State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

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

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JUN 0 4 2013

CERTIFIED MAIL
(Return Receipt Requested)

Mr. Travis Larsen, Environmental Engineer
PacifiCorp-Gadsby Plant
1359 West North Temple-rear
Salt Lake City, Utah 84116

Dear Mr. Larsen:

Subject: Renewal Permit Issuance for Utah Pollutant Discharge Elimination System (UPDES) Permit #UT0000116 PacifiCorp-Gadsby Plant

Enclosed is UPDES Permit No. UT0000116 for the PacifiCorp-Gadsby Plant. This permit was public noticed in the Salt Lake Tribune and Deseret News, and on the Division of Water Quality's website from April 12, 2013 to May 13, 2013. One comment was received during the public notice period, which dealt with some typographical errors noted on the permit. No other comments were received. This permit will become effective June 1, 2013, subject to the right to challenge this decision in accordance with the provisions of *Utah Administrative Code*, Section R317-9.

Copies of EPA form 3320-1, Discharge Monitoring Report (DMR) forms, for reporting and self-monitoring requirements as specified in the permit are available upon request (for those facilities not using NetDMR). As a reminder, DMR forms whether paper forms or NetDMR submittals, are due in our Office by the 28th day of each month following each monthly monitoring period.

A fee schedule was included in the Utah Department of Environmental Quality Budget appropriation request at the direction of the Legislature and in accordance with *Utah Code Annotated* 19-1-201. The fee schedule, as approved by the Legislature, includes a prescribed fee for specific Industrial Categories. The prescribed fee for the UPDES Electric Power Plant for a minor facility is $396.00 per year for each of the five years of the permit period. Your Company will be sent an invoice each year in June to be paid by July 1st. The first year will be prorated to

cover only those months for which the permit was issued and active. The permit becomes effective on June 1, 2013, the prorated amount is $33.00 per month and there is one month from June 1st to July 1st. Therefore, please remit $33.00 (1 month times $33.00 per month) within 30 days from receipt of this letter to:

Attn: Randy Sargent
Department of Environmental Quality
Division of Water Quality
P.O. Box 144870
Salt Lake City, UT 84114-4870

Please be sure to include the invoice number with you remittance.

The Utah Division of Water Quality (DWQ) values your feedback, and as the State agency charged with the administration of issuing UPDES permits, we are continuously looking for ways to improve our quality of service to you. DWQ Director Walter L. Baker is committed to continually assessing and improving the level and quality of services provided to you. In an effort to improve the State UPDES permitting process, we are asking for your input. Please take a few minutes to comment on the quality of service you received by completing the "Give Feedback to DWQ" form link on DWQ's webpage at www.waterquality.utah.gov. Thank you for assisting us in improving our service to you.

If you have any questions with regard to this matter, please contact Mike Herkimer of the UPDES Engineering Section at (801) 536-4386 or e-mail at mherkimer@utah.gov.

Sincerely,

John Kennington, Manager
UPDES Engineering Section

JK:MH:mc

Enclosures (3):
1. Fact Sheet Statement of Basis (DWQ-2013-004108)
2. Waste Load Allocation (DWQ-2013-004922)
3. Diagram of Facility (DWQ-2013-002745)
4. UPDES Permit UT0000116 (DWQ-2013-004881)
5. Comment Letter (DWQ-2013-003858)

cc: Amy Clark, EPA Region VIII (w/ enclosures)
Royal P. Delegge, PhD., Salt Lake Valley Health Department (w/ enclosures)

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FACT SHEET STATEMENT OF BASIS

PACIFICORP - GADSBY PLANT
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)
PERMIT NUMBER: UT0000116
MINOR INDUSTRIAL PERMIT RENEWAL

FACILITY CONTACTS

Principal Executive Officer:
Dana Ralston
Vice President Generation
PacifiCorp Energy
1407 West North Temple, Suite 320
Salt Lake City, Utah 84116
(801) 220-4017

Duly Authorized Representative:
David Lucas
Managing Director
Attn: Gadsby Plant
1825 North Pioneer lane
Vineyard, Utah 84042
(801) 796-1911

Environmental Engineer:
Travis Larsen
PacifiCorp-Gadsby Plant
1359 West North Temple-Rear
Salt Lake City, Utah 84116
(801) 220-7708

DESCRIPTION OF FACILITY

The Gadsby Plant is a steam electric power generating facility consisting of six generation units rated at 66 megawatts (MW), 75 MW, and 100 MW and three 40 MW Combustion Turbines (CT) yielding a capacity of 361 MW. A CO2 injection system is used at Outfall 004 to control elevated pH readings that may result from biological growth in the settling ponds. The plant is currently configured for operating all units on natural gas and has a *Standard Industrial Classification (SIC) code 4911*, for electric power generation. The design flow of this facility is 3.7 million gallons per day (MGD). A flow diagram of the system is appended. Based on information obtained from facility representatives, there is no once through cooling water used in this facility (when used, cooling water is recirculated through the cooling tower, until blowdown is required) and there is no discharge of metal cleaning wastes or chemical metal cleaning wastes.

DESCRIPTION OF DISCHARGE

The Gadsby Plant currently consists of two discharge points, Outfalls 004 and 007. Outfall 004 discharges waste water from treatment ponds into the Salt Lake Abatement Canal and Outfall 007 discharges back wash water from the intake screen to the Jordan River. The intake screen (Outfall 007) on the Jordan River is backwashed with an average flow of 170 gallons per minute using Jordan River water for one hour, once per week. The purpose is to clear the screen of river debris. Because Outfall 007 discharges only minimal amounts of Jordan River rinse water from intake screen back washing, monitoring and reporting requirements have not been included in this renewal UPDES permit.

The Gadsby Plant utilizes water from either the Jordan River, or Salt Lake City culinary water. Jordan River water is treated before use in the plant processes. This water is used for a variety of processes and becomes part of the facility waste water. The waste water is directed to the treatment ponds and includes water from cooling tower blowdown, boiler blowdown, yard drains, storm water, excess treated raw water and reverse osmosis reject. All other waste water streams are disposed of in the sanitary sewer system. There are no metal cleaning wastes of any kind discharged. The plant drains and combustion turbine drains pass through an oil water separator before discharge to the waste water ponds which discharge from Outfall 004. Self monitoring data on Discharge Monitoring Report (DMR) forms from the last 3 years for Outfall 004 have been reviewed and indicate that no effluent limits were exceeded.

