# **Knoxville Utilities Board**

# **Industrial Wastewater Discharge Permit**

Permit No: xxxxxx

In accordance with all terms and conditions of the Rules and Regulations of the Wastewater Division of the Knoxville Utilities Board (KUB), including the Industrial Pretreatment Program and accompanying Enforcement Response Guide (the "Rules and Regulations"), this permit, and any applicable provisions of Federal, State, or local law, rule, or regulation;

Authorization Is Hereby Granted To:

Industry Name Industry Address Knoxville, TN xxxxx

Contact: xxxxxx Telephone: xxxxxx NAICS No: xxxxxx Industry Category: xxxxxx

Industry Description: Insert Industry Description

To discharge into the KUB wastewater collection system at this location in accordance with effluent limitations, monitoring requirements, and other conditions or requirements set forth in this permit.

This Permit shall become effective on \_\_\_\_\_, **xxxx** This permit and the authorization to discharge shall expire at midnight, **xxxx**.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, xxxx.

Debbie G. Ailey Laboratory Services & Regulatory Compliance

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#### A. MONITORING REQUIREMENTS

#### 1. Sampling Location

When required by KUB, the owner of any property served by a building or plant sewer or sewers carrying commercial or industrial wastes shall install a suitable manhole to facilitate observation, sampling, and measurement of the combined wastes and/or process waste as required from the premises. Such manhole, or other appurtenance where a representative sample can be taken shall be:

- a. Accessibly and safely located
- b. Constructed in accordance with plans approved in writing by KUB
- c. Installed by the owner at his expense
- d. Maintained by the owner so as to be safe and accessible at all times
- 2. Sampling Methods

Based on the sampling method given for each pollutant listed on the effluent limit table provided with this permit, the following methods may be used:

a. Grab samples

An individual sample taken from a wastestream without regard to the flow in the wastestream and collected over a period of time not exceeding fifteen (15) minutes, and must be representative of the discharge. The samples must be maintained at  $\leq 6^{\circ}$  Celsius and/or preserved as specified in 40 CFR Part 136. Grab samples should be used for instantaneous limitations, homogenous batch discharges, and pollutants subject to degradation (i.e. total oil and grease, petroleum grease, pH, cyanide, phenols, sulfides, and volatile organic compounds). If multiple grab samples are composited prior to analysis, appropriate EPA guidance must be used. For cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease the samples must be composited in the laboratory.

b. Composite samples

A composite sample is a collection of individual grab samples obtained at regular intervals (collected manually or by use of automatic sampling equipment), either based on time intervals or flow intervals (e.g., every two hours during a 24-hour period or every 1000 gallons of process wastewater produced). Each individual grab sample is either combined with the others or analyzed individually and the results averaged.

Composite samples must be proportioned by flow at the time of sampling, unless timeproportioned composite sampling is authorized by KUB. The samples must be maintained at  $\leq 6^{\circ}$  Celsius and/or preserved as specified in 40 CFR Part 136. The composite sample should be collected over the duration of discharge for a workday. <u>Samples must be</u> <u>representative of the discharge during actual hours of process discharge</u>. If a facility operates and discharges 24-hours per day, then the sample should be taken as a 24-hour composite. If a facility operates 24-hours per day but only discharges wastewater for six hours, a six-hour composite sample should be collected. Samples may be collected automatically or manually grabbed and composited per an approved process. For any composite technique, the volume of each aliquot shall be at least 100 milliliters and total composite volume shall be at least two liters. In no case may a composite sample consist of fewer than four aliquots.

i. Time-Proportional Composite

Time-proportional composite samples are composed of constant volume aliquots collected in one container at constant time intervals (ex. 250 ml aliquots collected every 15 minutes). The time period between aliquots shall not exceed one hour. This method provides representative samples when the process wastewater flow is relatively constant.

- ii. Flow-Proportional Composite (two methods)
  - Constant volume aliquots are collected in one container at frequencies proportional to discharge flow (ex. 250 ml aliquots collected every 1,000 gallons discharged). This is the preferred method using a flow-integrated, automatic sampler.
  - Aliquots with volumes proportional to discharge flow are collected in one container at equal time intervals (ex. Aliquots collected every 30 minutes with the volume of the aliquot increasing as the discharge increases). This is the preferred method for manually composited samples. The time period between aliquots shall not exceed one hour.
- 3. Sample Analysis

Samples shall be analyzed per methods stated in 40 CFR Part 136.

