

1 INTRODUCTION

In accordance with the General Pretreatment Regulations promulgated by the U.S. Environmental Protection Agency (40 CFR 403), the Bismarck Wastewater Treatment Plant has developed and implemented an Industrial Pretreatment Program. The objectives of this program are as follows:

- Prevent the introduction of pollutants into the City's publicly owned treatment works (POTW) that would interfere with the operation of the facility including the use and disposal of sludge.
- Prevent the introduction of pollutants into the POTW that could pass through or otherwise be incompatible with the treatment works.
- Prevent the introduction of pollutants that would present a hazard to wastewater treatment workers.
- Improve opportunities to recycle and reclaim municipal wastewater and sludges.

In order to meet these objectives, Bismarck's pretreatment program was developed in accordance with program requirements listed in 40 CFR 403.8 and with submission requirements listed in 40 CFR 403.9. Key requirements in developing the program are the National Pretreatment Standards for Prohibited Discharges (40 CFR 403.5) and Categorical Standards (40 CFR 403.6). The prohibited discharge standards provide specific prohibitions of non-domestic pollutants that shall not be discharged to the POTW. The Categorical Standards provided limitation for specific pollutants which may be discharge to POTW's by industrial users in various subcategories.

1.1 Program Summary

The City of Bismarck's Industrial Pretreatment Program was approved by EPA on April 22, 1986. The Program was modified in 1992 (approval date - November 13, 1992) and 1994 (approval date - July 5, 1994) to reflect specific regulatory requirements and program changes. The following is a major revision of the original Program document which reflects the experience of the Pretreatment Program staff during the time the City has administered this Program. It includes documentation of program procedures that have been developed over the course of the twelve years since the program began. The Program document is organized into the following items:

Section 2

Identification of Industrial Users and Characteristics of their Wastewater Discharges. A master list of industries were compiled and from that list the significant industrial users were defined. Industrial wastewater discharges were sampled and analyzed. A process for updating the Industrial Waste Survey is also described in this section.

Section 3

Adoption of the Legal Authority Necessary to Implement and Enforce the Program. Bismarck has adopted an ordinance that addresses all of the legal requirements of the pretreatment program including specific effluent limitations for various toxic and other non-domestic, Prohibited Discharges and Categorical Standards. An industrial waste permit and an application form were also developed as a part of this section.

Section 4

Development of Procedures to Ensure Compliance with the Requirements of the Program. Bismarck has developed procedures to:

- Inform all industrial users of the pretreatment program.
- Permit existing and new industrial users.
- Require industry self-monitoring as well as City conducted monitoring, sampling, evaluation and inspection.
- Ensure compliance with the pretreatment program requirements through an enforcement response plan.

Section 5

Demonstration of Sufficient Personnel, Equipment, and Funding to Operate the Program. A program of this type requires the coordination and training of City personnel, specialized equipment, and a viable operating budget. Section 5 will demonstrate Bismarck's commitment to the program.

All of the above items will be discussed at length in each of the following respective sections of this program document.

2 INDUSTRIAL WASTE SURVEY

2.1 Introduction

The General Pretreatment Regulations require a POTW to identify and locate all possible industrial users (IUs) which might be subject to the POTW Pretreatment Program, to identify the character and volume of pollutants contributed to the POTW by the Industrial Users, and to notify industrial users of applicable Pretreatment Standards and other applicable regulatory requirements. This section of the City's Industrial Pretreatment Program describes how these requirements will be met.

The Industrial Waste Survey is designed to identify those non-residential water users which may be subject to the Pretreatment Program requirements. The IUs may be subject to regulation for a number of reasons. They may meet the definition of a Significant Industrial User (SIU) (40 CFR 403.3 (t) and Bismarck City Ordinance Section 11.1-01-02.42) for any of the following reasons:

- a) The industry is subject to Federal Categorical Pretreatment Standards
- b) The industry discharges an average of 25,000 gallons per day or more of process wastewater
- c) The industry's discharge makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant.
- d) The IU is designated by the City, State or EPA as having a reasonable potential to adversely affect the City's wastewater collection or treatment system or to violate any pretreatment standard or requirement.

In addition to identifying the significant industrial users that are subject to the Pretreatment Program the industrial waste survey provides the City with a comprehensive list of industrial users. This information is useful for identifying potential problem discharges that may occur, for characterizing the user base and in contacting IU's regarding information requests or notification of program or ordinance changes which may effect the IUs.

2.2 Identification of Industrial Users

A comprehensive list of industrial users was compiled from City water billing records, a survey of the telephone directory yellow pages and general knowledge of program staff. Restaurants, hotels and motels are not included in this listing because their waste is primarily domestic in nature.