SUMMARY OF PERMIT CHANGES FOR THIS PERMIT RENEWAL

The use of sodium hypochlorite to control algae in the settling ponds was previously approved by the Division of Water Quality. The use of calcium hypochlorite for the control of algae in the settling ponds was requested in this renewal permit application, and its use has been approved by the Division of Water Quality. So both sodium and calcium hypochlorite can be used for control of algae in the settling ponds. In the previous permit a total chlorine residual effluent limit was included as taken from once through cooling water discharge requirements in 40 CFR 423.13. As indicated in the introduction above, once-through cooling water is not presently discharged. For this reason and because the Abatement Canal has no water quality standard for total residual chlorine, the total chlorine residual limits included in the previous permit will be dropped from this permit renewal at Outfall 004. For a similar reason, total iron will be dropped from this permit. Based on 40CFR 423.12 total iron is required to be limited in the discharge of metal cleaning wastes. Since no metal cleaning wastes are being discharged and there is no water quality standard for iron in the Abatement Canal, total iron will be dropped from the permit at Outfall 004. The settling ponds are included in pictures appended to this fact sheet statement of basis (FSSOB) along with a diagram showing the process water flow at the Gadsby Plant.

Based on 40 CFR 423.23 total chromium and total zinc effluent limits are included in the renewal permit because, when necessary, there would be cooling tower blowdown.. The

monitoring location for free available chlorine will change from Outfall 004 to the discharge from the cooling tower blowdown. The following parameters will be sampled only at the cooling tower blowdown before mixing with any other waste streams: the 126 priority pollutants, total chromium, total lead and free available chlorine. The following parameters will be sampled at Outfall 004: TSS, oil and grease, pH, and flow.

SUMMARY OF PREVIOUS PERMIT CHANGES THAT ARE CONTINUED

Modified chlorine limitation: In the previous permit Gadsby plant personnel requested a waiver from the Federal requirement in *40 CFR 423.12(b)(8)*and *423.13(d)(2)*, which imposes a time limitation on chlorine discharged from their cooling units to 2-hours per day, and not from more than one unit at a time. The cooling tower components are negatively affected by short periods of high doses of chlorine (shock treatment). PacifiCorp believes that the Gadsby Plant units would be better conditioned and avoid significant corrosive activity with continuous low doses of chlorine instead of the current periodic shock treatment, as is the case with other PacifiCorp Plants. The citation in *40 CFR 423* allows for the discretion of the permitting authority to determine the applicability of this requirement because of "*...factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines.*" Because all of the wastewater is sent to settling/ wastewater ponds before being discharged, the affect on the receiving waters should be negligible as the mass load of chlorine through continuous low doses is not significantly different from the high dose treatment at two hour intervals. The Division of Water Quality reviewed the waiver request and agreed to modify the permit accordingly. This chlorine modification will be continued under this renewal permit because there have been no changes in the system and the Gadsby Plant is in compliance with their permit chlorine limitations (no violations over the last five years).

The second change incorporated in the previous permit was the addition of storm water provisions. Even though Gadsby personnel have in this renewal application requested an exemption from storm water discharge requirements, no exemption will be granted. The only way a storm water exception can be granted is if no storm water was discharged from the facility.

RECEIVING WATERS AND STREAM CLASSIFICATION

The Salt Lake Abatement Canal is tributary to the City Drain, which is tributary to the Salt Lake Sewage Canal which leads to the final destination of the Farmington Bay Water Fowl Management Area. The classification of the Farmington Bay Water Fowl Management Area is classified as 2B, 3C and 3D. The Farmington Bay Water Fowl Management Area is several miles downstream of the discharge at PacifiCorp Gadsby and undergoes significant dilution, therefore use of these receiving water classifications is very conservative and protective of the water fowl management area.

The Jordan River is classified as 2B, 3B, and 4.

2B -Protected for secondary contact recreation such as boating, wading, or similar uses.

3B -Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.

3C -Protected for non-game fish and other aquatic life, including the necessary aquatic organisms in their food chain.

3D -Protected for waterfowl, shore birds and other water oriented wildlife, not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

4 -Protected for agricultural uses including irrigation of crops and stock watering.

BASIS FOR EFFLUENT LIMITATIONS

In accordance with regulations promulgated in *40 Code of Federal Regulations (CFR) Part 122.44* and in *UAC R317-8-4.2*, effluent limitations are derived from technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (*UAC R317-1-3.2*) or Utah Water Quality Standards (*UAC R317-2*). In cases where multiple limits have been developed, those that are more stringent apply. In cases where no limits have been developed, Best Professional Judgment (BPJ) may be used where applicable. "Best Professional Judgment" refers to a discretionary, best professional decision made by the permit writer based upon precedent, prevailing regulatory standards or other relevant information.

Effluent limitations are also derived using a waste load analysis (WLA). The WLA incorporates Secondary Treatment Standards, Water Quality Standards, and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet applicable State water quality standards in the receiving waters. Where applicable, effluent limitations from the WLA were incorporated into the renewal permit (see the attached WLA).

The basis for effluent limitations is as follows:

Considering the processes employed at Gadsby, the following parameters are regulated under the effluent limitations guidelines for the Steam Electric Power Generating Point Source Category, *40 CFR Part 423*; total suspended solids (TSS), oil and grease, free available chlorine, pH, polychlorinated biphenyls, total chromium, total zinc and the 126 priority pollutants. However, free available chlorine will be monitored at Outfall 004 instead of from cooling tower blowdown. This is consistent with the previous permit and is more in line with the operational aspects of the power plant. Holding the discharge water in the ponds will allow the chlorine to dissipate and

monitoring at 004 will directly show the chlorine concentration going to the receiving waters (Abatement Canal).

The parameters regulated under *Utah Administrative Code (UAC) R317-1-3.2,* are secondary treatment standards for TSS and pH which are more stringent than the categorical requirements (40 CFR Part 423) for these parameters. TSS and pH is a combination of State secondary treatment standards and the federal categorical standards and applicable at Outfall 004.

Oil and grease will not be changed from what is in the previous permit. This limit is based on best professional judgment (BPJ) and is more stringent than the categorical requirements (40 CFR 423) for this parameter and will be applicable at Outfall 004.