4. Automatic Resampling

If the results of the permittees' wastewater analysis indicates a violation has occurred, the permittee must notify KUB within 24 hours of becoming aware of the violation by calling the Industrial Pretreatment Program at (865) 594-8367 or by email to the Pretreatment Coordinator. This notification must include the parameter which violated and the date and time the sample was taken. A repeat sample and pollutant analysis must be performed and the results of the analysis be submitted, in writing, within 30 days after becoming aware of the violation. Where KUB has performed the sampling and analysis in lieu of the industrial user, KUB must perform the repeat sampling and analysis.

5. Continuous pH Monitoring

Any requirement for continuous pH monitoring will be evaluated as follows: The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month. No individual excursion from the range of pH values shall exceed 60 minutes. In the event that a continuous pH meter fails or is inoperable, the industry must perform the pH analysis using an approved method listed in 40 CFR Part 136 once per day until the continuous meter is operational. If any pH value falls out of the permitted range, pH must be analyzed every hour until the value is documented to be within the permitted range for two consecutive hours. All pH values and an explanation of the event must be reported on the monthly monitoring report.

- 6. Effluent Limit Calculations and Best Management Practices
  - a. Local Limits Local limits are specific prohibitions or limits on pollutant parameters developed in accordance with State law. A user may not introduce into a wastewater facility pollutants that will cause *Pass Through* or *Interference* as defined in KUB's Wastewater Rules and Regulations.
  - b. Categorical Limits Categorical Limits are on the process only unless the Combined Waste Formula (CWF) was used to calculate a limit based upon all the waste streams to the sanitary sewer. Therefore, in some cases two sampling points are required. In other cases, the same stream can be used for both purposes – when there is no significant difference in flow between the sampled stream and the combined total streams.
  - c. Best Management Practices In cases where the pretreatment standard requires compliance with a Best Management Practice (or pollution prevention alternative), the *user* shall submit documentation required by *KUB* to determine the user's compliance status. In case where an industrial discharge permit requires compliance with a Best Management Practice or pollution prevention alternative, the *user* must submit reports based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in 40 CFR Part 136 and amendments thereto to determine the user's compliance status.
- 7. Dilution

No 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. KUB may impose mass limits on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when imposition of mass limits is appropriate.

#### B. REPORTING REQUIREMENTS

1. Periodic Compliance Reporting

All industrial users subject to the Pretreatment Standards must submit to KUB a Periodic Compliance Report by the 10th day of the month following sample collection unless instructed otherwise by KUB. Any requirement for continuous monitoring also requires a report by the 10th day of the following month. The reports shall be signed by a duly authorized representative as defined in 40 CFR Part 403.12(I). Each Periodic Compliance Report shall include the following:

- a. The precise nature and concentrations of the regulated pollutants in its discharge
- b. The average and maximum daily flow rates of the facility where required
- c. The methods used by the indirect discharger to sample and analyze the data
- d. A certification that these methods conformed to those methods outlined in the regulations. See 40 CFR Part 403.12; 40 CFR Part 136.
- e. A copy of each sample's chain of custody and laboratory report showing sample collection date and analysis results.

- f. In cases where the pretreatment standard or KUB requires compliance with a Best Management Practice (or pollution prevention alternative), for KUB to determine compliance status, the industrial user shall submit reports or documentation required by KUB. The reports should be based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in 40 CFR Part 136 and amendments thereto. Sampling and analysis may be performed by KUB in lieu of the industrial user. For additional reporting requirements required to comply with Best Management Practices, see section D.2.
- 2. Extra Sampling

If an *industrial user* subject to the reporting requirement in Tennessee Rule 0400-4-14-.12(7)(f) monitors any *pollutant* more frequently than required by *KUB*, using the procedures prescribed in paragraph (g)(5) of 40 CFR Part 403.12, the results of this monitoring shall be included in the industry's self-monitoring report.

