a separate Section II for each business activity occurring on the premises.*

**A. General**

1. Business Activity. Provide a brief description of the manufacturing or service activity on the premises.

---



---



---

2. Please provide the NAICS or SIC Code for the Primary Business Activity

NAICS Code \_\_\_\_\_  
 (Can be found at <http://www.census.gov/epcd/www/naics.html>)

SIC Code \_\_\_\_\_  
 (Can be found at [https://www.osha.gov/pls/imis/sic\\_manual.html](https://www.osha.gov/pls/imis/sic_manual.html))

3. Raw Materials and Products.

|                                      | DESCRIPTION | DAILY QUANTITIES<br>(Include Units) |      |
|--------------------------------------|-------------|-------------------------------------|------|
|                                      |             | Avg.                                | Max. |
| <b>Principal Raw Materials Used</b>  |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |
| <b>Catalysts or Intermediates</b>    |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |
| <b>Products or Services Produced</b> |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |
|                                      |             |                                     |      |

4. Shift Information

a. Days of week in operation (check all that apply):

Mon \_\_\_ Tue \_\_\_ Wed \_\_\_ Thu \_\_\_ Fri \_\_\_ Sat \_\_\_ Sun \_\_\_

b. Average number of employees per shift:

1<sup>st</sup> \_\_\_ 2<sup>nd</sup> \_\_\_ 3<sup>rd</sup> \_\_\_

c. Shift start times:

1<sup>st</sup> \_\_\_ 2<sup>nd</sup> \_\_\_ 3<sup>rd</sup> \_\_\_

5. Do any of the following exist for this facility? Please complete all relevant information for each. *40CFR 403.12(b)(2)*

| Type  | Permit/Plan number | Date Issued/Created | Expiration Date | Facility or process covered/purpose |
|---|--------------------|---------------------|-----------------|-------------------------------------|
| National Pollutant Discharge Elimination System (NPDES) Permit        |                    |                     |                 |                                     |
| SPCC (Spill Prevention, Countermeasure and Control) Plan              |                    |                     |                 |                                     |
| Slug Control Plan   |                    |                     |                 |                                     |
| Toxic Organic Management Plan (TOMP)                                  |                    |                     |                 |                                     |
| Chemical Hygiene Plan   |                    |                     |                 |                                     |
| Resource Conservation and Recovery Act (RCRA) Plan or disposal permit |                    |                     |                 |                                     |
| Clean Air permit  |                    |                     |                 |                                     |
| Stormwater Permit   |                    |                     |                 |                                     |

Note: The need for a Slug Control Plan and Toxic Organic Management Plan is determined by Ames Water & Pollution Control staff. All others may be required by DNR or EPA.

B. Water Sources and Uses – 40CFR 403.12(b)(4)

1. Estimate the average quantity of water received and wastewater discharged in gallons per day. Please use recent water bills to verify the estimates of total water supply. Use appropriate number of days per week to correspond to operational days per week or month.

| Water Use                                       | Supply From      |           |        | Discharged To                |           |           |
|---|------------------|-----------|--------|------------------------------|-----------|-----------|
|   | City<br>gal/day* | Other (1) |        | Sanitary<br>Sewer<br>gal/day | Other (2) |           |
|   |                  | gal/day   | Source |                              | gal/day   | Discharge |
| Sanitary  |                  |           |        |                              |           |           |
| Process   |                  |           |        |                              |           |           |
| Boiler Feed                                     |                  |           |        |                              |           |           |
| Cooling   |                  |           |        |                              |           |           |
| Washing   |                  |           |        |                              |           |           |
| Contained in Product                            |                  |           |        |                              |           |           |
| Other   |                  |           |        |                              |           |           |
|   |                  |           |        |                              |           |           |
| Total [Total supply must equal total discharge] |                  |           |        |                              |           |           |

\* Water bill quantities are listed in units of 100 cubic feet, 1 cubic foot = 7.48 gallons.

- (1) Indicate the quantity and appropriate code letter for the source.