EFFLUENT LIMITATIONS

The following effluent limitations for Outfall 004 and cooling tower blowdown are included in this UPDES permit renewal:

	Effluent Limitations a/			
Parameter	**30-day Average**	**7-day Average**	**Daily Min**	**Daily Max**
Total flow, MGD	Report	N.A.	N.A.	3.7
TSS, mg/L	25	35	N.A.	100
Oil and Grease, mg/L b/	N.A.	N.A.	N.A.	10
pH, standard units	N.A.	N.A.	6.5	9.0
Total Chromium, mg/L c/	0.2	N.A.	N.A.	0.2
Total Zinc, mg/L c/	1.0	N.A.	N.A.	1.0
Free Available Chlorine, mg/L	0.2	N.A.	N.A.	0.5

N.A. - not applicable.

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 from any of these discharge points.

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used as transformer fluid.

a/ See Definitions, Part I.A for definition of terms

b/ In addition to the monthly sampling requirement for oil and grease, a sample for oil and grease shall immediately be taken whenever a sheen is observed in the effluent or there is another reason to believe oil and grease is present.

c/ Total chromium and total zinc samples shall be taken from cooling tower blowdown only and shall not include dilution from any other effluent streams. It shall be taken at the same location as the 126 priority pollutants and shall not exceed the limitations in the effluent table above. Total zinc and total chromium is not required to be sampled at Outfall 004.

The blowdown from the cooling towers shall contain no detectable amounts of the 126 priority pollutants (Appendix A of 40 CFR Part 423) due to chemicals added for cooling tower maintenance. Compliance with this requirement may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the cooling tower blowdowns by the analytical methods in 40 CFR Part 136. These calculations must be based on the cooling tower blowdowns only and shall not include dilution by any other effluent streams. A list of the certified analytical contents of all biofouling and maintenance formulations (Manufacturer's certification as to contents and priority pollutants status) shall be submitted along with the engineering calculations. The engineering calculations shall be updated annually or whenever there is a change in the chemicals used or an increase in the application rate of the chemicals. If chemical usage, both type and quantity has not changed during the year, a letter certifying to that fact is adequate to demonstrate continued compliance with the requirement.

At Outfall 007 there shall be no chemicals added to the intake raw water sump because this water is used for back flushing the intake screens.

There shall be no discharge of metal cleaning wastes or chemical metal cleaning wastes.

SELF-MONITORING AND REPORTING REQUIREMENTS

The following effluent self-monitoring and reporting requirements are based on the *Utah Monitoring, Recording and Reporting Frequency Guidelines* as effective December 1, 1991:

Self-Monitoring and Reporting Requirements

Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Recorder	MGD
TSS	Monthly	Grab or Composite	mg/L
pH	Monthly	Grab	standard units
Oil&Grease*	Visible Sheen/Monthly	Grab	mg/L
Free Avail. Chlorine	Weekly	Grab	mg/L
Total Chromium	Quarterly	Grab or Composite	mg/L
Total Zinc	Quarterly	Grab or Composite	mg/L

*In addition to the monthly sampling requirement for Oil & Grease, a sample for Oil and Grease shall also be immediately taken whenever a sheen is observed on the effluent or there is another reason to believe oil or grease is present.

STORM WATER REQUIREMENTS

The storm water requirements are based on the UPDES Multi-Sector General Permit (MSGP) for Storm Water Discharges for Industrial Activity, General Permit No. UTR000000. All sections of the MSGP that pertain to discharges from wastewater treatment plants have been included and sections which are redundant or do not pertain have been deleted. The permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan for all areas within the confines of the facility. The Gadsby plant has storm water requirements in their present permit and maintains on site a Storm Water Pollution Prevention Plan as required.

The storm water permit provisions will be continued in this renewal permit.

PRETREATMENT REQUIREMENTS

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

As part of a nationwide effort to control toxics, biomonitoring requirements are being included in all major permits and in minor permits for facilities where effluent toxicity is an existing or potential concern. Authorization for requiring effluent biomonitoring is provided for in *UAC R317-8-4.2* and *R317-8-5.3*. *The Whole Effluent Toxicity (WET) Control Guidance Document*, February 15, 1991, outlines guidance to be used by Utah Division of Water Quality staff and by permittees for implementation of WET control through the UPDES discharge permit program.

The Gadsby plant is a minor facility and the chances of a toxic discharge are low. An acute WET test using Ceriodaophnia and Fat Head Minnows was completed on the discharge from Outfall 004 in the first week of January 2013. No toxicity was detected in either species. Based upon this test and based on the characterization of the facility's waste stream that showed non detect for organic toxics, best professional judgment (BPJ) supports not requiring whole effluent

toxicity limits or monitoring in this renewal permit. However, if the permittee violates effluent limits in the renewal permit (for example showing detectable amounts of any of the 126 priority pollutants) then the permit may be opened and WET testing and/or WET limits may be included in the permit.

PERMIT DURATION

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

Drafted by Mike Herkimer, Environmental Scientist
Utah Division of Water Quality
Original draft: November 8, 2011
Second draft: March 14, 2012
Third draft: November 1, 2012

This permit was public noticed in the Salt Lake Tribune and Deseret News and on the Division of Water Quality web site under "Public Participation" at www.waterquality.utah.gov/ from April 12, 2013 to May 13, 2013. One comment was received and is appended to this Fact Sheet Statement of Basis. This comment came from PacifiCorp Gadsby personnel and pointed out some minor typographical errors, which were corrected.

