

**STATEMENT OF BASIS
CHEVRON
UPDES PERMIT NUMBER: UT0000175
RENEWAL PERMIT
MAJOR INDUSTRIAL**

FACILITY CONTACTS

| | | | |
|--------------|------------------|--------------|---------------------------|
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| Position: | Refinery Manager | Position: | Environmental Team Leader |
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Facility Name: Chevron Products Company
Mailing Address: Division of Chevron U.S.A.
2351 North 1100 West
Salt Lake City, Utah 84116

Facility Address: 2351 North 1100 West
Salt Lake City, Utah

DESCRIPTION OF FACILITY

Chevron is a petroleum refinery facility located at 2351 North 1100 West, Salt Lake City. It has a Standard Industrial Classification (SIC) code 2911, for petroleum refining.

The wastewater treatment system (WWTS) currently consists of a wastewater collection box, three surge tanks, two induced air flotation (IAF) units, two equalization tanks, ten submerged biological contactors (SBCs), eight rotating biological contactors (RBCs), two clarifiers, an aerobic sludge digester, auxiliary filters and an effluent weir box. The following are considered auxiliary equipment: two of the three surge tanks, one of the two equalization tanks, one of the two IAF units, one of the biological contactors in each stage, and one of the two clarifiers and the auxiliary filters. The auxiliary pieces of equipment may be offline at any given time or on stand-by if needed for surges in operation. Wastewater from the lime pond, which contains no petroleum or organic compounds, is routed directly to the final clarifiers.

All refinery wastewater is fed to the collection box at the beginning of the WWTS, with the exclusion of lime pond water. The water is then pumped to one of the three surge tanks. The process wastewater fluctuates on a normal basis; the surge tank controls the flow rates through the WWTS. Initial oil-water separation takes place in the surge tanks. The oil skimmed from the top of the surge tanks is sent to the recovered oil tank to be recycled through the refinery. Sludge, which is collected at the bottom of the surge tanks, is periodically removed. The sludge removed from the surge tanks is dewatered and shipped offsite for incineration or other allowed treatment. The sludge which is collected from the surge tank is an F037-listed hazardous waste.

The wastewater is then directed to the IAF for additional removal of oil. In the IAF a polymer is added to aid in the separation process by binding to the oil and helping to break emulsions. The polymer-oil floats to the top and is skimmed off and sent to a tank where it is recycled to the coker. The units are in parallel, Chevron typically operates the IAF with only one in service at a time. This insures the WWTS does not have to shut down when one IAF is shut down due to maintenance.

After the IAF unit the wastewater flows to one of the two equalization tanks. The on-line tank is designed to allow the wastewater to mix and equalize water quality, thus lessening the impact of changing water quality on the downstream biological treatment units. Phosphoric acid is added to the wastewater stream as a nutrient to promote activity and growth in the biosystem downstream. These tanks also provide additional surge capacity for the WWTS and can be operated in series, parallel or individually.

The biological treatment portion of the WWTS consists of four stages of biological contactors. The first stage consists of six submerged biological contactors (SBCs) in parallel, and Stage Two consists of four SBC's in parallel. The SBCs are rotated by air blowers which provide oxygen to the microorganisms. The primary function of the SBCs is to remove carbonaceous biochemical oxygen demand (CBOD) from the wastewater. Stage Three consists of four rotating biological contactors (RBCs) in parallel, and Stage Four consists of four RBCs in parallel. These RBCs act to reduce the remaining hydrocarbon and due to low hydrocarbon levels, nitrifying bacteria remove ammonia from the wastewater, the remaining ammonia is reported on the discharge monitoring reports (DMRs). One SBC and RBC in each stage is considered auxiliary equipment.

After biological treatment, the wastewater is sent to a splitter box where the flow is divided and routed in equal portions to the two clarifiers which typically operate in parallel. Lime water, which comes from the alkylation east pit and includes alkylation plant storm water and lime sludge from the KOH regenerator, is added to the wastewater at this point. The lime pond water is fed to the clarifiers because these streams do not come into contact with oils or organics. Sending the lime pond water to the biological treatment stage of the WWTS would adversely affect the microorganisms and needlessly reduce residence time and treatment efficiency in upstream equipment. The clarifiers remove suspended solids, which consist primarily of microorganisms that fall off of the biological contactors. These solids sink to the bottom and are removed and sent to the sludge digester. Sludge from the digester is periodically removed and disposed of off site as a non-hazardous waste.

The wastewater leaving the clarifier goes through another splitter box that under normal conditions routes the wastewater to the outfall. If the wastewater requires any additional treatment, it may be routed through a gravity sand filter as an auxiliary treatment before going to the outfall so that permit conditions are met. When discharged to the outfall the wastewater passes through an effluent weir box which records the flow rate. The wastewater is discharged to the Northwest Oil Drain Canal.