Routine monitoring required by KUB is outlined in the Effluent Limit Table of this permit. In addition to this routine monitoring and the requirements found in section A.4, if an *industrial user* continues to be in non-compliance, additional routine monitoring may be required. These additional requirements will be communicated to the industry by KUB in a "Notice of Non-compliance" or "Notice of Violation". All additional monitoring must be included in the industry's self-monitoring report.

3. Report Forms

Copies of the recommended forms will be delivered for your use. If a different report format is desired, please submit it to KUB for approval.

4. Signatory Requirement

The reports required in this section shall include the following certification statement as set forth in 40 CFR Part 403.6(a)(2)(ii):

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.

and shall be signed as follows:

- a. By a responsible corporate officer, if the *industrial user* submitting the reports required by paragraphs (b), (d) and (e) of 40 CFR Part 403.12 is a corporation. For the purpose of this paragraph, a responsible corporate officer means:
  - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

- ii. A manager of one or more manufacturing, production, or operation facilities, provided, the manager is authorized to make management decisions which 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 control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. By a general partner or proprietor if the *industrial user* submitting the reports required by paragraphs (b), (d) and (e) of 40 CFR Part 403.12 is a partnership or sole proprietorship respectively.
- c. By a duly authorized representative of the individual designated above if:
  - i. The authorization is made in writing by this individual;

ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

- iii. The written authorization is submitted to KUB.
- d. If an authorization 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 authorization satisfying the requirements of this section must be submitted to KUB prior to or together with any reports to be signed by an authorized representative.
- 5. Notification of Hazardous Discharge

The industrial user shall notify KUB, the Environmental Protection Agency (EPA) Regional Waste Management Division Director, and State hazardous waste authorities in writing of any discharge into KUB's wastewater system of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of such waste per calendar month to KUB, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of such constituents in the waste stream discharged during that calendar month, and an estimation of the mass of constituents in the waste stream expected to be discharged during the following 12 months. See 40 CFR Part 403.12(p). The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements of this permit.

In the case of new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the industrial user must

notify KUB, the EPA Regional Waste Management Division Director, and State hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.

6. Notification of Changed Discharge

All industrial users shall promptly notify KUB in writing in advance of any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the industrial user has submitted initial notification as stated above.

7. Where to send reports

Compliance reports and other permit-related information must be mailed with original signatures. Emails and faxes may only be sent to meet the reporting deadline of the 10<sup>th</sup> day of the following month and must be immediately followed by a hard copy with an original signature.

KUB Regulatory Compliance Attn: Industrial Pretreatment Program Coordinator (Mailstop - JK16)

PO BOX 59017 Knoxville, TN 37950

or

835 East Jackson Ave. Knoxville, TN 37915

Fax number (865) 594-8316

- C. STANDARD CONDITIONS
  - 1. Record Keeping

Any industrial user required by this permit to conduct monitoring on their waste stream, or that monitors any pollutant more frequently than required by KUB, shall maintain records of all information resulting from any such monitoring activities. Such records shall include the following monitoring information for all samples:

- a. A chain of custody containing the date, exact place, method, time of sampling, and the names of the persons taking the samples
- b. The dates analyses were performed
- c. The certified laboratory that performed the analyses
- d. The analytical techniques/methods used. All sampling and analysis required by this permit shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.
- e. The results of such analyses.
- 2. Records Retention

Industrial users shall be required to retain for a minimum of three (3) years any records, reports, and/or results of monitoring (whether or not such monitoring activities are required by this permit) required by these rules (including documentation associated with Best Management Practices) and shall make such records available for inspection and copying by KUB, the State, or EPA. This period of retention shall be extended during the course of any unresolved litigation regarding the industrial user or when requested by KUB, the State, or the EPA.

3. Inspection and Entry

KUB's identified representatives and employees shall be granted all necessary access to the customer's premises at all times for the purpose of reading meters, testing, inspecting, repairing, removing, and replacing all equipment belonging to KUB, and for inspecting customer's plumbing and premises generally in order to determine compliance with KUB's Wastewater Rules and Regulations. Inspections may be made at unannounced times.