John Kuft for Mike Herkimer 6/4/13

DWQ-2012-004108

Utah Division of Water Quality
Salt Lake City, Utah

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WASTELOAD ANALYSIS [WLA]
Addendum: Statement of Basis
SUMMARY

Discharging Facility:	**Pacificorp Gatsby**		
UPDES No:	UT-UT0000116		
Current Flow:	3.70 MGD	Design Flow	
Receiving Water:	**Ditch=>City Drain=>Sewage Canal=>Farmington Bay**		
Stream Classification:	2B, 3C, 3D		
Stream Flows [cfs]:	36.0	Summer (July-Sept)	20th Percentile
	36.0	Fall (Oct-Dec)	20th Percentile
	36.0	Winter (Jan-Mar)	20th Percentile
	36.0	Spring (Apr-June)	20th Percentile
	56.0	Average	
Stream TDS Values:	2205.0	Summer (July-Sept)	Average
	2205.0	Fall (Oct-Dec)	Average
	2205.0	Winter (Jan-Mar)	Average
	2205.0	Spring (Apr-June)	Average

Effluent Limits:			**WQ Standard:**	
Flow, MGD:	3.70	MGD	Design Flow	
BOD, mg/l:	25.0	Summer	5.0	Indicator
Dissolved Oxygen, mg/l	None	Summer		Discharge to 3E Ditch
TNH3, Chronic, mg/l:	3.0	Summer		Set at Sewage Canal Background
TDS, mg/l:	None	Summer		No Irrigation Standard

Modeling Parameters:

Acute River Width:	50.0%
Chronic River Width:	100.0%

Level 1 Antidegradation Level Completed: Level II Review is not required. Simple renewal - no increase in concentration or load.

The Gatsby Plant discharge to a 3E ditch (no numeric standards), which then flows through a series of ditches and drainage canals for approximately 10 miles before entering Farmington Bay (2B, 3C, 3D). Normally, a discharge to a 3E water would not require a WLA, as no numeric standards exist. In this case, a wasteload was completed to assess the potential impacts to the downstream water uses. The approach used was to use background data from Station # 4991050 (Sewage Canal @ Cudahy Lane)the only station for which data were available (Cudahe Lane) and calculate effluent limits for the Gatsby discharge as if the Sewage Canal were classed 2B, 3C, 3D. The reasoning being that if instream standards were met here, they would be protective of downstream uses.

Date: 11/8/2012

Permit Writer:		
WLA by:	Neil M. Wharton	11/8/12
WQM Sec. Approval:		
TMDL Sec. Approval:		

Utah Division of Water Quality
Salt Lake City, Utah

WASTELOAD ANALYSIS [WLA]
Addendum: Statement of Basis

8-Nov-12
4:00 PM

Facilities: **Pacificorp Gatsby** **UPDES No: UT-UT0000116**
Discharging to: **Ditch=>City Drain=>Sewage Canal=>Farmington Bay**

I. Introduction

Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses [R317-2-8, UAC]. Projected concentrations are compared to numeric water quality standards to determine acceptability. The anti-degradation policy and procedures are also considered. The primary in-stream parameters of concern may include metals (as a function of hardness), total dissolved solids (TDS), total residual chlorine (TRC), un-ionized ammonia (as a function of pH and temperature, measured and evaluated interms of total ammonia), and dissolved oxygen.

Mathematical water quality modeling is employed to determine stream quality response to point source discharges. Models aid in the effort of anticipating stream quality at future effluent flows at critical environmental conditions (e.g., low stream flow, high temperature, high pH, etc).

The numeric criteria in this wasteload analysis may always be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

II. Receiving Water and Stream Classification

Ditch=>City Drain=>Sewage Canal= 2B, 3C, 3D
Antidegradation Review: Level I review completed. Level II review not required.

III. Numeric Stream Standards for Protection of Aquatic Wildlife

Total Ammonia (TNH3)	Varies as a function of Temperature and pH Rebound. See Water Quality Standards
Chronic Total Residual Chlorine (TRC)	0.011 mg/l (4 Day Average) 0.019 mg/l (1 Hour Average)
Chronic Dissolved Oxygen (DO)	5.00 mg/l (30 Day Average) N/A mg/l (7Day Average) 3.00 mg/l (1 Day Average
Maximum Total Dissolved Solids	N/A mg/l Background

Utah Division of Water Quality
Salt Lake City, Utah

Acute and Chronic Heavy Metals (Dissolved)

Parameter	4 Day Average (Chronic) Standard Concentration	Load*	1 Hour Average (Acute) Standard Concentration		Load*
Aluminum	87.00 ug/l**	2.684 lbs/day	750.00	ug/l	23.139 lbs/day
Arsenic	190.00 ug/l	5.862 lbs/day	340.00	ug/l	10.490 lbs/day
Cadmium	0.93 ug/l	0.029 lbs/day	11.67	ug/l	0.360 lbs/day
Chromium III	338.75 ug/l	10.451 lbs/day	7087.22	ug/l	218.654 lbs/day
ChromiumVI	11.00 ug/l	0.339 lbs/day	16.00	ug/l	0.494 lbs/day
Copper	38.91 ug/l	1.200 lbs/day	67.61	ug/l	2.086 lbs/day
Iron			1000.00	ug/l	30.852 lbs/day
Lead	26.71 ug/l	0.824 lbs/day	685.39	ug/l	21.145 lbs/day
Mercury	0.0120 ug/l	0.000 lbs/day	2.40	ug/l	0.074 lbs/day
Nickel	214.50 ug/l	6.618 lbs/day	1929.30	ug/l	59.523 lbs/day
Selenium	4.60 ug/l	0.142 lbs/day	20.00	ug/l	0.617 lbs/day
Silver	N/A ug/l	N/A lbs/day	67.06	ug/l	2.069 lbs/day
Zinc	493.77 ug/l	15.234 lbs/day	493.77	ug/l	15.234 lbs/day

* Allowed below discharge

**Chronic Aluminum standard applies only to waters with a pH < 7.0 and a Hardness < 50 mg/l as CaCO3

Metals Standards Based upon a Hardness of 531.92 mg/l as CaCO3

Organics [Pesticides]

Parameter	4 Day Average (Chronic) Standard Concentration	Load*	1 Hour Average (Acute) Standard Concentration		Load*
Aldrin			1.500	ug/l	0.046 lbs/day
Chlordane	0.004 ug/l	0.967 lbs/day	1.200	ug/l	0.037 lbs/day
DDT, DDE	0.001 ug/l	0.225 lbs/day	0.550	ug/l	0.017 lbs/day
Dieldrin	0.002 ug/l	0.427 lbs/day	1.250	ug/l	0.039 lbs/day
Endosulfan	0.056 ug/l	12.594 lbs/day	0.110	ug/l	0.003 lbs/day
Endrin	0.002 ug/l	0.517 lbs/day	0.090	ug/l	0.003 lbs/day
Guthion			0.010	ug/l	0.000 lbs/day
Heptachlor	0.004 ug/l	0.855 lbs/day	0.260	ug/l	0.008 lbs/day
Lindane	0.080 ug/l	17.991 lbs/day	1.000	ug/l	0.031 lbs/day
Methoxychlor			0.030	ug/l	0.001 lbs/day
Mirex			0.010	ug/l	0.000 lbs/day
Parathion			0.040	ug/l	0.001 lbs/day
PCB's	0.014 ug/l	3.148 lbs/day	2.000	ug/l	0.062 lbs/day
Pentachlorophenol	13.00 ug/l	2923.594 lbs/day	20.000	ug/l	0.617 lbs/day
Toxephene	0.0002 ug/l	0.045 lbs/day	0.7300	ug/l	0.023 lbs/day