Over the life of this permit the refinery will consider and may construct several units of equipment which will either replace or upgrade certain units of equipment. The replacement or upgrade of units of equipment is not expected to have a significant impact on either the volume or quality of the effluent. If Chevron plans to construct equipment which will significantly change the nature or increase the quantity of pollutants discharged, Chevron will provide the appropriate information to the Division of Water Quality.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

The effluent limits are based on categorical limits and secondary water quality standards. Due to recalculation of the production based limits, the limits have been recalculated to reflect the current production rates at the Chevron Refinery.

As part of the renewal process, Chevron has completed and submitted an Effluent Screening Report to determine if additional effluent limits are needed to protect the beneficial use of the receiving water. This document is included in Addendum 1. The report demonstrates that the effluent from this facility will not cause or contribute to a violation of water quality standards. Therefore, the effluent limits in the renewal permit are the same as in the previous permit. However, additional data is needed to address uncertainties associated with selenium and ammonia concentrations in the Northwest Oil Drain Canal and to further delineate the mercury and ammonia concentrations in the effluent. Therefore, the renewal permit contains a study requirement with a time table to collect flow, ammonia and selenium data in the Northwest Oil Drain Canal as well as a requirement for three times weekly ammonia monitoring of the effluent.

DESCRIPTION OF DISCHARGE

The WWTS treats all process water from the refinery and marketing operations. Also sent to the WWTS are the following: Storm water from the refinery and marketing areas, wastewater from groundwater remediation and monitoring wells, and Chevron pipeline pump station wastewater. In addition, the following waste streams may occasionally be treated by the WWTS: hydrostatic test and maintenance water from storage tanks and pipelines (onsite or offsite), well purge water from groundwater monitoring wells, Storm water from construction and run-off from BOC hydrogen plant on the Chevron property, water from cleaning of process unit equipment, and naturally occurring artesian spring water from the Bonneville Spring. Under normal conditions the Bonneville Spring water, which flows 30 to 50 gallons per minute, is pumped to a wetlands area on Chevron's property. If the pump malfunctions, spring water may enter the storm water system and get routed through the WWTS while the pump is being repaired.

Outfall **Description of Discharge Point**

001 Located at latitude 40°49'29" and longitude 111°55'48". Consists of discharge from a biological/mechanical system. Discharges into the Northwest Oil Drain Canal at approximately 1 MGD.

RECEIVING WATERS AND STREAM CLASSIFICATION

The discharge flows into the Northwest Oil Drain Canal and eventually into the Great Salt Lake. The Northwest Oil Drain Canal is classified as 2B and 3E, and the Great Salt Lake is Class 5, according to *Utah Administrative Code (UAC) R317-2-13*, as follows:

Class 2B Protected for infrequent primary and secondary contact recreation.

Class 3E Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

Class 5 The Great Salt Lake. Protected for primary and secondary contact recreation, aquatic wildlife, and mineral extraction.

BASIS FOR EFFLUENT LIMITATIONS

The Chevron Facility meets the applicability of the Petroleum Refining, found in *40 CFR 419*. Chevron is categorized into the Subpart B-Cracking Subcategory. There are three categories of limitations promulgated: 1) Best Practicable Control Technology Currently Available (BPT); 2) Best Available Technology Economically Achievable (BAT); 3) and Best Conventional Pollutant Control Technology (BCT). Effluent mass limitations were calculated for each technology and the most stringent were selected.

The effluent concentration limits are based on current Utah Secondary Treatment requirements, *UAC R317-1-3.2*. Wasteload Analysis (see ADDENDUM) indicates that these limitations should be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters.

Based on effluent monitoring data and the existing treatment facility, the permittee is expected to be able to comply with the limitations.

Limitations for pH and the concentration limits for total suspended solids (TSS) and biochemical oxygen demand (BOD₅) are based on current Utah Secondary Treatment Standards, *UAC R317-1-3.2*. Mass limitations on BOD₅, TSS, oil and grease, COD, phenolic compounds, ammonia, sulfide, total and hexavalent chromium are based upon calculation found in *40 CFR 419* Petroleum Refining Point Source Category (see ADDENDUM). The permit effluent limitations are:

Effluent Mass and Concentration Limitations

| Parameter | 30 Day Average mg/L | 7 Day Average mg/L | 30 Day Average lbs/day | Daily Maximum lbs/day |
|---------------------|------------------------|-----------------------|---------------------------|--------------------------|
| BOD ₅ | 25 | 35 | 279 | 502 |
| TSS | 25 | 35 | 224 | 350 |
| COD | N.A. | N.A. | 1941 | 3757 |
| Oil & Grease | N.A. | N.A. | 81.6 | 154 |
| Phenolic Compounds | N.A. | N.A. | 1.82 | 3.74 |
| Ammonia | N.A. | N.A. | 133 | 293 |
| Sulfide | N.A. | N.A. | 1.29 | 2.89 |
| Total Chromium | N.A. | N.A. | 2.72 | 7.60 |
| Hexavalent Chromium | N.A. | N.A. | 0.24 | 0.53 |

N.A. – Not Applicable.