- 4. Enforcement Responses for Violations of Rules, Permit Conditions or Order
  - a. Any person who is in noncompliance and/or violates any provision of KUB's Wastewater Rules and Regulations, these permit conditions, or a compliance order shall be subject to an enforcement response, including but not limited to a civil penalty in an amount not to exceed ten thousand (\$10,000) dollars per offense, the possibility of water and/or wastewater service termination. Civil penalties or termination of water and/or wastewater service may be appealed in accordance with Section XV of KUB's Wastewater Rules and Regulations. The following situations are subject to an enforcement response by KUB:
    - i. Unpermitted discharge;
    - ii. Non-permitted discharge (permit required);
    - iii. Exceedance of Local or Federal Standard Permit Limit
    - iv. Failure to complete or failure to properly complete a filing or report requirement;
    - v. Failure to perform or properly perform any required monitoring and/or failure to properly report any required monitoring;
    - vi. Improper sampling
    - vii. Failure to install monitoring equipment
    - viii. Missing a milestone in a compliance schedule and/or violation of a final order or determination of KUB's Chief Operating Officer
    - ix. Denial of site visits by KUB employees or representatives for sampling or inspection.
    - x. Dilution of wastestreams in lieu of treatment
    - xi. Failure to mitigate noncompliance or halt production
    - xii. Failure to properly operate and maintain pretreatment facility
    - xiii. Illegal discharges
    - xiv. Failure to sample properly
    - xv. Inadequate record keeping
    - xvi. Failure to report any monitoring conducted in addition to permit requirements
  - b. Each separate violation shall constitute a separate offense, and each day of violation shall constitute a separate offense.
- 5. Significant Noncompliance
  - a. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by state rules;
  - b. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a sixmonth period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, as defined by state rules multiplied by the

applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH). TRC calculations for pH are not required by this rule.

- c. Any other violation of a pretreatment standard or requirement as defined by state rules (daily maximum, long-term average, instantaneous limit, or narrative standard) that KUB determines has caused, alone or in combination with other discharges, interference or pass through (including but not limited to endangering the health of KUB personnel or the general public);
- d. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the KUB's exercise of its emergency authority under section IV of KUB's Wastewater Rules and Regulations Appendix A, "Dangerous Discharge Reports," to halt or prevent such a discharge;
- e. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
- f. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- g. Failure to accurately report noncompliance;
- h. Any other violation or group of violations, which may include a violation of Best Management Practices, which *KUB* determines, will adversely affect the operation or implementation of KUB's Wastewater Rules and Regulations Appendix A.
- 6. Provisions Governing Fraud and False Statements
  - a. The reports and other documents required to be submitted or maintained under these rules shall be subject to:
  - b. The provisions of 18 U.S.C. Section 1001 relating to fraud and false statements
  - c. The provisions of Sections 309(c)(4) of the Federal Clean Water Act, as amended, governing false statements, representation of certification
  - d. The provisions of Section 309(c)(6) regarding responsible corporate officers.
- 7. Limitation on Permit Transfer

Wastewater discharge permits are issued to a specific user for a specific operation. If a transfer of ownership occurs, a copy of the permit must be provided to the new owner or operator. A wastewater discharge permit shall not be reassigned, transferred, or sold to a new owner, new user, or for different premises, unless approved by KUB. If the transfer is approved by KUB, the new owner, however, must execute a new Acknowledgement of Receipt.

8. Permit Expiration/Renewal

Prior to permit expiration an "Industrial Waste Survey and Permit Application Form" (IWS) will be mailed to your organization. It must be completed and returned by the due date. Failure to complete and return the IWS is a reporting violation. After thirty (30) days past the due date, your permit renewal can be denied. After forty-five (45) days past the due date, the water service can be terminated.