- a. Well
- b. Surface Water
- c. Rural Water
- d. Stormwater
- e. Reclaimed Water

- (2) Indicate the quantity and appropriate code letter for the discharge location.

- a. Surface Water
- b. Waste Hauler
- c. Evaporation
- d. Storm Drain
- e. Land Application
- f. Contained in Product

2. Do you have wells or any other water supply source at this address which are not in use at the present time? If so, describe.

3. Describe any water supply treatment process in use and any resulting brines or wastewaters that may be created by the treatment process.
4. Describe any plans for expansion that may impact water used or wastewater discharged.

C. Wastewater Characterization – *40CFR 403.12(b)(3)*

1. Describe any wastewater treatment equipment or processes in use and any byproducts produced by the treatment equipment. Include disposal practices for byproducts.

2. Wastewater Flow Diagram

For each unit process generating wastewater, indicate on a simple schematic the flow of the water from start to completed product.

3. Building and Sewer Layout

Draw a simple site plan. Please indicate the location of the following:

- a. Water sources for the facility
- b. Regulated wastewater generating processes
- c. Sampling sites
- d. Pretreatment facilities (if any)
- e. Facility connection to the sanitary sewer

An attached blueprint or drawing of the facility, including the above items, may be substituted for the sketch.

4. Pollutant Checklist. Indicate by placing an X in the space following each chemical if the chemical is suspected or known to be present in your service activity, manufacturing activity, or generated as a by-product. 40CFR 403.12(p)(1)

|    |                              |  |
|----|------------------------------|--|
| 1  | 1,1,1-Trichloroethane        |  |
| 2  | 1,1,2,2-Tetrachloroethane    |  |
| 3  | 1,1,2-Trichloroethane        |  |
| 4  | 1,1-Dichloroethane           |  |
| 5  | 1,1-Dichloroethene           |  |
| 6  | 1,2-Dichloroethane           |  |
| 7  | 1,2-Dichloropropane          |  |
| 8  | 1,3-Dichloropropylene        |  |
| 9  | 2-Chloroethylvinyl ether     |  |
| 10 | Acetone                      |  |
| 11 | Acrolein                     |  |
| 12 | Acrylonitrile                |  |
| 13 | Benzene                      |  |
| 14 | Bromodichloromethane         |  |
| 15 | Bromoform                    |  |
| 16 | Carbon Tetrachloride         |  |
| 17 | Chlorobenzene                |  |
| 18 | Chloroethane                 |  |
| 19 | Chloroform                   |  |
| 20 | Dibromochloromethane         |  |
| 21 | Dichloroethylene             |  |
| 22 | Ethylbenzene                 |  |
| 23 | Methyl Bromide               |  |
| 24 | Methyl Chloride              |  |
| 25 | Methylene Chloride           |  |
| 26 | Tetrachloroethene            |  |
| 27 | Toluene                      |  |
| 28 | Trichloroethene              |  |
| 29 | Vinyl Chloride               |  |
| 30 | 1,2,4-Trichlorobenzene       |  |
| 31 | 1,2-Dichlorobenzene          |  |
| 32 | 1,2-Diphenylhydrazine        |  |
| 33 | 1,3-Dichlorobenzene          |  |
| 34 | 1,4-Dichlorobenzene          |  |
| 35 | 2,2'-oxybis(1-chloropropane) |  |
| 36 | 2,4,6-Trichlorophenol        |  |
| 37 | 2,4-Dichlorophenol           |  |
| 38 | 2,4-Dimethylphenol           |  |
| 39 | 2,4-Dinitrophenol            |  |
| 40 | 2,4-Dinitrotoluene           |  |
| 41 | 2,6-Dinitrotoluene           |  |
| 42 | 2-Chloronaphthalene          |  |
| 43 | 2-Chlorophenol               |  |
| 44 | 2-Methylnaphthalene          |  |
| 45 | 2-Nitrophenol                |  |
| 46 | 3,3'-Dichlorobenzidine       |  |
| 47 | 4,6-Dinitro-o-cresol         |  |
| 48 | 4-Bromophenyl phenyl ether   |  |
| 49 | 4-Chlorophenyl phenyl ether  |  |
| 50 | 4-Nitrophenol                |  |
| 51 | Acenaphthene                 |  |
| 52 | Acenaphthylene               |  |
| 53 | Anthracene                   |  |
| 54 | Benzidine                    |  |
| 55 | Benzo(a)anthracene           |  |
| 56 | Benzo(a)pyrene               |  |