The pH of the discharge shall not be less than 6.5 nor greater than 9.0 standard units in any sample.

SELF-MONITORING AND REPORTING REQUIREMENTS

The following effluent self-monitoring and reporting requirements are the same as those in the previous permit. Reports shall be made on DMR forms and are due 28 days after the end of the month or quarter, as applicable. Lab sheets for biomonitoring must be attached to the biomonitoring DMR.

Self-Monitoring and Reporting Requirements

| <u>Parameter</u> | <u>Frequency</u> | <u>Sample Type</u> | <u>Units</u> |
|---------------------|------------------|--------------------|---------------|
| Total Flow (a) | Continuous | Recorder | MGD |
| BOD ₅ | Weekly | Grab | mg/L, lbs/day |
| TSS | Weekly | Grab | mg/L, lbs/day |
| Oil & Grease | Monthly | Grab | lbs/day |
| pH | Weekly | Grab | S.U. |
| COD | Weekly | Grab | lbs/day |
| Phenolic Compounds | Weekly | Grab | lbs/day |
| Ammonia | Weekly | Grab | lbs/day |
| Sulfide | Weekly | Grab | lbs/day |
| Total Chromium | (b) | Grab | lbs/day |
| Hexavalent Chromium | (b) | Grab | lbs/day |

- (a) Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- (b) Quarterly monitoring shall commence with the first quarter in which use of chromium is resumed.

SELENIUM, AMMONIA AND FLOW CHARACTERIZATION OF THE NORTHWEST OIL DRAIN CANAL COMPLIANCE SCHEDULE

The review completed for this permit renewal (see MEMORANDUM, attached) identified areas in which DWQ believes additional work is needed to fully address the uncertainties in the selenium and ammonia concentrations and flows of the Northwest Oil Drain Canal.

Therefore, the renewal permit contains a study requirement with a time table to allow Chevron time to develop and submit for DWQ's approval a work plan for the characterization of selenium and ammonia concentrations and in the Northwest Oil Drain Canal. Flow measurements in the Northwest Oil Drain Canal will need to be included in this plan to establish dilution criteria to potentially be used in future permits.

STORM WATER REQUIREMENTS

Chevron is currently required to discharge under the multi sector general permit for storm water discharges. Chevron has been issued a separate Storm water permit and will manage its Storm water in accordance with applicable requirements.

PRETREATMENT REQUIREMENTS

The permittee does not discharge to another wastewater treatment facility, but rather treats and discharges all of the facility's process wastewater. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters

In addition, in accordance with *40 CFR 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 261*. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

BIOMONITORING REQUIREMENTS

In Utah, the nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring)*. Authority to require effluent biomonitoring is provided in *Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3* and *Water Quality Standards, UAC R317-2-5* and *R317-2-7.2*.

A limitation of no acute toxicity will be included in the permit since the permittee is a major discharger. Since the discharge is to a Class 3E stream, there will be no chronic testing or limits at this time. However, the permit will contain a toxicity limitation reopener provision.

PUBLIC NOTICE

The public notice was from October 25, 2014 until November 25, 2014. No comments were received.

PERMIT DURATION

It is recommended that this permit be effective for duration of five (5) years.

Drafted by Jennifer Robinson
Environmental Engineer
Utah Division of Water Quality
June 5, 2014



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

MEMORANDUM

TO: Jennifer Robinson, Permit Writer

FROM: Chris Bittner, Standards Coordinator

DATE: March 18, 2014

SUBJECT: Antidegradation Review for the Chevron Refinery
2014 UPDES Permit UT0021725 Renewal

Summary: Based on the information provided in the Reasonable Potential Analysis (December 26, 2013) submitted by Chevron, the uses designated in R317-2-12 and existing uses of the receiving waters (Northwest Oil Drain Canal → Farmington Bay, Great Salt Lake) will be protected and water quality-based effluent limits are not required (UAC R317-8-4.2(4)a.2.). The collection of additional data from the receiving waters during the effective period of this permit is recommended to reduce the uncertainties regarding this conclusion for ammonia, mercury, and selenium. Additional flow data for the receiving waters is also required to support a determination whether chronic whole effluent toxicity monitoring should be required.

Receiving Waters and Designated Uses (UAC R317-2-12):

Northwest Oil Drain Canal

Class 2B protected for infrequent primary and secondary contact recreation.