The industrial users on the list were classified according to the nature and size of the business, amount of water use, and overall potential to have significant impacts upon the City wastewater system. Survey questionnaires were initially sent to 37 of the 239 identified industrial users on the master list. A copy of the questionnaire is included as Attachment 1. Based upon this evaluation and the results of the survey questionnaires Significant Industrial Users have been defined. Minor industrial users, defined as users that discharge non-domestic pollutants to the sewer system in amounts that on a routine basis have insignificant impact on the treatment works but may have the potential to impact the collection or treatment system or to violate the prohibited discharge limits in the City Ordinance, are included in the Industrial Waste Survey data base This includes industrial users that have a potential to cause sewer obstructions, slug loads or chemical spills Those industrial users that have dry processes, discharge only sanitary wastes and are considered to have an insignificant potential to impact the wastewater system are not included in the Industrial Waste Survey database.

The process for classifying the industrial users according to the above definitions is based upon the information obtained from the survey questionnaire and/or site visits or phone calls to follow up on the information provided. This follow up serves several purposes:

1. Verification of the information provided.
2. Physical inspection of the industrial process to evaluate its potential for impacting the POTW.
3. Evaluate the potential for spills of process waste or stored chemicals which could impact the POTW.
4. To explain the Pretreatment Program and to help the IU to understand the potential for impacting the sewer system.

With the data obtained from this process the industries are then evaluated based upon the definitions in Section 2.1 above. The current Significant Industrial Users are listed in Table 2.1

Table 2.1
Significant Industrial Users
(12-31-97)

Industrial User	Type of Business	Criteria Met
Country Lake Foods	Milk Processor	2,4
Melroe Company	Agriculture Equipment Mfg.	1
Dakota Dust Tex, Inc.	Industrial Laundry	4
Amoco Oil Company	UST Cleanup	4
American Linen Company	Industrial Laundry	2,4
Enoch Schultz Creamery	Dairy Products	2,4
Bismarck Tribune	Newspaper	4
Midwest Coca Cola	Soft Drink Company	2,3
Q & R Clinic	Medical Clinic	4
Cordes & Company	UST Cleanup	4

Criteria

- 1 - Categorical
- 2 - Flow \geq 25,000 gpd of process wastewater
- 3 - Flow or loading $>$ 5%
- 4 - POTW designation, potential for affecting operation either toxics or organic strength

2.3 Update Procedures

The Industrial Waste Survey must be updated on a regular basis to remain useful. To keep the IWS current and to regularly evaluate changes to the industrial user base the City will implement the procedures described in this section. The Industrial Waste Survey will be maintained as a computer database using Microsoft Access.

2.3.1 Annual Update

The master list of industrial users will be reviewed annually by comparing it to the list of commercial water users and the Yellow Pages of the telephone directory. This annual review will take place following the issuance of new telephone directories. The purpose of the annual review is to identify name changes, industries that have ceased operation or new industries that have not been identified by the monthly, on-going update procedures described in Section 2.3.2.

2.3.2 Monthly Update

The City's primary method for keeping the Industrial Waste Survey up to date is a monthly review of building permits and new commercial water accounts. A listing of all building permits is provided to the Pretreatment Coordinator by the Fire and Inspections Department on a biweekly basis. The Water Administration Department provides the Coordinator with a monthly list of new commercial water users. This information is reviewed monthly for industrial users to be added to the master list of IU's. Users that appear to have some potential to be included in the Industrial Waste Survey are sent a survey questionnaire to complete and return within 30 days. As necessary, follow up visits or phone calls are used to obtain and/or verify the information. This same monthly update process will also identify those existing users that are modifying or expanding their business. A form has been developed to help identify and track IU's during this process (Attachment 2).

The Water Administration Department also provides a monthly list of water users with average consumption of more than 25,000 gpd. Through this information those users with potential to meet the flow criteria for an SIU can be identified. Any industries that appear on this list that have not been previously surveyed are contacted with a survey questionnaire to determine if they have significant process wastewater discharges.

In addition to the formal update process there are a number of informal methods for obtaining information on new industrial users, or existing users that may be modifying their operation. Newspaper and electronic media stories on new or expanding businesses provide a source of information. Workers in the wastewater collection system are encouraged to report to the Pretreatment Coordinator any unusual condition they observe. Investigations can then be conducted to determine if industrial users are the source and whether reclassification and/or control of IU's is required. In addition, in a city the size of Bismarck, plant personnel are generally quite familiar with activities in the community and often observe new industrial users or construction activities in their travel around the community.

3 *LEGAL AUTHORITY*

The General Pretreatment Regulations (40 CFR 403) dated January 28, 1981, requires POTW's to have the legal authorization to apply and enforce the requirements of Section 307 (b) and (c) and 402 (b) (8) of the Clean Water Act and any regulations implementing those sections. At a minimum, this legal authority must meet the requirements of 40 CFR 403.8 (f) (1) (i-viii).