9. Prohibited Discharges

A user may not discharge any pollutant(s) which cause pass through or interference. These prohibitions apply to each industrial user discharging pollutants whether or not the user is

subject to other National Pretreatment Standards or any, national, State, or local pretreatment requirements. Notwithstanding discharges that are prohibited by other provisions of the Rules and Regulations and applicable federal, state and local laws and regulations, no user shall discharge or cause to be discharged to a sanitary sewer any of the following described substance materials, water or wastes:

- a. Any gasoline, benzene, naphtha, fuel oil or mineral oil, or other flammable or explosive liquid, solids or gas. *Pollutants* which create a fire or explosion hazard in the *POTW*, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Celsius using the test methods specified in 40 CFR Part 261.21.
- b. Any waters or wastes, acid or alkaline in reaction, or having corrosive properties capable of causing damage or hazard to structures, equipment and personnel of the wastewater system. Free acids and alkalis of such wastes must be neutralized at all times to a pH within the local limits of the plant receiving the discharge. This includes pollutants which will cause corrosive structural damage to the treatment plant or collection system, but in no case discharges with pH lower than 5.0.
- c. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, hair and fleshings, entrails, lime slurry, lime residues, beer or distillery slops, chemical residues, paint residues, cannery waste bulk solids, grease and oil or other solid or viscous substances capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the POTW.
- d. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the treatment plant and/or collection system.
- e. Heat in the amount, which will inhibit biological activity in the treatment plant or result in interference, but in no case heat in such quantities that the temperature at the treatment plant's influent exceeds one hundred (100) degrees Fahrenheit (thirty-seven (37) degrees Celsius).
- f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
- g. A user may not introduce into the POTW any pollutants, which will cause a toxic pass through or interference or result in the presence of toxic gases, vapors, or fumes within the treatment plant or collection system in a quantity that may cause acute worker health and safety problems.
- h. Any trucked or hauled pollutants, except at discharge points designated by KUB.
- i. Any material in violation of the customer's pretreatment permit or authorization issued by KUB.

#### 10. Slug Discharge Plan

A "Slug Discharge Control Plan" (SDCP) is required by 40 CFR Part 403 and may be re-evaluated by KUB at any time, but in no case less frequently than every two (2) years.

A slug is defined as 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 KUB's regulations, local limits or permit conditions. The results of such activities shall be available to the State of Tennessee upon request. *Significant Industrial Users* are required to notify KUB immediately of any changes at its facility affecting potential for a *slug* discharge. A slug discharge control plan is necessary and should contain, at a minimum, the following elements:

a. Description of discharge practices, including non-routine batch discharges

- b. Description of stored chemicals
- c. Procedures for immediately notifying KUB of slug discharges, including any discharge that would violate a specific prohibition listed under Standard Conditions, Section 9 of this permit, , with procedures for follow-up written notification within five (5) days
- d. 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 run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response
- e. Follow-up practices to limit the damage suffered by KUB's collection system and wastewater treatment plant or the environment
- f. A notice shall be permanently posted on the user's bulletin board, or other prominent place, advising employees to call the KUB Wastewater Plant Operations immediately at (865) 594-7622 and the Pretreatment Program Coordinator at (865) 594-8367 in the event of a dangerous discharge. Employers shall ensure that all employees who may cause or suffer such a dangerous discharge to occur are advised of the emergency notification procedure.

Any person causing or suffering any discharge, whether accidental or not, which presents or may present an imminent or substantial endangerment to the health and welfare of persons, to the environment, or which is likely to cause interference with or damage to KUB, shall notify KUB Wastewater Plant Operations immediately by telephone at (865) 594-7622 and the Pretreatment Program Coordinator at (865) 594-8367. The industrial user shall notify KUB immediately by telephone of any slug loading.

- g. Within five (5) days following such occurrence, the user shall provide KUB with a detailed written report describing the cause of the dangerous discharge and 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 may be incurred as a result of damage to KUB, fish kills, or any other damage to person or property; nor shall such notification relieve the user of any fines, civil penalties, or other liability which may be imposed by KUB's Wastewater Rules and Regulations, this permit, or applicable federal, state, or local law, rule, or regulation.
- 11. New Construction or Addition of Facilities

All commercial or industrial users of the wastewater facilities who elect or are required to construct new or additional facilities for pretreatment, equalization, or other process necessary for compliance with the provisions of this article shall submit plans, specifications, and other pertinent information relative to the proposed construction to KUB for approval. Plans and specifications submitted for approval must bear the seal of a registered (in Tennessee) professional engineer if significant construction. Written approval of KUB must be obtained before construction of new or additional facilities may begin. The plans, specifications, and other pertinent information submitted to KUB for approval will be retained as file material for future reference.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Permit Modification