Class 3E severely habitat-limited waters. Narrative Standards will be applied to protect these waters for aquatic wildlife

Northwest Oil Drain Canal → Farmington Bay

Class 5D protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain

Level I Antidegradation Review

At the Division of Water Quality's (Division's) request, Chevron prepared and submitted the Reasonable Potential Analysis for the Chevron Salt Lake City refinery (RPA) in support of their permit renewal application. The purpose of this request was twofold: 1) to document that the effluent will not violate water quality standards, and 2) to determine if water quality-based effluent limits are required for the permit. Water quality-based effluent limits are required when the effluent has "reasonable potential" to cause or contribute to a violation of a water quality

standard.

The Level I antidegradation review requirements are that existing uses will be protected (UAC R317-2-3.1). For the affected receiving waters, existing uses are the same as the designated uses. The receiving waters for this effluent do not have numeric water quality criteria for the protection of aquatic life and therefore, R317-8-4.2(4)(a)6 applies:

Where the State has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard the Director will establish effluent limits using one or more of the following options:

- a. Establish effluent limits using a calculated numeric water quality criterion for the pollutant which the Director determines will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. Such a criterion may be derived using a proposed State criterion, or an explicit State policy or rule interpreting its narrative water quality criteria supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents:
- b. Establish effluent limits on a case-by-case basis, using EPA's water quality criteria, published under section 307(a) of the CWA, supplemented where necessary by other relevant information; or
- c. Establish effluent limitations on an indicator parameter for the pollutant of concern.

The screening approach taken was to compare the pollutant concentrations in the effluent to freshwater numeric criteria. If the effluent pollutant concentrations meet freshwater numeric criteria, the conclusion is that the aquatic life uses of the receiving waters will not be impaired. Consistent with a screening process, failure to meet the freshwater criteria is not an indication that the aquatic life uses won't be supported but does indicate that further analysis is needed to make a determination.

As documented in the Screening Report, the effluent from the refinery generally meets acute and chronic freshwater numeric criteria. However, additional data is needed to decrease the uncertainties associated with ammonia concentrations and chronic toxicity. Many unmeasured factors will potentially decrease ammonia concentrations and toxicity. This permit includes a study requirement with a time table to collect data to measure ammonia concentrations in the Northwest Oil Drain Canal prior to reaching Farmington Bay. Should this new data indicate that the uses aren't being supported, the permit will be reopened and modified to that ensure that the uses remain supported.

Previous mercury monitoring has resulted in mercury not being detected but the analytical method detection limits are insufficient to support a reasonable potential determination. Therefore, this

permit should include a time-limited monitoring requirement to collect more data using more sensitive analytical methods.

Limited data was also collected in 2013 from the Northwest Oil Drain Canal for selenium. This data shows that selenium concentrations in the Northwest Oil Drain Canal meet the freshwater chronic numeric criterion prior to Farmington Bay. However, this data is limited in time and may not capture variability in selenium concentrations. Therefore, a compliance schedule requirement should be included for additional characterization of selenium concentrations in the Northwest Oil Drain Canal prior to the confluence with Farmington Bay.

Chevron is required to monitor pollutant concentrations in their effluent. This data supports that observed effluent concentrations are likely representative of future concentrations. Based on this data and the comparison to freshwater numeric criteria, the Division concludes that no pollutants have reasonable potential and water quality-based effluent limits are not required. The self-monitoring and reporting requirements are recommended to be conserved from the previous permit to support future reasonable potential determinations.

Level II Antidegradation Review

In accordance with UAC R317-2-3.5.b.1.(b), a Level II antidegradation review is not required because there is no change to effluent concentrations or loading compared to the previous permit.

WET Testing

Chevron currently conducts acute WET monitoring consistent with Utah's 1991 WET Implementation Guidance. To provide a higher degree of confidence in the conclusion of no adverse impacts to the designated uses, chronic WET monitoring is being considered. Chronic WET testing is conducted using the predicted dilution of the receiving water but these data (flow in Northwest Oil Drain Canal) are currently unavailable. This data should be collected as required by the permit. Based on the outcome of this study, the Division will reevaluate whether acute WET monitoring is sufficiently protective or if chronic WET monitoring should be required.