The City of Bismarck, North Dakota has developed this legal authority to extend over all of its industrial users including those located outside of the City limits. As specifically referred to in the submitted City Attorney's letter, the wastewater treatment plant has the authority to:

- Deny or condition new or increased contribution of pollutants or changes in the nature thereof, when such contributions will exceed standards or cause a violation of the POTW's NPDES permit.
- Require industrial users to comply with applicable pretreatment standards and requirements, including specific prohibitive discharge limits set by the City.
- Control the contribution of each industrial user by permit or other means to ensure compliance with standards and requirements.
- Require industrial users to develop compliance schedules for installation of technology necessary to meet standards and to submit notices and self-monitoring reports to the POTW to assess compliance measures.
- Enter the premises of an industrial user to perform all inspection, surveillance, and monitoring procedures necessary to independently determine the compliance of the industrial user.
- Seek injunctive relief in the case of noncompliance, assess penalties, and prevent or halt discharges that appear to present an imminent danger to health or the environment or interfere with POTW operations.
- Provide confidentiality where necessary to protect industrial user's trade secrets.

To demonstrate this authority for pretreatment program approval, the City of Bismarck, North Dakota has submitted the following which are included in the appendix:

- Attachment 3 - Original City Attorney's statement outlining the legal basis of the program.
- Attachment 4 - Updated City Attorney's statement.
- Attachment 5 - The City of Bismarck's ordinances, Title 11.1.

4 PROGRAM PROCEDURES

Bismarck has developed procedures necessary to ensure compliance with the pretreatment program. Procedures were developed to assist in implementation of the pretreatment program. Elements of this program are listed below:

- * Permitting Process
- * Notification of Appropriate Federal, State and Local Requirements
- * Industry Self-Monitoring
- * Monitoring and Inspection Activities
- * Investigation of Non-Compliance and Enforcement Response
- * Public Participation
- * Acceptance of Hauled Wastewater

4.1 Permitting Process

4.1.1 Existing Industries

All significant industrial users will be required to fill out a permit application and receive a discharge permit based upon categorical pretreatment standards or the local limits developed for Bismarck's POTW (Attachment 6). Only significant industrial users as defined in Section 2.1 will be required to be permitted.

In some cases an industry will be able to modify its process in such a manner that the quality or quantity of wastewater that is cause for concern will be reduced or eliminated. If an industry changes its operation and it can be determined by sampling and observation that the wastewater discharge is no longer a concern or no longer meets the definition of "Significant Industrial User", the City may take the option to redefine the user and not require a discharge permit.

4.1.2 New Industries

Any new industry indicating its intention to locate in the City of Bismarck or requesting water and sewer connection outside the jurisdictional limits will be evaluated for the need to fill out a permit application. Only those industries that have the potential to be classified as an SIU will be required to apply. The Public Works Department will make the determination of who is to apply based upon the building permit data, survey questionnaire data and firsthand knowledge of the industry. Upon completion and review of the permit application, a discharge permit shall be issued specifying pollutant limitations, monitoring frequency, and other requirements described in Title 11.1-06 of the Bismarck Code of Ordinances. A permit application and a sample permit are included as Attachments 7 & 8.

4.1.3 Updating Permits

All permits shall be reviewed by the Pretreatment Coordinator at least once a year. The Coordinator will compare the permit conditions with self-monitoring reports, City conducted sampling analysis, the current Local Limits document and current Federal regulations.

4.2 Notification of Appropriate Federal, State and Local Requirements

Bismarck will notify all industrial users included in the pretreatment program of any changes in applicable pretreatment requirements (Local, State, or Federal) as well as applicable requirements under Section 204 (b) and 405 of the Clean Water Act and subtitles C and D of the Resource Conservation and Recovery Act. EPA and State notifications, meetings and training, as well as the Federal Register and journals will be used as the source for becoming aware of new regulations. As new Federal and local requirements are issued, the Coordinator will notify the affected users, by mail, of any applicable pretreatment standards as well as other relevant requirements under the Clean Water Act and Resource Conservation and Recovery Act. Federal Pretreatment Standards will be made a condition of industrial waste permits and as EPA or the City promulgates new standards, affected industrial users will have existing permit conditions modified to incorporate explicitly the new standards.

4.3 Industry Self-Monitoring

The Pretreatment Coordinator will receive and analyze self-monitoring reports and other notices submitted by the industrial users according to the reporting requirements of the discharge permit and 40 CFR 403.12. Collection and analysis must be by EPA approved methods and analysis must be performed by an EPA or state certified laboratory. The frequency of sampling and pollutants to be analyzed by the industrial user will be specified in the discharge permit.

4.3.1 Categorical Industries

Industries that fall under the Federal Categorical Pretreatment Standards will be subject to five (5) separate reports. These reports will also be used as guidelines for reports submitted by all other industries not falling into a categorical standard. The types of reports are listed below.