|     |                             |  |
|-----|-----------------------------|--|
| 57  | Benzo(b)fluoranthene        |  |
| 58  | Benzo(g,h,i)perylene        |  |
| 59  | Benzo(k)fluoranthene        |  |
| 60  | bis(2-Chloroethoxy)methane  |  |
| 61  | bis(2-Chloroethyl)ether     |  |
| 62  | bis(2-Chloroisopropyl)ether |  |
| 63  | bis(2-Ethylhexyl)phthalate  |  |
| 64  | Butyl benzyl phthalate      |  |
| 65  | Chrysene                    |  |
| 66  | Dibenzo(a,h)anthracene      |  |
| 67  | Diethyl phthalate           |  |
| 68  | Dimethyl phthalate          |  |
| 69  | Di-n-butyl phthalate        |  |
| 70  | Di-n-octyl phthalate        |  |
| 71  | Fluoranthene                |  |
| 72  | Fluorene                    |  |
| 73  | Hexachlorobenzene           |  |
| 74  | Hexachlorobutadiene         |  |
| 75  | Hexachlorocyclopentadiene   |  |
| 76  | Hexachloroethane            |  |
| 77  | Indeno(1,2,3-cd)pyrene      |  |
| 78  | Isophorone                  |  |
| 79  | Naphthalene                 |  |
| 80  | Nitrobenzene                |  |
| 81  | N-Nitrosodi-methylamine     |  |
| 82  | N-Nitrosodi-n-propylamine   |  |
| 83  | N-Nitrosodi-phenylamine     |  |
| 84  | p-Chloro-m-cresol           |  |
| 85  | Pentachlorophenol           |  |
| 86  | Phenanthrene                |  |
| 87  | Pyrene                      |  |
| 88  | Antimony                    |  |
| 89  | Arsenic                     |  |
| 90  | Beryllium                   |  |
| 91  | Cadmium                     |  |
| 92  | Chloride                    |  |
| 93  | Chromium                    |  |
| 94  | Copper                      |  |
| 95  | Cyanide                     |  |
| 96  | Iron                        |  |
| 97  | Lead                        |  |
| 98  | Phosphorus (total)          |  |
| 99  | Magnesium                   |  |
| 100 | Manganese                   |  |
| 101 | Mercury                     |  |
| 102 | Molybdenum                  |  |
| 103 | Nickel                      |  |
| 104 | Oil & Grease                |  |
| 105 | Phenol                      |  |
| 106 | Selenium                    |  |
| 107 | Silver                      |  |
| 108 | Thallium                    |  |
| 109 | Zinc                        |  |

5. Process Discharge Characterization Summary

Toxic Pollutants:

- a. For each pollutant identified on the Pollutant Checklist, describe the source, average rate of discharge, and maximum rate of discharge. Discharge may be expressed in gallons/day, gallons/batch, etc. A table may be used for this summary.
- b. List any other potentially toxic substances known or anticipated to be present in the discharge.