Daily Maximum Limits

| Pollutants | BPT | BAT | BCT | Previous Permit (lbs/day) | Renewal Limits (lbs/day) |
|-------------------|------------|------------|------------|----------------------------------|---------------------------------|
| BOD | 502 | NA | 502 | 458 | 502 |
| TSS | 350 | NA | 350 | 320 | 350 |
| COD | 3757 | 3757 | NA | 3429 | 3757 |
| Oil & Grease | 154 | NA | 154 | 140 | 154 |
| Phenols | 3.74 | 9.05 | NA | 3.41 | 3.74 |
| Ammonia | 293 | 293 | NA | 264 | 293 |
| Sulfide | 2.89 | 2.89 | NA | 2.6 | 2.89 |
| Tot. Chromium | 7.60 | 7.80 | NA | 6.78 | 7.60 |
| Hex. Chromium | 0.61 | 0.53 | NA | 0.51 | 0.53 |

30 Day Average Limits

| Pollutants | BPT | BAT | BCT | Previous Permit (lbs/day) | Renewal Limits (lbs/day) |
|-------------------|------------|------------|------------|----------------------------------|---------------------------------|
| BOD | 279 | NA | 279 | 254 | 279 |
| TSS | 224 | NA | 224 | 204 | 224 |
| COD | 1941 | 1941 | NA | 1770 | 1941 |
| Oil & Grease | 81.6 | NA | 82 | 74 | 81.6 |
| Phenols | 1.82 | 2.30 | NA | 1.66 | 1.82 |
| Ammonia | 133 | 133 | NA | 120 | 133 |
| Sulfide | 1.29 | 1.29 | NA | 1.16 | 1.29 |
| Tot. Chromium | 4.46 | 2.72 | NA | 2.59 | 2.72 |
| Hex. Chromium | 0.28 | 0.24 | NA | 0.22 | 0.24 |

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

AUTHORIZATION TO DISCHARGE UNDER THE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)

In compliance with provisions of the *Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

CHEVRON PRODUCTS COMPANY

is hereby authorized to discharge from its facility located at Salt Lake City, Utah, with the outfall located at latitude 40°49'29" and longitude 111°55'48", to receiving waters named

the **Northwest Oil Drain Canal**

in accordance with the discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on January 1, 2015.

This permit expires at midnight on December 31, 2019.

Signed this 29 day of December, 2014



Walter L. Baker, P.E.
Director

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Definitions.

1. The "7-day (and weekly) average" is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
2. The "30-day (and monthly) average" is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
3. "Act" means the "Utah Water Quality Act".
4. "Acute toxicity" occurs when 50 percent or more mortality is observed for either test species at any effluent concentration.
5. "Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
6. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
7. "Co-located industrial activity" means when a facility has industrial activities being conducted onsite that are described under more than one of the coverage sections of *Appendix II* in the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity. Facilities with co-located industrial activities shall comply with all applicable monitoring and pollution prevention plan requirements of each section in which a co-located industrial activity is described.
8. "Commercial Treatment and Disposal Facilities" means facilities that receive, on a commercial basis, any produced hazardous waste (not their own) and treat or dispose of those wastes as a service to the generators. Such facilities treating and/or disposing exclusively residential hazardous wastes are not included in this definition.

9. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the composite sample period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous collection of sample, with sample collection rate proportional to flow rate.
10. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
11. "Daily Maximum" ("Daily Max.") is the maximum value allowable in any single sample or instantaneous measurement.
12. "Daily Minimum" ("Daily Min.") is the minimum value allowable in any single sample or instantaneous measurement.
13. "EPA" means the United States Environmental Protection Agency.
14. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.
15. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream. The sample is taken without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.
16. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a *UPDES* permit (other than the *UPDES* permit for discharges from the municipal separate storm sewer) and discharges from fire fighting activities, fire hydrant flushings, potable water sources including waterline flushings, uncontaminated ground water (including dewatering

ground water infiltration), foundation or footing drains where flows are not contaminated with process materials such as solvents, springs, riparian habitats, wetlands, irrigation water, exterior building washdown where there are no chemical or abrasive additives, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used, and air conditioning condensate.

17. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
18. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
19. "Land application unit" means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
20. "NOI" means "notice of intent", it is an application form that is used to obtain coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
21. "NOT" means "notice of termination", it is a form used to terminate coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
22. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agriculture storm water runoff.
23. "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.
24. "Section 313 water priority chemical" means a chemical or chemical categories that:
 - a. Are listed at 40 CFR 372.65 pursuant to Section 313 of the *Emergency Planning and Community Right-to-Know Act (EPCRA)* (also known as *Title III of the Superfund Amendments and Reauthorization Act (SARA)* of 1986);
 - b. Are present at or above threshold levels at a facility subject to *EPCRA Section 313* reporting requirements; and
 - c. Meet at least one of the following criteria:

- (1) Are listed in *Appendix D* of *40 CFR Part 122* on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);
 - (2) Are listed as a hazardous substance pursuant to *Section 311(b)(2)(A)* of the *CWA* at *40 CFR 116.4*; or
 - (3) Are pollutants for which EPA has published acute or chronic water quality criteria. See *Appendix III* of this permit. This appendix was revised based on final rulemaking EPA published in the *Federal Register* November 30, 1994.
25. "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.
26. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under *Section 101(14)* of *CERCLA*; any chemical the facility is required to report pursuant to *EPCRA Section 313*; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
27. "Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311* of the *Clean Water Act* (see *40 CFR 110.10* and *40 CFR 117.21*) or *Section 102* of *CERCLA* (see *40 CFR 302.4*).
28. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.
29. "Storm water associated with industrial activity" (*UAC R317-8-3.8(6)(c) & (d)*) means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the *UPDES* program. For the categories of industries identified in paragraphs (a) through (j) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined in *40 CFR Part 401*); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and

finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (k) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (a) to (k) of this definition) include those facilities designated under *UAC R317-8-3.8(1)(a)5*. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- a. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under *40 CFR Subchapter N* (except facilities with toxic pollutant effluent standards that are exempted under category (k) of this definition);
- b. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;
- c. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under *40 CFR 434.11(l)* because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations that have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but that have an identifiable owner/operator;
- d. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

- e. Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under *Subtitle D* of *RCRA*;
 - f. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
 - g. Steam electric power generating facilities, including coal handling sites;
 - h. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45 and 5171 that have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or that are otherwise identified under paragraphs (a) to (g) or (I) to (k) of this subsection are associated with industrial activity;
 - i. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under *40 CFR Part 403*. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located in the confines of the facility, or areas that are in compliance with *40 CFR Part 503*;
 - j. Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area that are not part of a larger common plan of development or sale;
 - k. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and that are not otherwise included within categories (a) to (j))
30. "SWDMR" means "storm water discharge monitoring report", a report of the results of storm water monitoring required by the permit. The Division of Water Quality provides the storm water discharge monitoring report form.
31. "Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

32. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
33. "Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

B. Description of Discharge Point

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit is a violation of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number

Location of Discharge Point

001

The wastewater is piped west of the refinery, west of the WWTS's last treatment process, the auxiliary filter (polishing treatment if necessary), and directly to the Northwest Oil Drain Canal. The outfall is located at latitude 40°49'29" and longitude 111°55'48".

C. Narrative Standard.

It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.

D. Specific Limitations and Self-monitoring Requirements.

1. Toxicity Limitations for Outfall 001

Effective immediately, and lasting through the life of this permit, there shall be no acute toxicity in the discharge as defined in *Part I*, and determined by test procedures described in *Part I.D.4* of this permit

2. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified:

Effluent Mass and Concentration Limitations

| Parameter | 30 Day Average mg/L | 7 Day Average mg/L | 30 Day Average lbs/day | Daily Maximum lbs/day |
|---------------------|------------------------|-----------------------|---------------------------|-----------------------------|
| BOD ₅ | 25 | 35 | 279 | 502 |
| TSS | 25 | 35 | 224 | 350 |
| COD | N.A. | N.A. | 1941 | 3757 |
| Oil & Grease | N.A. | N.A. | 81.6 | 154 |
| Phenolic Compounds | N.A. | N.A. | 1.82 | 3.74 |
| Ammonia | N.A. | N.A. | 133 | 293 |
| Sulfide | N.A. | N.A. | 1.29 | 2.89 |
| Total Chromium | N.A. | N.A. | 2.72 | 7.60 |
| Hexavalent Chromium | N.A. | N.A. | 0.24 | 0.53 |

Self-Monitoring and Reporting Requirements, a/

| <u>Parameter</u> | <u>Frequency</u> | <u>Sample Type</u> | <u>Units</u> |
|---------------------|------------------|--------------------|---------------|
| Total Flow | Continuous | Recorder | MGD |
| BOD ₅ | Weekly | Grab | mg/L, lbs/day |
| TSS | Weekly | Grab | mg/L, lbs/day |
| Oil & Grease | Monthly | Grab | lbs/day |
| pH | Weekly | Grab | S.U. |
| COD | Weekly | Grab | lbs/day |
| Phenolic Compounds | Weekly | Grab | lbs/day |
| Ammonia | Weekly | Grab | lbs/day |
| Sulfide | Weekly | Grab | lbs/day |
| Total Chromium | b/ | Grab | lbs/day |
| Hexavalent Chromium | b/ | Grab | lbs/day |

The pH shall not be less than 6.5 standard units and not greater than 9.0 standard units in any sample and shall be monitored weekly by a grab sample.

There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

There shall be no discharge of sanitary wastes.

N.A. - Not Applicable.

- a/ See Definitions, *Part I.A* for definition of terms.
- b/ Quarterly monitoring for chromium will commence with the first quarter in which use of chromium is resumed.
3. Selenium, Ammonia and Flow Characterization of the Northwest Oil Canal study requirements:
- a. The permittee shall submit to the Director within six months of the effective date of this permit an approvable work plan that contains the following:
- (1) A plan to evaluate the selenium and ammonia concentrations in the Northwest Oil Drain Canal over a two year period.
- (2) A plan to ascertain the flows in the Northwest Oil Drain Canal over a two year period.
- b. A final report containing the results of the study shall be submitted by June 1 of the fourth year of the permit.
- c. The work plan can be revised with Director approval.