1. A base line monitoring report to be filed within 180 days of the effective date of a Federal Categorical Standard, containing
 - a. Name, address, owner, and contact person at the facility
 - b. List of any environmental control permits
 - c. Description of operation
 - d. Flow measurement data and sewer piping layout
 - e. Certified statement of compliance indicating whether or not pretreatment standards have been met and, if not, what is being done to remedy the situation
 - f. Schedule of compliance
2. Progress reports for compliance schedule milestones in permit.
3. Compliance data report indicating compliance with categorical deadlines.
4. Reports of continued compliance at time intervals specified in the discharge permit.
5. Notice of slug loading.

The Pretreatment Coordinator may consider a report invalid if:

1. The analysis is incomplete.
2. EPA approved methods are not used in the sample analysis procedure.
3. Results of the report cannot be verified by the laboratory.
4. It is observed that the monitoring equipment has been tampered with or wastewater loadings and/or flow have been changed or altered.

When any of these conditions occur, the Bismarck Public Works Department will proceed with the appropriate enforcement action as detailed in Section 4.5.

4.3.2 Non-Categorical SIU's

All non-categorical SIU's will be required to submit the following items in a report at least twice a year or as required by the discharge permit:

1. Sample analysis required by permit.
2. Progress on scheduled milestones, as appropriate.
3. General compliance statement.

The Pretreatment Coordinator may consider the report invalid for the same reasons listed under categorical industries.

4.3.3 Review of Self-Monitoring and Compliance Reports

The self-monitoring reports shall be handled in the following manner:

- * Recorded on a self monitoring report log verifying timeliness of report.
- * Checked for completeness of permit requirements.
- * Compared with discharge permit limitations for compliance or non-compliance.
- * Filed in the Industrial User's file for future reference.

Compliance reports shall be handled in a similar manner with compliance to milestones being the major item to verify. A copy of the self-monitoring report log is included as Attachment 9.

A Discharge Monitoring Report Check list (Attachment 10) has been developed to assist staff in the review of reports. A copy of the completed check list is filed in the IU permit file.

4.4 Monitoring and Inspection Activities

In conjunction with the periodic reports filed by industrial users, the City of Bismarck will randomly sample, analyze, spot check, and inspect industrial users to verify self-monitoring and compliance reports and to ensure compliance with the permit requirements. All permitted industries will be required to install and maintain a manhole or some other acceptable sampling point for use by the City of Bismarck Public Works Department to obtain representative samples. A wastewater meter, if necessary, shall also be installed. The City will create and maintain a file for each industrial user required to have a discharge permit.

4.4.1 Monitoring

All sampling and analysis activities will conform with EPA approved methods. The City of Bismarck wastewater treatment laboratory will run and analyze the following parameters: COD, BOD, SS, pH, temperature, metals, flash point and oil and grease. Other parameters will be analyzed at a certified commercial laboratory using EPA approved methods.

All Significant Industrial Users will be sampled at least twice per year. The sampling frequency may be increased or decreased based upon the presence or absence of pollutants and strength of wastes, but in no case will permitted industrial users be sampled less than two times per year by the City.

Non-permitted industrial users which have the potential to discharge heavy metals, hot water, low pH, or large amounts of oil and grease or other pollutants will be inspected or sampled if observations and/or sampling in the collection system indicates a potential problem. If problems of sufficient magnitude are identified by this process, or if the City staff determines that the industrial user meets the definition of an SIU, the Coordinator will define the user as an SIU and require a permit application to be completed.

1. Coordination of Monitoring Activities

The staff of the wastewater treatment plant will be responsible for sampling permitted industries. At the beginning of each calendar year a sampling schedule will be developed for all permitted IUs by the staff and the Pretreatment Coordinator. This schedule will establish the sampling frequency based upon permit requirements, recent compliance history and variation in wastewater strength.

Each permitted IU will be evaluated to determine the appropriate type of sampling, i.e. flow or time-based composite or grab and this determination will be placed in each permit file. Also a sampler set-up instruction document will be created for each IU. This will specify exact sampling location, sample types and times along with any other information specific to each IU. These documents will be reviewed annually to assure that they reflect current conditions. A sample of sampler set-up instructions is included as Attachment 11.

When an IU is sampled a "Sampling Report Form" (Attachment 12) will be completed in the field by the personnel who set up and collect the sample. This form will be returned to the lab along with the sample for additional data entry. Sampling and lab personnel will also complete the "Sample Transfer Register" form or appropriate chain of custody form for any other laboratory used. (Attachment 13).

2. **Analysis and Reporting**

Upon completion of the laboratory analysis according to the City of Bismarck WWTP Laboratory “Manual of Operations and Quality Control” the analytical results will be reported to the Pretreatment Coordinator for review. This will occur no later than 30 days after sampling. Following review of the analytical results for quality assurance and permit compliance a computer generated laboratory report form (Attachment 14) will be sent to the IUs. In cases where a violation is identified written notification will be provided to the IU within 5 working days as a follow up to the verbal notification that will be provided to the IU within one working day of the violation being identified.