---

---

---

- c. List any RCRA hazardous wastes that may be discharged to the sanitary sewer. For each waste listed, describe the source, the EPA hazardous waste number, the type of discharge (continuous, batch, etc.) and average rate of discharge, and maximum rate of discharge. *40CFR 403.12(p)*

---

---

---

6. Pretreatment

- a. Are additional pretreatment facilities and/or operation and maintenance required to meet pretreatment standards? If so, please list the schedule indicating when they will be provided.

| Facility/Operation Description | Date  |
|--------------------------------|-------|
| <hr/>                          | <hr/> |
| <hr/>                          | <hr/> |
| <hr/>                          | <hr/> |

**IV. STORED WASTES**

This section applies to facilities whose processes or operations produce wastes which are NOT discharged to sanitary sewers, combined sewers, or to surface waters. *Please complete the following questions using a separate form for each industrial process.*

A. General

- 1. Process Identification: \_\_\_\_\_



2. Description of process or operation producing waste:

---

---

---

3. Brief characterization of waste:

---

---

---

4. Annual waste production: \_\_\_\_\_ Tons/yr. \_\_\_\_\_ Gallons/yr.

5. Frequency of waste production:

\_\_\_\_\_ Seasonal (describe) \_\_\_\_\_ Occasional  
\_\_\_\_\_ Continual \_\_\_\_\_ Other (specify)

B. Waste Composition

1. Average percent solids: \_\_\_\_\_ % pH range: \_\_\_\_\_ to \_\_\_\_\_

2. Physical State: \_\_\_\_\_ Liquid \_\_\_\_\_ Slurry \_\_\_\_\_ Sludge  
\_\_\_\_\_ Solid \_\_\_\_\_ Other (specify)

3. Hazardous Properties: \_\_\_\_\_ Flammable \_\_\_\_\_ Toxic  
\_\_\_\_\_ Reactive \_\_\_\_\_ Explosive \_\_\_\_\_ Infectious  
\_\_\_\_\_ Corrosive \_\_\_\_\_ Other (specify)

C. Storage

1. Typical length of time waste is stored:

\_\_\_\_\_ Days \_\_\_\_\_ Weeks \_\_\_\_\_ Months

2. Method of on-site storage for greater than 90 days:

\_\_\_\_\_ Drum \_\_\_\_\_ Roll-off Container  
\_\_\_\_\_ Tank \_\_\_\_\_ Lagoon  
\_\_\_\_\_ Other (specify)

3. Typical volume of stored waste: \_\_\_\_\_ (Tons, Gallons, etc)
4. Is storage site diked? Yes \_\_\_\_\_ No \_\_\_\_\_
5. Is surface drainage collection provided? Yes \_\_\_\_\_ No \_\_\_\_\_
6. Is there another form of secondary containment provided for the waste?  
Yes \_\_\_ No \_\_\_  
If so, please describe the containment.
7. Is the waste stored close to an open floor drain or sink? Yes \_\_\_ No \_\_\_
8. Is a spill kit available near waste storage site? Yes \_\_\_ No \_\_\_

D. Treatment and Disposal

1. Treatment or disposal: \_\_\_\_\_ On-site \_\_\_\_\_ Off-site  
If waste is hauled off-site, fill out 3 and 4 below.
2. Waste is: \_\_\_\_\_ Reclaimed \_\_\_\_\_ Treated \_\_\_\_\_ Land Application  
\_\_\_\_\_ Incinerated \_\_\_\_\_ Other (Specify)
3. Contractor Hauling Waste:  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
E-mail: \_\_\_\_\_
4. Off-site facility receiving waste:  
Name of Facility: \_\_\_\_\_  
Facility Address: \_\_\_\_\_  
\_\_\_\_\_  
E-mail: \_\_\_\_\_





Does the facility discharge anything besides domestic sewage into the sewer system, possibly through floor drains, mop sinks, kitchen sinks, etc?  Yes  No

If yes, please describe:

---



---

Is any solid or liquid waste hauled off-site?  Yes  No

If yes, describe the waste and where it is hauled for disposal:

---



---

Does the facility perform any of the following processes? *Check all that apply.*

| Yes | No |  | Yes | No |  |
|-----|----|--|-----|----|--|
|     |    | Metal Manufacturing<br>(Forming, Casting, Molding, etc.) |     |    | Chemical Production<br>(Organic, Inorganic, Pesticide, etc.) |
|     |    | Food Processing  |     |    | Pharmaceutical Production                                    |
|     |    | Metal Finishing (Plating, Coating, etc.)                 |     |    | Leather Tanning/Finishing                                    |
|     |    | Battery Manufacturing                                    |     |    | Plastic Molding/Forming                                      |
|     |    | Fertilizer Manufacturing                                 |     |    | Porcelain Enameling  |
|     |    | Glass Manufacturing                                      |     |    | Rubber Manufacturing   |
|     |    | Ink/Dye/Pigment/Paint Formulating                        |     |    | Soap/Detergent Manufacturing                                 |
|     |    | Electronic Component Manufacturing                       |     |    | Grain Processing   |

\_\_\_\_\_  
Signature\*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (Printed)

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Fax: \_\_\_\_\_

\*The above-named person will be the primary contact for all correspondence between the industry and the City of Ames Water and Pollution Control Department.

Please submit the completed form by one of the following ways:

Water & Pollution Control  
1800 E. 13<sup>th</sup> St., Building 1  
Ames, IA 50010

E-Mail  
Pretreatment@cityofames.org

Fax  
(515) 239-5251



Water Pollution Control Facility  
**Hauled Waste Manifest**

| Hauler Information |                             |
|--------------------|-----------------------------|
| Company _____      | Phone ( ) _____             |
| Address _____      | City _____                  |
| Truck Number _____ | Tank Capacity _____ gallons |

| Waste Generator Information   |                      |
|---|----------------------|
| 1. Facility Name _____  | Phone ( ) _____      |
| Facility Contact _____  |                      |
| Address _____   | City _____           |
| Date Pumped _____   | Gallons Pumped _____ |
| Provide a short description of the waste: _____<br>_____                |                      |
| 2. Facility Name _____  | Phone ( ) _____      |
| Facility Contact _____  |                      |
| Address _____   | City _____           |
| Date Pumped _____   | Gallons Pumped _____ |
| Provide a short description of the waste: _____<br>_____                |                      |
| If additional sites were included in this load attach another manifest. |                      |

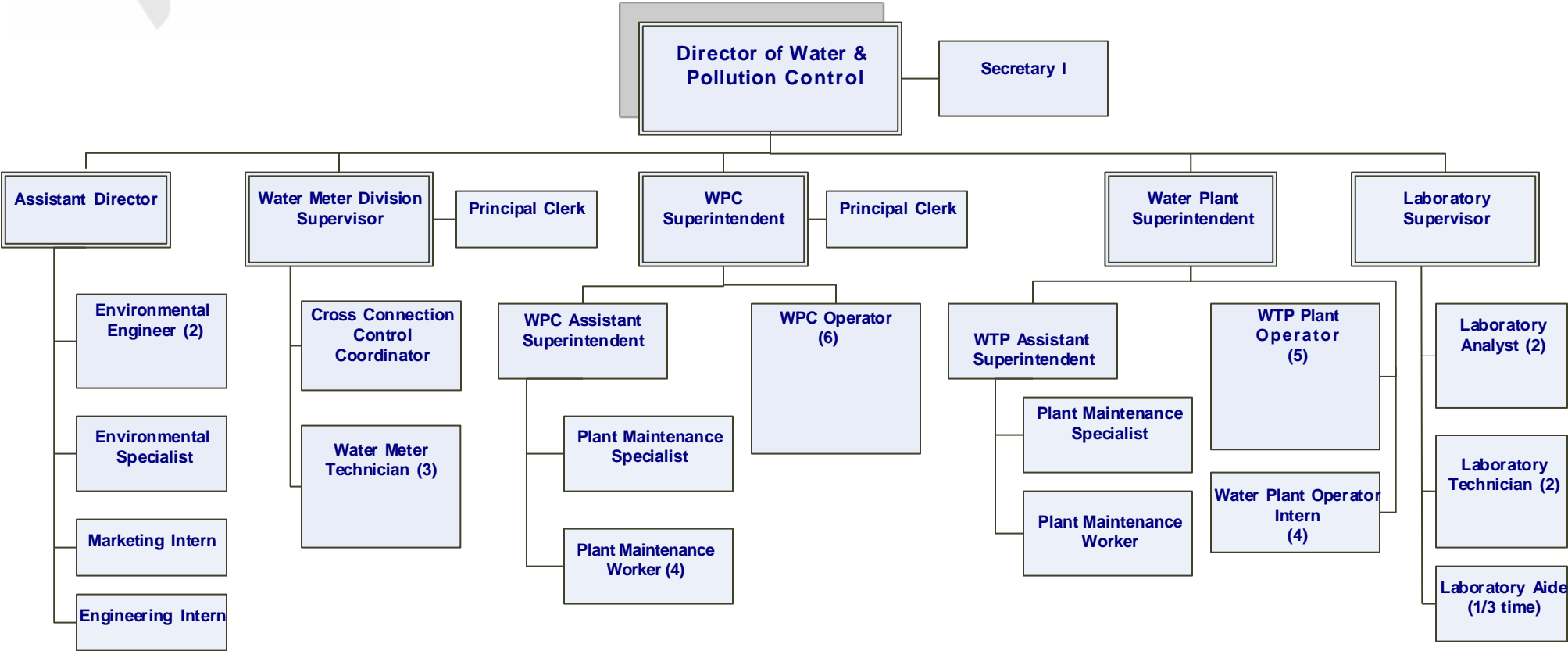
I certify under penalty of law that this manifest was prepared by me or under my direct supervision. The information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that the wastes covered by this manifest are not hazardous as defined by 40 CFR Part 261 and that all discharges made are in accordance and compliance with requirements specified in the Ames Municipal Code.