- a. This permit may be modified for good causes including, but not limited to, the following:
  - i. To incorporate any new or revised Federal, State or local pretreatment standards, rules, regulations or requirements
  - ii. Material or substantial alterations or additions to the discharger's operational processes, or discharge volume or character which were not considered in drafting the effective permit
  - iii. A change in any condition in either the industrial user or at KUB that requires either a temporary or permanent reduction or elimination of the authorized discharge
  - iv. Information indicating that the permitted discharge poses a threat to KUB's collection and treatment systems, personnel or the receiving waters
  - v. Violation of any terms or conditions of this permit
  - vi. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting
  - vii. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR Part 403.13
  - viii. To correct typographical or other errors in the permit
  - ix. To reflect transfer of the facility ownership and/or operation to a new owner/operator
  - x. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws or rules and regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changed or anticipated noncompliance does not stay any permit conditions.

## 14. Pretreatment Bypass

- a. Definitions
  - i. Bypass means the intentional diversion of waste streams from any portion of an industrial user's treatment facility.
  - ii. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass Not Violating Applicable Pretreatment Standards or Requirements
  - i. An industrial user may allow any bypass to occur which does not cause Pretreatment Standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (c) and (d) of this section
- c. Notice
  - i. If an industrial user knows in advance of the need for a bypass, it shall submit prior notice to KUB, if possible at least ten (10) days before the date of the bypass.
  - ii. An industrial user shall submit oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to KUB within 24 hours from the time the user becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the user becomes aware of the bypass. The written

submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. KUB may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- d. Prohibition of Bypass
  - i. Bypass is prohibited, and KUB may take enforcement action against an industrial user for a bypass, unless;
    - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage
    - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance
    - 3. The industrial user submitted notices as required under paragraph (c) of this section.
- e. KUB may approve an anticipated bypass, after considering its adverse effects, if KUB determines that it will meet the three conditions listed in paragraph (d) of this section.

# D. BEST MANAGEMENT PRACTICES

Best Management Practices (BMPs) are defined in 40 CFR Part 122.2 as scheduled activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollution. BMPs can also include treatment requirements, operating procedures, sludge or waste disposal, or drainage from raw material storage, and practices to control plant site runoff, spillage, or leaks. Federal, State, and KUB rules now allow BMPs to be enforceable as local limits, as an alternative to numerical limits, or as a supplement to local limits. As such, the following BMPs shall be enforceable per KUB's Wastewater Rules and Regulations and the Industrial Pretreatment Program Enforcement Response Guide.

If your facility has specific requirements for Best Management Practices or pollution prevention alternatives, they will be listed in this section.

- 1. Industry-Specific Best Management Practices (Will Vary Depending on Type of Industry)
- 2. Reporting Requirements for Best Management Practices -(Will Vary Depending on Type of Industry)