4.4.2. **Inspection Activities**

Each Significant Industrial User will be formally inspected at least once annually. These inspections will be scheduled one or two days in advance with the IU to assure that the appropriate staff will be available at the time of the inspection. The purpose of these inspections is to verify operating conditions at the IU’s facility and determine if process, treatment or production changes have occurred. The inspection also allows the POTW staff to review compliance information, evaluate IU self-monitoring and record keeping and to discuss program changes and pollution prevention activities with the IU personnel.

A copy of the Inspection form used by the City of Bismarck is enclosed as Attachment 15. This form is completed and filed in the IU permit file. A letter is also sent to each IU noting deficiencies found during the inspection along with required corrective actions.

4.4.2.1 **Slug Control**

At the time of inspection the Pretreatment Coordinator shall evaluate each permitted industrial user to determine the need for a plan to control slug discharges. The determination shall be made at least once every two years. If a slug control plan is required it shall contain, at a minimum, the following elements:

1. Description of discharge practices, including non-routine batch discharges.
2. Description of stored chemicals.
3. Procedures for immediately notifying the wastewater treatment plant of slug discharges, including any discharge that would violate a prohibition under Section 11.1-03-01 of the Bismarck Code of Ordinances, with procedures for follow up written notification within 5 days.
4. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic, organic pollutants, including solvents, and/or measures or equipment for emergency response.

The determination of need for a Slug Control Plan will be included in the permit file for each industrial user. Any slug control plan submitted will also become part of the user’s file.

4.5 Investigation of Non-Compliance and Enforcement Response

The Bismarck Public Works Department will investigate instances of non-compliance with Title 11.1 of the Bismarck Code of Ordinances and discharge permits issued pursuant to that Ordinance. It will collect and document all the technical information necessary to pursue appropriate enforcement actions. All violations will be recorded in the IU permit file on the Pretreatment Violation Log (Attachment 16). Violations identified during the review processes described in Section 4.4 and 4.5 will cause the Pretreatment Coordinator to initiate appropriate enforcement activities. The enforcement response to any particular violations will depend to a large extent upon the following criteria:

- * Magnitude of the violation.
- * Duration of the violation.
- * Effect of the violation on the City facilities or the environment.
- * Compliance history of the industrial user.
- * Good faith of the industrial user.

The following Enforcement Response Guide was developed to define the appropriate levels of escalating enforcement activities necessary to bring a non-compliant user back into compliance with City, State, and EPA regulations. Where multiple options are listed for a given type of non-compliance the above factors will be considered in selecting the appropriate action. The Guide does not preclude the City from taking any, all, or any combination of actions against a non-compliant industrial user.

City of Bismarck Enforcement Response Guide

UNAUTHORIZED DISCHARGES (No Permit)

<u>NONCOMPLIANCE</u>	<u>NATURE OF THE VIOLATION</u>	<u>ENFORCEMENT RESPONSES</u>	<u>PERSONNEL</u>
1. Unpermitted discharge	IU unaware of requirement; no harm to POTW or environment.	- Phone Call; Send application form - NOV with application form	PC PC
	IU unaware of requirement; harm to POTW or environment	- AO - Recover cost of damages through user charge or civil action	PC, DIR PC, DIR, ATT
	Failure to apply continues after notice by the POTW	- AO, show cause, fine - Civil Action - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, ATT PC, DIR, BRD PC, DIR, ATT
2. Non-permitted discharge (failure to renew)	IU has not submitted application within 10 days of due date	Phone call and warning letter	PC
	Failure to submit after notice by the POTW	- NOV - AO, show cause	PC PC, DIR, BRD, ATT
3. Unauthorized discharge through manholes, car washes, septic waste receiving stations, etc	No harm to POTW or environment	- NOV - AO	PC PC, DIR
	Harm to POTW or environment	- AO - Recover cost of damages through user charge or civil action	PC, DIR PC, DIR, ATT
	Recurring	- AO, show cause, fine - Criminal action	PC, DIR, BRD, ATT PC, DIR, ATT

DISCHARGE LIMIT VIOLATION

1. Exceedance of local or Federal Standard (permit limit)	Isolated (no harm to POTW or environment)	- Phone call and warning letter, resample - NOV, require corrective action plan, resample - AO to implement corrective action plan, resample	PC PC, DIR PC, DIR
	Isolated (harm to POTW or environment)	- NOV, require corrective action plan, resample - AO to implement corrective action plan, resample - Recover cost of damages through user charge or civil action	PC, DIR PC, DIR PC, DIR, ATT
	Recurring (no harm to POTW or environment)	- AO to return to compliance, resample - AO, show cause, fine	PC, DIR PC, DIR, BRD, ATT
	Recurring (harm to POTW or environment)	- AO, show cause, resample, fine - Recover cost of damages through user charge or civil action - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, ATT PC, DIR, BRD PC, DIR, ATT