Name (Printed): \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

|  |             |                   |
|--|-------------|-------------------|
| Received by (Please Print): _____  | Date: _____ | Time: _____ AM/PM |
| Sample Collected: Yes <input type="checkbox"/> No <input type="checkbox"/> | pH: _____   |                   |
| Comments: _____  |             |                   |



# WATER & POLLUTION CONTROL



**Industrial Users  
Required to Obtain Pretreatment Permits**

| <u>Industry</u>                                     | <u>Classification</u>   | <u>Categorical Standard</u> | <u>Water Usage<br/>(gallons/month)</u> | <u>Description</u>                |
|---|-------------------------|-----------------------------|--|-----------------------------------|
| Barilla America, Inc.                               | Non-Significant         |                             | 2,900,000                              | Wheat Milling<br>Pasta Production |
| Biova, LLC  | Significant             |                             | 330,000                                | Processing Egg Shell<br>Membranes |
| Danfoss Power Solutions                             | Categorical Significant | 40 CFR Part 433             | 1,250,000                              | Hydraulic Pump Mfg.               |
| Hach Company<br>North Outfall                       | Significant             |                             | 100,000                                | Chemical Production               |
| Hach Company<br>South Outfall                       | Non-Significant         |                             | 40,000                                 | Chemical Production               |
| Merck Animal Health                                 | Categorical Significant | 40 CFR Part 439             | 35,000                                 | Vaccine Production                |
| Industrial Plating Company                          | Categorical Significant | 40 CFR Part 413             | 55,000                                 | Electroplating                    |
| Iowa State University<br>Central Campus             | Significant             |                             | 16,000,000                             | Housing, Research, Elec. Prod.    |
| Iowa State University<br>EH&S Building              | Non-Significant         |                             | 20,000                                 | Hazardous Waste Disposal          |
| Iowa State University<br>Veterinary Medicine        | Non-Significant         |                             | 1,400,000                              | Veterinary Med. & Research        |
| Iowa State University<br>VMRI/LIDIF                 | Non-Significant         |                             | 240,000                                | Veterinary Research               |
| Mary Greeley Medical Center                         | Non-Significant         |                             | 2,500,000                              | Medical Facility                  |
| National Centers for Animal Health<br>North Outfall | Non-Significant         |                             | 7,100,000                              | Veterinary Research               |
| National Centers for Animal Health<br>South Outfall | Non-Significant         |                             | 170,000                                | Veterinary Research               |