Page for Map of Industry and Sampling Location

# Sample Effluent Limit Table Industry Name and Address

## Permit Number xxxxxx

The Following Limits and Parameters Will Vary Depending on the Type of Industry

| Pollutant <sup>1</sup>             | Daily<br>Limits | Monthly<br>Limits | Sampling<br>Frequency <sup>2</sup>                           | Sample<br>Type | Rationale                       |
|------------------------------------|-----------------|-------------------|--|----------------|---------------------------------|
|                                    | mg/l            |                   |  |                | (Categorical or<br>local limit) |
| BENZENE                            | 0.109           | 0.109             | Not Required   |                | Local Limit                     |
| CADMIUM                            | 0.276           | 0.276             | 1 / month  | Composite      | Local Limit                     |
| CARBON TETRACHLORIDE               | 0.367           | 0.367             | Not Required   |                | Local Limit                     |
| CHLOROFORM                         | 0.155           | 0.155             | Not Required   |                | Local Limit                     |
| CHROMIUM                           | 3.469           | 3.469             | 1 / month  | Composite      | Local Limit                     |
| COPPER                             | 4.192           | 4.192             | 1 / month  | Composite      | Local Limit                     |
| CYANIDE                            | 0.622           | 0.622             | Not Required   |                | Local Limit                     |
| ETHYL BENZENE                      | 0.335           | 0.335             | Not Required   |                | Local Limit                     |
| FLOW                               |                 |                   | Measured or<br>estimated daily,<br>report following<br>month | NA             |                                 |
| LEAD                               | 1.950           | 1.950             | 1 / month  | Composite      | Local Limit                     |
| LEL (<%)                           | 5.000           | 5.000             | Not Required   |                | Local Limit                     |
| MERCURY                            | 0.014           | 0.014             | Not Required   |                | Local Limit                     |
| METHYLENE CHLORIDE                 | 0.806           | 0.806             | Not Required   |                | Local Limit                     |
| NAPHTHALENE                        | 0.105           | 0.105             | Not Required   |                | Local Limit                     |
| NICKEL                             | 2.286           | 2.286             | 1 / month  | Composite      | Local Limit                     |
| NITRITE                            | 5.000           | 5.000             | Not Required   |                | Local Limit                     |
| OIL AND GREASE, Total <sup>3</sup> | 100             | 100               | 1 / day  | Grab           | Local Limit                     |
| PETROLEUM GREASE <sup>3</sup>      | 50              | 50                | 1 / day  | Grab           | Local Limit                     |
| pH (SU) Max.                       | 5.5             | 11.0              | 1 / day  | Grab           | Local Limit                     |
| PHENOLS                            | 3.811           | 3.811             | Not Required   |                | Local Limit                     |
| SILVER                             | 0.247           | 0.247             | 1 / month  | Composite      | Local Limit                     |
| T-1,2 DICHLOROETHENE               | 0.063           | 0.063             | Not Required   |                | Local Limit                     |
| TETRACHLOROETHENE                  | 1.164           | 1.164             | Not Required   |                | Local Limit                     |
| TOLUENE                            | 1.796           | 1.796             | Not Required   |                | Local Limit                     |
| TOTAL PHTHALATES                   | 3.605           | 3.605             | Not Required   |                | Local Limit                     |
| TPH (Sum of GRO and DRO analyses)  | 10.000          | 10.000            | Not Required   |                | Local Limit                     |
| TRICHLOROETHANE-1,1,1              | 2.096           | 2.096             | Not Required   |                | Local Limit                     |
| TRICHLOROETHENE                    | 0.107           | 0.107             | Not Required   |                | Local Limit                     |
| ZINC                               | 5.742           | 5.742             | 1 / month  | Composite      | Local Limit                     |

1 - Pollutants for which monitoring is not required must still comply with KUB's Local Limits.

2 - Semi-Annual Periods are April-September and October-March. Your facility is encouraged to collect samples often in the required monitoring period and always allow time for additional sampling in the event of a violation. Hard copy reports for required monitoring with original signed certification statements must be delivered to KUB by the 10<sup>th</sup> day of the month following any sample collection or monitoring.

3 - Total Oil and Grease and Petroleum Grease must be analyzed on the same sample. Petroleum Grease is only required when Total Oil and Grease is greater than or equal to 50 mg/l.

# ACKNOWLEDGEMENT OF RECEIPT

I, \_\_\_\_\_, of

Industry Name Industry Address Knoxville, TN xxxxx

Being duly authorized to sign this document, do hereby acknowledge receipt of the final Industrial Wastewater Discharge Permit for the referenced facility and have reviewed the permit with a KUB representative.

I understand that it is my duty to comply with all provisions of this permit and KUB's Rules and Regulations, including general discharge prohibitions. It is also my duty to comply with all applicable Federal and State pretreatment standards including those that become effective during the term of this permit and that compliance with this permit is not a defense for violation of applicable Federal and State pretreatment standards.

Any addition or change to a process or operation must be presented to KUB for approval prior to commencing discharge from the added or changed process or operation.

Additionally, it has been explained to me that the above facility is regulated under the provisions of the Rules and Regulations of the Knoxville Utilities Board and that the Knoxville Utilities Board can take enforcement actions, up to and including termination of service for violation of such Rules and Regulations and/or the terms of this permit.

Signed this \_\_\_\_\_day of \_\_\_\_\_, xxxx.

(Signature)

(Title)