Utah Division of Water Quality
Salt Lake City, Utah

IV. Numeric Stream Standards for Protection of Agriculture

	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard		
	Concentration	Load*	Concentration	Load*	
Arsenic			ug/l		lbs/day
Boron			ug/l		lbs/day
Cadmium			ug/l	#VALUE!	lbs/day
Chromium			ug/l		lbs/day
Copper			ug/l		lbs/day
Lead			ug/l		lbs/day
Selenium			ug/l		lbs/day
TDS, Summer			mg/l		tons/day

V. Numeric Stream Standards for Protection of Human Health (Class 1C Waters)

	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard		
Metals	Concentration	Load*	Concentration	Load*	
Arsenic			ug/l		lbs/day
Barium			ug/l		lbs/day
Cadmium			ug/l		lbs/day
Chromium			ug/l		lbs/day
Lead			ug/l		lbs/day
Mercury			ug/l		lbs/day
Selenium			ug/l		lbs/day
Silver			ug/l		lbs/day
Fluoride (3)			ug/l		lbs/day
to			ug/l		lbs/day
Nitrates as N			ug/l		lbs/day
Chlorophenoxy Herbicides					
2,4-D			ug/l		lbs/day
2,4,5-TP			ug/l		lbs/day
Endrin			ug/l		lbs/day
ocyclohexane (Lindane)			ug/l		lbs/day
Methoxychlor			ug/l		lbs/day
Toxaphene			ug/l		lbs/day

VI. Numeric Stream Standards the Protection of Human Health from Water & Fish Consumption [Toxics]

	Maximum Conc., ug/l - Acute Standards				
	Class 1C		Class 3A, 3B		
Toxic Organics	[2 Liters/Day for 70 Kg Person over 70 Yr.]		[6.5 g for 70 Kg Person over 70 Yr.]		
Acenaphthene	ug/l	lbs/day	2700.0 ug/l	607.21	lbs/day
Acrolein	ug/l	lbs/day	780.0 ug/l	175.42	lbs/day
Acrylonitrile	ug/l	lbs/day	0.7 ug/l	0.15	lbs/day
Benzene	ug/l	lbs/day	71.0 ug/l	15.97	lbs/day
Benzidine	ug/l	lbs/day	0.0 ug/l	0.00	lbs/day
Carbon tetrachloride	ug/l	lbs/day	4.4 ug/l	0.99	lbs/day
Chlorobenzene	ug/l	lbs/day	21000.0 ug/l	4722.73	lbs/day
1,2,4-Trichlorobenzene					
Hexachlorobenzene	ug/l	lbs/day	0.0 ug/l	0.00	lbs/day
1,2-Dichloroethane	ug/l	lbs/day	99.0 ug/l	22.26	lbs/day

1,1,1-Trichloroethane					
Hexachloroethane	ug/l	lbs/day	8.9	ug/l	2.00 lbs/day
1,1-Dichloroethane					
1,1,2-Trichloroethane	ug/l	lbs/day	42.0	ug/l	9.45 lbs/day
1,1,2,2-Tetrachloroethai	ug/l	lbs/day	11.0	ug/l	2.47 lbs/day
Chloroethane			0.0	ug/l	0.00 lbs/day
Bis(2-chloroethyl) ether	ug/l	lbs/day	1.4	ug/l	0.31 lbs/day
2-Chloroethyl vinyl ether	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2-Chloronaphthalene	ug/l	lbs/day	4300.0	ug/l	967.03 lbs/day
2,4,6-Trichlorophenol	ug/l	lbs/day	6.5	ug/l	1.46 lbs/day
p-Chloro-m-cresol			0.0	ug/l	0.00 lbs/day
Chloroform (HM)	ug/l	lbs/day	470.0	ug/l	105.70 lbs/day
2-Chlorophenol	ug/l	lbs/day	400.0	ug/l	89.96 lbs/day
1,2-Dichlorobenzene	ug/l	lbs/day	17000.0	ug/l	3823.16 lbs/day
1,3-Dichlorobenzene	ug/l	lbs/day	2600.0	ug/l	584.72 lbs/day
1,4-Dichlorobenzene	ug/l	lbs/day	2600.0	ug/l	584.72 lbs/day
3,3'-Dichlorobenzidine	ug/l	lbs/day	0.1	ug/l	0.02 lbs/day
1,1-Dichloroethylene	ug/l	lbs/day	3.2	ug/l	0.72 lbs/day
1,2-trans-Dichloroethyle	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2,4-Dichlorophenol	ug/l	lbs/day	790.0	ug/l	177.66 lbs/day
1,2-Dichloropropane	ug/l	lbs/day	39.0	ug/l	8.77 lbs/day
1,3-Dichloropropylene	ug/l	lbs/day	1700.0	ug/l	382.32 lbs/day
2,4-Dimethylphenol	ug/l	lbs/day	2300.0	ug/l	517.25 lbs/day
2,4-Dinitrotoluene	ug/l	lbs/day	9.1	ug/l	2.05 lbs/day
2,6-Dinitrotoluene	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
1,2-Diphenylhydrazine	ug/l	lbs/day	0.5	ug/l	0.12 lbs/day
Ethylbenzene	ug/l	lbs/day	29000.0	ug/l	6521.86 lbs/day
Fluoranthene	ug/l	lbs/day	370.0	ug/l	83.21 lbs/day
4-Chlorophenyl phenyl ether					
4-Bromophenyl phenyl ether					
Bis(2-chloroisopropyl) e	ug/l	lbs/day	170000.0	ug/l	38231.61 lbs/day
Bis(2-chloroethoxy) met	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Methylene chloride (HM	ug/l	lbs/day	1600.0	ug/l	359.83 lbs/day
Methyl chloride (HM)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Methyl bromide (HM)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Bromoform (HM)	ug/l	lbs/day	360.0	ug/l	80.96 lbs/day
Dichlorobromomethane	ug/l	lbs/day	22.0	ug/l	4.95 lbs/day
Chlorodibromomethane	ug/l	lbs/day	34.0	ug/l	7.65 lbs/day
Hexachlorobutadiene(c)	ug/l	lbs/day	50.0	ug/l	11.24 lbs/day
Hexachlorocyclopentadi	ug/l	lbs/day	17000.0	ug/l	3823.16 lbs/day
Isophorone	ug/l	lbs/day	600.0	ug/l	134.94 lbs/day
Naphthalene					
Nitrobenzene	ug/l	lbs/day	1900.0	ug/l	427.29 lbs/day
2-Nitrophenol	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4-Nitrophenol	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2,4-Dinitrophenol	ug/l	lbs/day	14000.0	ug/l	3148.49 lbs/day
4,6-Dinitro-o-cresol	ug/l	lbs/day	765.0	ug/l	172.04 lbs/day
N-Nitrosodimethylamine	ug/l	lbs/day	8.1	ug/l	1.82 lbs/day
N-Nitrosodiphenylamine	ug/l	lbs/day	16.0	ug/l	3.60 lbs/day
N-Nitrosodi-n-propylami	ug/l	lbs/day	1.4	ug/l	0.31 lbs/day
Pentachlorophenol	ug/l	lbs/day	8.2	ug/l	1.84 lbs/day