The permittee may work with others, on the Northwest Oil Drain, to gather the information required in this section of the permit.

4. Whole Effluent Testing - Acute Toxicity.

Starting immediately, the permittee shall quarterly conduct acute static replacement toxicity tests on a composite sample of the final effluent. The sample shall be collected at Outfall 001.

The monitoring frequency for acute tests shall be quarterly unless a sample is found to be acutely toxic during a routine test. If that occurs, the monitoring frequency shall become weekly (See *Part I.D.5, Accelerated Testing*). Samples shall be collected on a two day progression; i.e., if the first sample is on a Monday, during the next sampling period, the sampling shall begin on a Wednesday, etc.

The replacement static acute toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012* as per 40 CFR 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS, and the present *Region VIII EPA NPDES Acute*

Test Conditions - Static Renewal Whole Effluent Toxicity Test. The permittee shall alternate between the 48-hour static replacement toxicity test using Ceriodaphnia dubia and the acute 96-hour static replacement toxicity test using Pimephales promelas (fathead minnow).

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the results to be considered valid. If more than 10 percent control mortality occurs, the test shall be repeated until satisfactory control mortality is achieved.

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar month, e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining biomonitoring reports submitted with DMRs due each July 28, October 28, and January 28. Monthly test results shall be reported along with the DMR submitted for that month. The format for the report shall be consistent with the latest revision of the *Region VIII Guidance for Acute Whole Effluent Reporting* and shall include all chemical and physical data as specified.

If the results for one year of testing indicate no acute toxicity, the permittee may request a reduction in testing frequency and/or reduction to one species. The Director may approve, partially approve, or deny the request based on results and other available information. If approval is given, the modification will take place without a public notice.

5. Accelerated Testing.

When acute toxicity is indicated during routine biomonitoring as specified in this permit, the permittee shall notify the Director in writing within 5 days after becoming aware of the test result. The permittee shall perform an accelerated schedule of biomonitoring to establish whether a pattern of toxicity exists. Accelerated testing will begin within seven days after the permittee becomes aware of the test result. Accelerated testing shall be conducted as specified under *Part I.D.6., Pattern of Toxicity*. If the accelerated testing demonstrates no pattern of toxicity, routine monitoring shall be resumed.

6. Pattern of Toxicity.

A pattern of toxicity is defined by the results of a series of up to five biomonitoring tests pursuant to the accelerated testing requirements using 100 percent effluent on the single species found to be more sensitive, once every week for up to five consecutive weeks.

If two (2) consecutive tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity) do not result in acute toxicity, no further accelerated testing will be required and no pattern of toxicity will be found to exist. The

permittee will provide written verification to the Director within 5 days, and resume routine monitoring.

A pattern of toxicity is established if one of the following occurs:

- a. If two (2) consecutive test results (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity) indicate acute toxicity, this constitutes an established pattern of toxicity.
- b. If consecutive tests continue to yield differing results each time, the permittee will be required to conduct up to a maximum of five (5) acute tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity). If three out of five test results indicate acute toxicity, this will constitute an established pattern of toxicity.

7. Preliminary Toxicity Investigation.

- a. When a pattern of toxicity is detected the permittee will notify the Director in writing within 5 days and begin an evaluation of the possible causes of the toxicity. The permittee will have 15 working days from demonstration of the pattern of toxicity to complete a Preliminary Toxicity Investigation (PTI) and submit a written report of the results to the Director. The PTI may include, but is not limited to, additional chemical and biological monitoring, examination of pretreatment program records, examination of discharge monitoring reports, a thorough review of the testing protocol, evaluation of treatment processes and chemical use, inspection of material storage and transfer areas to determine if a spill may have occurred, and similar procedures.
- b. If the PTI identifies a probable toxicant and/or a probable source of toxicity, the permittee shall submit, as part of its final results, written notification of that effect to the Director. Within thirty days of completing the PTI the permittee shall submit for approval a control program to control effluent toxicity and shall proceed to implement such plan within seven days following approval. The control program, as submitted to or revised by the Director, may be incorporated into the permit.
- c. If no probable explanation for toxicity is identified in the PTI, the permittee shall notify the Director as part of its final report, along with a schedule for conducting a Phase I Toxicity Reduction Evaluation (TRE) (See *Part I.D.8, Toxicity Reduction Evaluation*).
- d. If toxicity spontaneously disappears during the PTI, the permittee shall submit written notification to that effect to the Director as part of the reporting requirements of paragraph a. of this section.