MONITORING AND REPORTING VIOLATIONS

<u>NONCOMPLIANCE</u>	<u>NATURE OF THE VIOLATION</u>	<u>ENFORCEMENT RESPONSES</u>	<u>PERSONNEL</u>
1. Reporting violation	Report is improperly signed or certified	- Phone call and warning letter	PC
	Report is improperly signed or certified after notice by POTW	- NOV - AO, show cause, fine	PC, DIR PC, DIR, BRD, ATT
	Isolated, non significant (i.e., < 30 days late)	- Phone call and warning letter	PC
	Significant (i.e., report 30 days or more late)	- NOV - AO, show cause, fine	PC PC, DIR, BRD, ATT
	Reports are consistently late or no reports at all	- AO, show cause, fine - Permit revocation - Terminate service	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD
	Failure to report spill or changed discharge (no harm)	- NOV	PC
	Failure to report spill or changed discharge (results in harm)	- AO, Develop spill control plan - Recover cost of damages through user charge or civil action - Criminal action	PC, DIR PC, DIR, ATT PC, DIR, ATT
	Repeated failure to report spills	- AO, show cause, fine - Permit revocation - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD PC, DIR, ATT
2. Failure to monitor	Falsification of report	- AO, show cause, fine - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, ATT
	Failure to monitor all pollutants as required by	Phone call and warning letter, resample	PC

correctly	permit		
	Recurring failure to monitor	- NOV, resample - AO, show cause, fine - Permit revocation	PC, DIR PC, DIR, BRD, ATT PC, DIR, BRD

MONITORING AND REPORTING VIOLATIONS (continued)

3. Improper sampling	Unintentional or isolated	- Phone call and warning letter, resample	PC
	Recurring or evidence of intent	- AO, show cause, fine - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, ATT
4. Failure to install monitoring equipment	Delay of less than 30 days	- Phone call and warning letter	PC
	Delay of 30 days or more	- AO to install	PC, DIR
	Recurring failure to install after AO to install	- AO, show cause, fine - Permit revocation - Terminate service - Criminal action	PC, DIR, BRD PC, DIR, BRD PC, DIR, BRD PC, DIR, ATT
5. Tampering with monitoring equipment or sample	Any incident	- AO, show cause, fine - Permit revocation - Terminate Service - Criminal Action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD PC, DIR, ATT

COMPLIANCE SCHEDULE VIOLATIONS

<u>NONCOMPLIANCE</u>	<u>NATURE OF THE VIOLATION</u>	<u>ENFORCEMENT RESPONSES</u>	<u>PERSONNEL</u>
1. Compliance Schedule	Missed milestone by less than 30 days or will not affect final milestone	- Phone call and warning letter	PC
	Missed milestone by more than 30 days, or will affect final milestone (good cause for delay)	- NOV	PC
	Missed milestone by more than 30 days, or will affect final milestone (no good cause for delay)	- AO, show cause, fine - Permit revocation - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD PC, DIR, ATT
	Recurring violation or violation of AO	- AO, show cause, fine - Permit revocation - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD PC, DIR, ATT

VIOLATIONS DETECTED DURING SITE VISITS

<u>NONCOMPLIANCE</u>	<u>NATURE OF THE VIOLATION</u>	<u>ENFORCEMENT RESPONSES</u>	<u>PERSONNEL</u>
1. Entry Denial	Entry denied or consent withdrawn	- NOV and AO to allow entry or records access	PC, DIR
	Copies of records denied	AO to suspend or terminate service	PC, DIR
2. Illegal Discharge, including discharge of unauthorized waste.	No harm to POTW or environment	- NOV, require corrective action	PC, DIR
	Discharge caused harm or evidence of intent/negligence	- AO, cease and desist - Recover cost of damages through user charge or civil action - Criminal action	PC, DIR PC, DIR, ATT PC, DIR, ATT
	Recurring illegal discharge	- AO, show cause, fine - Terminate service - Criminal action	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, ATT, BRD
3. Improper Sampling	Unintentional sampling at incorrect location	- Warning letter, resample	PC
	Unintentionally using incorrect sample type	- Warning letter, resample	PC
	Unintentionally using incorrect sample collection techniques	- Warning letter, resample	PC
	Recurring improper sampling	- AO, show cause, fine, resample	PC, DIR, BRD, ATT
4. Inadequate record keeping	Inspector finds files incomplete or missing (no evidence of intent)	- Warning letter	PC
	Recurring	- NOV - AO, show cause, fine	PC, DIR PC, DIR, BRD, ATT
5. Failure to report additional monitoring	Inspection finds additional files	- NOV	PC
	Recurring	- AO, show cause, fine - Permit revocation	PC, DIR, BRD, ATT PC, DIR, BRD