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Phenol	ug/l	lbs/day	4.6E+06	ug/l	1.03E+06 lbs/day
Bis(2-ethylhexyl)phthala	ug/l	lbs/day	5.9	ug/l	1.33 lbs/day
Butyl benzyl phthalate	ug/l	lbs/day	5200.0	ug/l	1169.44 lbs/day
Di-n-butyl phthalate	ug/l	lbs/day	12000.0	ug/l	2698.70 lbs/day
Di-n-octyl phthlate					
Diethyl phthalate	ug/l	lbs/day	120000.0	ug/l	26987.02 lbs/day
Dimethyl phthlate	ug/l	lbs/day	2.9E+06	ug/l	6.52E+05 lbs/day
Benzo(a)anthracene (P/	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Benzo(a)pyrene (PAH)	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Benzo(b)fluoranthene (F	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Benzo(k)fluoranthene (F	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Chrysene (PAH)	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Acenaphthylene (PAH)					
Anthracene (PAH)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Dibenzo(a,h)anthracene	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Indeno(1,2,3-cd)pyrene	ug/l	lbs/day	0.0	ug/l	0.01 lbs/day
Pyrene (PAH)	ug/l	lbs/day	11000.0	ug/l	2473.81 lbs/day
Tetrachloroethylene	ug/l	lbs/day	8.9	ug/l	2.00 lbs/day
Toluene	ug/l	lbs/day	200000	ug/l	44978.36 lbs/day
Trichloroethylene	ug/l	lbs/day	81.0	ug/l	18.22 lbs/day
Vinyl chloride	ug/l	lbs/day	525.0	ug/l	118.07 lbs/day
					lbs/day
Pesticides					lbs/day
Aldrin	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Dieldrin	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Chlordane	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDT	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDE	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDD	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
alpha-Endosulfan	ug/l	lbs/day	2.0	ug/l	0.45 lbs/day
beta-Endosulfan	ug/l	lbs/day	2.0	ug/l	0.45 lbs/day
Endosulfan sulfate	ug/l	lbs/day	2.0	ug/l	0.45 lbs/day
Endrin	ug/l	lbs/day	0.8	ug/l	0.18 lbs/day
Endrin aldehyde	ug/l	lbs/day	0.8	ug/l	0.18 lbs/day
Heptachlor	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Heptachlor epoxide					
PCB's					
PCB 1242 (Arochlor 12/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1254 (Arochlor 12	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1221 (Arochlor 12	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1232 (Arochlor 12	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1248 (Arochlor 12/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1260 (Arochlor 12	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1016 (Arochlor 10	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Pesticide					
Toxaphene	ug/l		0.0	ug/l	0.00 lbs/day
Dioxin					
Dioxin (2,3,7,8-TCDD)	ug/l	lbs/day			

Metals				
Antimony	ug/l	lbs/day		
Arsenic	ug/l	lbs/day	4300.00 ug/l	967.03 lbs/day
Asbestos	ug/l	lbs/day		
Beryllium				
Cadmium				
Chromium (III)				
Chromium (VI)				
Copper				
Cyanide	ug/l	lbs/day	2.2E+05 ug/l	49476.20 lbs/day
Lead	ug/l	lbs/day		
Mercury			0.15 ug/l	0.03 lbs/day
Nickel			4600.00 ug/l	1034.50 lbs/day
Selenium	ug/l	lbs/day		
Silver	ug/l	lbs/day		
Thallium			6.30 ug/l	1.42 lbs/day
Zinc				

There are additional standards that apply to this receiving water, but were not considered in this modeling/waste load allocation analysis.

VII. Mathematical Modeling of Stream Quality

Model configuration was accomplished utilizing standard modeling procedures. Data points were plotted and coefficients adjusted as required to match observed data as closely as possible.

The modeling approach used in this analysis included one or a combination of the following models.

(1) The Utah River Model, Utah Division of Water Quality, 1992. Based upon STREAMDO IV (Region VIII) and Supplemental Ammonia Toxicity Models; EPA Region VIII, Sept. 1990 and QUAL2E (EPA, Athens, GA).

(2) Utah Ammonia/Chlorine Model, Utah Division of Water Quality, 1992.

(3) AMMTOX Model, University of Colorado, Center of Limnology, and EPA Region 8

(4) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

Coefficients used in the model were based, in part, upon the following references:

(1) Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling. Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Athens Georgia. EPA/600/3-85/040 June 1985.