8. Toxicity Reduction Evaluation (TRE).

If toxicity is detected and it is determined by the Director that a TRE is necessary, the permittee shall be so notified and shall initiate a TRE immediately thereafter. The purpose of the TRE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A TRE may include but is not limited to one, all, or a combination of the following:

- a. Phase I - Toxicity Characterization
- b. Phase II - Toxicity Identification Procedures
- c. Phase III - Toxicity Control Procedures
- d. Any other appropriate procedures for toxicity source elimination and control

If the TRE establishes that the toxicity cannot be immediately eliminated the permittee shall submit a proposed compliance plan to the Director. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Director, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

- a. Submit an alternative control program for compliance with the numerical requirements.
- b. If necessary, provide a modified biomonitoring protocol which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Director, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Director, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Director, shall be considered a violation of this permit.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. **Representative Sampling.** Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to the use-disposal practice.
- B. **Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this permit.
- C. **Penalties for Tampering.** The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- E. **Additional Monitoring by the Permittee.** If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* or as otherwise specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.
- F. **Records Contents.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) and time(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and,
 6. The results of such analyses.
- G. **Retention of Records.** The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location.

- H. Reporting of Monitoring Results. Monitoring results obtained during the previous month (quarter) shall be summarized for each month (quarter) and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), post-marked no later than the 28th day of the month following the completed reporting period. The first report is due on February 28, 2015. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part IV.G)*, and submitted to the Director, Division of Water Quality and to EPA at the following addresses:

original to: Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

- I. Twenty-four Hour Notice of Noncompliance Reporting.

1. The permittee shall (orally) report any noncompliance which may seriously endanger health or environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 536-4300, or 24 hour answering service (801) 536-4123.
 - a. The following occurrences of noncompliance shall be reported by telephone, to a live person, to either (801) 231-1769 or (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
 - (1) Any noncompliance which may endanger health or the environment;
 - (2) Any unanticipated bypass, which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.*); or
 - (3) Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*)
 - b. A violation of a discharge limitation, for any of the pollutants listed in the permit, shall be reported by telephone to the permit writer or (801) 536-4300 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances.
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances, listed in I.2. and/or I.3. above. The written submission shall contain:

- a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.
4. Reports shall be submitted to the addresses in *Part II.H, Reporting of Monitoring Results*.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part II.H* are submitted. The reports shall contain the information listed in *Part II.I.4*.
- K. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.
 5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

III. COMPLIANCE RESPONSIBILITIES

- A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. **Penalties for Violations of Permit Conditions.** The *Act* provides that any person who violates a permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine not exceeding \$25,000 per day of violation; Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part III.G, Bypass of Treatment Facilities* and *Part III.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. **Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. **Removed Substances.** Collected screening, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. **Bypass of Treatment Facilities.**
 - 1. **Bypass Not Exceeding Limitations.** The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to 2. and 3. of this section.

2. Prohibition of Bypass.

- a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to 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 backup 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, and
 - (3) The permittee submitted notices as required under section G.3.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in sections G.2a. (1), (2) and (3).

3. Notice.

- a. Anticipated bypass. Except as provided above in section G.2. and below in section G. 3.b, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
 - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages;
 - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
 - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
 - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;

(5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and

(6) Any additional information requested by the Director.

b. Emergency Bypass. Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in section G.3.a.(1) through (6i) to the extent practicable.

c. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass to the Director as required under Part II.I., Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the cause(s) of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required under Part II.I., Twenty-four Hour Notice of Noncompliance Reporting; and,

d. The permittee complied with any remedial measures required under Part III.D, Duty to Mitigate.

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time

provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Director as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Director in accordance with *UAC R317-8-4.2(6)*.
 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/L);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
 - d. The level established by the Director in accordance with *UAC R317-8-4.2(6)*.
- K. Industrial Pretreatment. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In addition, in accordance with *40 CFR 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 261*. This notification must include the name of the

hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

IV. GENERAL REQUIREMENTS

- A. **Planned Changes.** The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.
- B. **Anticipated Noncompliance.** The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. **Duty to Reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. **Duty to Provide Information.** The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. **Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- G. **Signatory Requirements.** All applications, reports or information submitted to the Director shall be signed and certified.
 - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official
 - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Director, and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph IV.G.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.G.2 must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
 4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- H. Penalties for Falsification of Reports. The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
 - I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential

- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions 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.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- O. Water Quality-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.

3. A revision to the current Water Quality Management Plan is approved and adopted which calls for different effluent limitations than contained in this permit.
- P. **Toxicity Limitation -Reopener Provision.** This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur;
1. Toxicity is detected, during the duration of this permit.
 2. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the Director agrees with the conclusion.
 3. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the Director agrees that numerical controls are the most appropriate course of action.
 4. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicants that are controlled numerically.
 5. The TRE reveals other unique conditions or characteristics which, in the opinion of the Director, justify the incorporation of unanticipated special conditions in the permit.
- Q. **Storm Water-Reopener Provision.** At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-the-State".