OTHER PERMIT VIOLATIONS

<u>NONCOMPLIANCE</u>	<u>NATURE OF THE VIOLATION</u>	<u>ENFORCEMENT RESPONSES</u>	<u>PERSONNEL</u>
1. Wastestreams are diluted in lieu of treatment	Initial violation	- NOV - AO, show cause, fine	PC PC, DIR, BRD, ATT
	Recurring	- AO, show cause, fine - Permit revocation - Terminate service	PC, DIR, BRD, ATT PC, DIR, BRD PC, DIR, BRD
2. Failure to mitigate non-compliance or halt discharge	Does not result in harm	- NOV	PC
	Does result in harm	- NOV - AO, show cause, fine - Recover cost of damages through user charge or civil action	PC, DIR PC, DIR, BRD, ATT PC, DIR, ATT

3. Failure to properly operate and maintain pretreatment facility	Does not result in harm	- Criminal action	PC, DIR, ATT
	Does result in harm	- NOV	PC
		- NOV	PC, DIR
		- AO, show cause, fine	PC, DIR, BRD, ATT
		- Recover cost of damages through user charge or civil action	PC, DIR, ATT
		- Criminal action	PC, DIR, ATT

TIME FRAMES FOR RESPONSES

- A. All violations will be identified and documented within five working days of receiving compliance information.
- B. Initial enforcement responses (involving contact with the industrial user and requesting information on corrective or preventative action(s)) will occur within 15 days of violation detection.
- C. Follow up actions for continuing or reoccurring violations will be taken within 60 days of the initial enforcement response. For all continuing violations, the response will include a compliance schedule.
- D. Violations which threaten health, property, or environmental quality are considered emergencies and will receive immediate response such as halting the discharge or terminating service.
- E. All violations meeting the criteria for significant non-compliance will be addressed with an enforceable order within 30 days of the identification of significant non-compliance, unless the IU has returned to compliance by that time. Significant non-compliance determinations will be made at the end of each calendar quarter.

DEFINITION OF TERMS

Terms and abbreviations used in the Enforcement Response guide are defined below.

AO	An order from the Director of Public Works or the Board of City Commissioners. May be a show cause, consent, implementation compliance, cease and desist order, or order to suspend or terminate service.
BRD	Board of City Commissioners
IU	Industrial User
NOV	Notice of Violation
PC	Pretreatment Coordinator
DIR	Director of Public Works
ATT	City Attorney. Will provide support to pretreatment coordinator, Director of Public Works, and Board of City Commissioners for enforcement actions.
Show Cause Order	Administrative order requiring the IU to appear and demonstrate why the City should not take a proposed enforcement action against it. The meeting may also service as a forum to discuss corrective actions and compliance schedules.

4.6 Public Participation

Bismarck will comply with the public participation requirements of 40 CFR 25 in the enforcement of the National Pretreatment Standards. A list of industrial users which in the past 12 months were in significant non-compliance with applicable pretreatment requirements will be published annually in the Bismarck Tribune. Significant non-compliance shall be as defined in 40 CFR 403.8 (f) (2) (vii) or subsequent legislation.

A press release will also be provided in the paper when the pretreatment program goes into effect citing objectives of the program.

4.7 Acceptance of Hauled Wastewater

The City accepts hauled waste from unsewered areas and has developed policies and procedures to regulate these discharges under the Industrial Pretreatment Program. Section 11.1-03-01.15 of the City Ordinance prohibits the discharge of hauled or trucked pollutants except at discharge points designated by the Pretreatment Coordinator. The City has issued a policy memo to all commercial waste haulers indicating that wastes will be accepted only at the Wastewater Treatment Plant. The memo also explains the policies and conditions for acceptance of wastewater for treatment, (see Attachment 17). Wastes from new haulers or sources are tested by the Wastewater Treatment Plant staff before acceptance. Random grab sampling is used to monitor routine hauled wastes. All loads must be logged in at the plant with a description of the volume and source of the wastewater along with the hauler's signature (see Attachment 18).

The POTW also accepts leachate from the City owned and operated landfill. The leachate is hauled and discharged by City personnel to a designated manhole near the landfill. Monthly samples are taken and reports of quality and volume discharged are provided to the Pretreatment Coordinator.

The local pollutant limits that have been developed for the Bismarck Industrial Pretreatment Program include a daily mass-based set aside for hauled wastes and batch discharges by non-significant industrial users. This set aside is equal to ten percent of the Maximum Allowable Headworks Loading (MAHL) for the treatment plant for regulated pollutants (11.1-03-02.6). This allows the City to regulate the waste haulers on a mass basis and limit the amount of hauled waste that is accepted to levels that will not result in pass-through, interference or excessive metals concentrations in biosolids.

5 Program Organization, Personnel and Equipment

The Public Works Department of the City of Bismarck is responsible for the implementation and administration of the Industrial Pretreatment Program. The Director of Public Works is designated as the responsible authority for the wastewater treatment plant's NPDES permit and is also the Pretreatment Coordinator, although this duty may be delegated according to City ordinance. Currently, the wastewater treatment engineer is the delegated Pretreatment Coordinator. An organization chart for the Industrial Pretreatment Program follows this section.