(2) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

VIII. Modeling Information

The required information for the model may include the following information for both the upstream conditions at low flow and the effluent conditions:

Flow, Q, (cfs or MGD)	D.O. mg/l
Temperature, Deg. C.	Total Residual Chlorine (TRC), mg/l
pH	Total NH3-N, mg/l
BOD5, mg/l	Total Dissolved Solids (TDS), mg/l
Metals, ug/l	Toxic Organics of Concern, ug/l

Other Conditions

In addition to the upstream and effluent conditions, the models require a variety of physical and biological coefficients and other technical information. In the process of actually establishing the permit limits for an effluent, values are used based upon the available data, model calibration, literature values, site visits and best professional judgement.

Model Inputs

The following is upstream and discharge information that was utilized as inputs for the analysis. Dry washes are considered to have an upstream flow equal to the flow of the discharge.

Current Upstream Information Sewage Canal at Cudahay Lane

	Stream Critical Low Flow cfs	Temp. Deg. C	pH	T-NH3 mg/l as N	BOD5 mg/l	DO mg/l	TRC mg/l	TDS mg/l
Summer (Irrig. Season)	36.0	20.0	7.6	3.00	10.00	6.92	0.00	2205.0
Fall	36.0	12.0	7.6	3.00	10.00	---	0.00	2205.0
Winter	36.0	8.0	7.6	3.00	10.00	---	0.00	2205.0
Spring	36.0	12.0	7.6	3.00	10.00	---	0.00	2205.0

Dissolved Metals	Al ug/l	As ug/l	Cd ug/l	CrIII ug/l	CrVI ug/l	Copper ug/l	Fe ug/l	Pb ug/l
All Seasons	15.00	0.53*	0.50	0.53*	2.65*	12.00	121.0	1.50

Dissolved Metals	Hg ug/l	Ni ug/l	Se ug/l	Ag ug/l	Zn ug/l	Boron ug/l	
All Seasons	0.0000	0.53*	3.80	0.1*	60.00	10.0	* 1/2 MDL

Projected Discharge Information

Season	Flow, MGD	Temp.	TDS mg/l	TDS tons/day
Summer	3.70000	17.0	1757.00	27.10332
Fall	3.70000	15.0		
Winter	3.70000	12.0		
Spring	3.70000	15.0		

All model numerical inputs, intermediate calculations, outputs and graphs are available for discussion, inspection and copy at the Division of Water Quality.

IX. Effluent Limitations

Current State water quality standards are required to be met under a variety of conditions including in-stream flows targeted to the 7-day, 10-year low flow (R317-2-9).

Other conditions used in the modeling effort coincide with the environmental conditions expected at low stream flows.

Effluent Limitation for Flow based upon Water Quality Standards

In-stream criteria of downstream segments will be met with an effluent flow maximum value as follows:

Season	Daily Average	
Summer	3.700 MGD	5.724 cfs
Fall	3.700 MGD	5.724 cfs
Winter	3.700 MGD	5.724 cfs
Spring	3.700 MGD	5.724 cfs

Flow Requirement or Loading Requirement

The calculations in this wasteload analysis utilize the maximum effluent discharge flow of 3.7 MGD. If the discharger is allowed to have a flow greater than 3.7 MGD during 7Q10 conditions, and effluent limit concentrations as indicated, then water quality standards will be violated. In order to prevent this from occuring, the permit writers must include the discharge flow limititation as indicated above; or, include loading effluent limits in the permit.

Effluent Limitation for Whole Effluent Toxicity (WET) based upon WET Policy

Effluent Toxicity will not occur in downstream segements if the values below are met.

WET Requirements	LC50 >	53.0% Effluent	[Acute]
	IC25 >	13.7% Effluent	[Chronic]

Effluent Limitation for Biological Oxygen Demand (BOD) based upon Water Quality Standards or Regulations

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent BOD limitation as follows:

Season	Concentration	
Summer	25.0 mg/l as BOD5	771.3 lbs/day
Fall	25.0 mg/l as BOD5	771.3 lbs/day
Winter	25.0 mg/l as BOD5	771.3 lbs/day
Spring	25.0 mg/l as BOD5	771.3 lbs/day

Effluent Limitation for Dissolved Oxygen (DO) based upon Water Quality Standards

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent D.O. limitation as follows:

Dissolved oxygen effluent limit not appropriate as discharge is to a 3E ditch that flows for approximately 10 miles.

Effluent Limitation for Total Ammonia based upon Water Quality Standards

Ammonia limit was set to the mean background ammonia (3.0 mg/l) in Sewage Canal.

Acute limit calculated with an Acute Zone of Initial Dilution (ZID) to be equal to 100.%.

Effluent Limitation for Total Residual Chlorine based upon Water Quality Standards

In-stream criteria of downstream segments for Total Residual Chlorine will be met with an effluent limitation as follows:

Residual Chlorine effluent limit not appropriate as discharge is to a 3E ditch that flows for approximately 10 miles. Residual chlorine is dissipated before reaching Farmington Bay

Effluent Limitations for Total Dissolved Solids based upon Water Quality Standards

Season		Concentration	Load	
Summer	Maximum, Acute	mg/l	#VALUE!	tons/day
Fall	Maximum, Acute	mg/l	#VALUE!	tons/day
Winter	Maximum, Acute	mg/l	#VALUE!	tons/day
Spring	4 Day Avg. - Chronic	mg/l	#VALUE!	tons/day
Colorado Salinity Forum Limits		Determined by Permitting Section		

Effluent Limitations for Total Recoverable Metals based upon Water Quality Standards

In-stream criteria of downstream segments for Dissolved Metals will be met with an effluent limitation as follows (based upon a hardness of 531.92 mg/l):

	4 Day Average Concentration		Load	1 Hour Average Concentration		Load
Aluminum	N/A		N/A	3,061.4	ug/l	94.4 lbs/day
Arsenic	1,379.99	ug/l	27.5 lbs/day	1,406.7	ug/l	43.4 lbs/day
Cadmium	3.66	ug/l	0.1 lbs/day	46.8	ug/l	1.4 lbs/day
Chromium III	2,464.26	ug/l	49.1 lbs/day	29,372.0	ug/l	906.2 lbs/day
Chromium VI	55.18	ug/l	1.1 lbs/day	53.8	ug/l	1.7 lbs/day
Copper	208.16	ug/l	4.2 lbs/day	242.5	ug/l	7.5 lbs/day
Iron	N/A		N/A	3,764.2	ug/l	116.1 lbs/day
Lead	185.26	ug/l	3.7 lbs/day	2,836.0	ug/l	87.5 lbs/day
Mercury	0.09	ug/l	0.0 lbs/day	9.9	ug/l	0.3 lbs/day
Nickel	1,558.59	ug/l	31.1 lbs/day	7,993.9	ug/l	246.6 lbs/day
Selenium	9.63	ug/l	0.2 lbs/day	70.9	ug/l	2.2 lbs/day
Silver	N/A	ug/l	N/A lbs/day	277.9	ug/l	8.6 lbs/day
Zinc	3,221.95	ug/l	64.3 lbs/day	1,857.9	ug/l	57.3 lbs/day
Cyanide	37.90	ug/l	0.8 lbs/day	91.2	ug/l	2.8 lbs/day