5.1 Staff Responsibilities

Pretreatment Coordinator

The Coordinator is responsible for the overall implementation and administration of the Pretreatment Program. Major areas of responsibility include budgeting, coordination of personnel and resources necessary for the program, industrial waste survey updates, review of permit applications and permit issuance, tracking and review of self-monitoring and City compliance monitoring, initiation of enforcement activities, industrial user inspections and other administrative duties necessary for the day-to-day activities of the program. Program document revisions, ordinance revisions and local limits updates will also be initiated by the Coordinator. The Coordinator will also be responsible for providing training to other City staff to allow delegation of some of the above mentioned duties.

Chemist

The wastewater treatment plant chemist is responsible for laboratory analysis of samples collected for monitoring industrial users. When the City lab is not certified to perform required analyses commercial laboratories will be used. In all cases the chemist will be responsible to see that proper chain of custody procedures and quality assurance/quality control measures are followed. The chemist will also provide technical support for sampling and inspection activities.

The chemist will also receive training in various aspects of the program to allow day-to-day involvement in the administration of the program to assist the Coordinator and to provide continuity of Program activities in the absence of the Coordinator.

Plant Staff

The operational staff of the wastewater treatment plant will provide the sampling support for the program. This will include coordination of the sampling schedule with the Coordinator and chemist, collection of samples either manually or with automatic samplers, flow monitoring and reporting of violations or usual conditions noted while in the field.

Collection Systems Staff

The collection systems staff, while not routinely involved in program activities, will be able to report to the Coordinator conditions observed in the field which may be related to industrial discharges.

Public Works Department Office Staff

These individuals will be responsible for typing and mailing correspondence, maintaining program documents on the word processing system and billing industrial users for program fees and waste surcharges.

City Attorney

The City Attorney is a full-time, City position and is available as needed to provide support in legal interpretations, ordinance revisions, and enforcement activities.

Director of Public Works

The Director is ultimately responsible for successful implementation of the Program. This position will see that adequate resources are available, will coordinate with other City Departments, and will work to see that City policy is consistent with the Pretreatment Program when possible. The Director will also be involved in enforcement efforts as indicated in the Enforcement Response Guide, Section 4.5.

5.2 Program Staffing

None of the personnel listed in the previous section are assigned to the Pretreatment Program on a full time basis, however all are available as needed. Program staffing is expected to continue at a level of 700 to 1,000 man hours per year with total annual expenditures of approximately \$15,000 to \$20,000. This includes the cost of all personnel, travel, legal publications, equipment maintenance and supplies, as well as commercial laboratory fees.

The level of effort and expenditures will vary from year to year based upon changes in regulatory requirements, number of users, etc. In years when the City's local limits are revised considerably higher levels of effort may be required. The City of Bismarck has made the commitment to provide these resources with funding from the Water Utility Fund as required to adequately implement the Industrial Pretreatment Program.

5.3 Equipment

The Bismarck Wastewater Treatment Plant has all necessary equipment for the successful implementation of the Industrial Pretreatment Program. This includes a laboratory certified to perform the following tests: BOD, suspended solids, pH, ammonia, oil and grease, residual chlorine, arsenic, cadmium, chromium, copper, lead, nickel, silver and zinc (wastewater and sludge for metals). The laboratory also has in-house whole effluent toxicity testing capability.

Sampling equipment includes a van, three automatic composite samplers, one of which can be paced by a flow meter, a recording flow meter, field pH meter and all necessary manhole and confined space entry equipment and associated safety gear.

TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	1
2. Industrial Waste Survey	3
3. Legal Authority	6
4. Program Procedures	7
4.1 Permitting Process	7
4.2 Notification of Appropriate Federal, State, and Local Requirements	7
4.3 Industry Self-Monitoring	8
4.4 Monitoring and Inspection Activities	10
4.5 Investigation of Non-Compliance and Enforcement Response	12
4.6 Public Participation	17
4.7 Acceptance of Hauled Wastewater	17
5. Program Organization, Personnel, and Equipment	18

Attachments

1. Industrial Waste Survey Questionnaire
2. New Commercial Water Account and Building Permit Review
3. Original City Attorney's Statement of Legal Basis
4. Updated City Attorney's Statement
5. City of Bismarck Ordinance
6. Local Limits Development Document
7. Industrial Sewer Use Permit Application
8. Industrial Waste Permit
9. Self Monitoring Report
10. Discharge Monitoring Report Checklist
11. Sampler Set Up Instructions
- 12 & 13. Sampling Report Form and Sample Transfer Register
14. Laboratory Report Form
15. Inspection Form
16. Pretreatment Violation Log
17. Hauled Wastewater Acceptance Memo
18. Hauled Wastewater Log Sheet