Effluent Limitations for Heat/Temperature based upon Water Quality Standards

Summer	100.0 Deg. C.	212.0 Deg. F

Fall	100.0 Deg. C.	212.0 Deg. F
Winter	100.0 Deg. C.	212.0 Deg. F
Spring	100.0 Deg. C.	212.0 Deg. F

Effluent Limitations for Organics [Pesticides]
Based upon Water Quality Standards

In-stream criteria of downstream segments for Organics [Pesticides] will be met with an effluent limit as follows:

	4 Day Average Concentration		Load		1 Hour Average Concentration		Load	
Aldrin					1.5E+00	ug/l	7.16E-02	lbs/day
Chlordane	4.30E-03	ug/l	1.33E-01	lbs/day	1.2E+00	ug/l	5.73E-02	lbs/day
DDT, DDE	1.00E-03	ug/l	3.09E-02	lbs/day	5.5E-01	ug/l	2.63E-02	lbs/day
Dieldrin	1.90E-03	ug/l	5.86E-02	lbs/day	1.3E+00	ug/l	5.97E-02	lbs/day
Endosulfan	5.60E-02	ug/l	1.73E+00	lbs/day	1.1E-01	ug/l	5.25E-03	lbs/day
Endrin	2.30E-03	ug/l	7.10E-02	lbs/day	9.0E-02	ug/l	4.30E-03	lbs/day
Guthion	0.00E+00	ug/l	0.00E+00	lbs/day	1.0E-02	ug/l	4.77E-04	lbs/day
Heptachlor	3.80E-03	ug/l	1.17E-01	lbs/day	2.6E-01	ug/l	1.24E-02	lbs/day
Lindane	8.00E-02	ug/l	2.47E+00	lbs/day	1.0E+00	ug/l	4.77E-02	lbs/day
Methoxychlor	0.00E+00	ug/l	0.00E+00	lbs/day	3.0E-02	ug/l	1.43E-03	lbs/day
Mirex	0.00E+00	ug/l	0.00E+00	lbs/day	1.0E-02	ug/l	4.77E-04	lbs/day
Parathion	0.00E+00	ug/l	0.00E+00	lbs/day	4.0E-02	ug/l	1.91E-03	lbs/day
PCB's	1.40E-02	ug/l	4.32E-01	lbs/day	2.0E+00	ug/l	9.55E-02	lbs/day
Pentachlorophenol	1.30E+01	ug/l	4.01E+02	lbs/day	2.0E+01	ug/l	9.55E-01	lbs/day
Toxephene	2.00E-04	ug/l	6.17E-03	lbs/day	7.3E-01	ug/l	3.48E-02	lbs/day

Effluent Targets for Pollution Indicators
Based upon Water Quality Standards

In-stream criteria of downstream segments for Pollution Indicators will be met with an effluent limit as follows:

	1 Hour Average Concentration	Loading
Gross Beta (pCi/l)	50.0 pCi/L	
BOD (mg/l)	5.0 mg/l	154.3 lbs/day
Nitrates as N	4.0 mg/l	123.4 lbs/day
Total Phosphorus as P	0.05 mg/l	1.5 lbs/day
Total Suspended Solids	90.0 mg/l	2776.7 lbs/day

Note: Pollution indicator targets are for information purposes only.

Effluent Limitations for Protection of Human Health [Toxics Rule]
Based upon Water Quality Standards (Most stringent of 1C or 3A & 3B as appropriate.)

In-stream criteria of downstream segments for Protection of Human Health [Toxics] will be met with an effluent limit as follows:

	Maximum Concentration Concentration	Load
Toxic Organics		
Acenaphthene	1.97E+04 ug/l	6.07E+02 lbs/day
Acrolein	5.69E+03 ug/l	1.75E+02 lbs/day
Acrylonitrile	4.81E+00 ug/l	1.48E-01 lbs/day
Benzene	5.18E+02 ug/l	1.60E+01 lbs/day
Benzidine	ug/l	lbs/day
Carbon tetrachloride	3.21E+01 ug/l	9.90E-01 lbs/day
Chlorobenzene	1.53E+05 ug/l	4.72E+03 lbs/day
1,2,4-Trichlorobenzene		
Hexachlorobenzene	5.61E-03 ug/l	1.73E-04 lbs/day
1,2-Dichloroethane	7.22E+02 ug/l	2.23E+01 lbs/day
1,1,1-Trichloroethane		
Hexachloroethane	6.49E+01 ug/l	2.00E+00 lbs/day
1,1-Dichloroethane		
1,1,2-Trichloroethane	3.06E+02 ug/l	9.45E+00 lbs/day
1,1,2,2-Tetrachloroethane	8.02E+01 ug/l	2.47E+00 lbs/day
Chloroethane		
Bis(2-chloroethyl) ether	1.02E+01 ug/l	3.15E-01 lbs/day
2-Chloroethyl vinyl ether		
2-Chloronaphthalene	3.13E+04 ug/l	9.67E+02 lbs/day
2,4,6-Trichlorophenol	4.74E+01 ug/l	1.46E+00 lbs/day
p-Chloro-m-cresol		
Chloroform (HM)	3.43E+03 ug/l	1.06E+02 lbs/day
2-Chlorophenol	2.92E+03 ug/l	9.00E+01 lbs/day
1,2-Dichlorobenzene	1.24E+05 ug/l	3.82E+03 lbs/day
1,3-Dichlorobenzene	1.90E+04 ug/l	5.85E+02 lbs/day

1,4-Dichlorobenzene	1.90E+04 ug/l	5.85E+02 lbs/day
3,3'-Dichlorobenzidine	5.61E-01 ug/l	1.73E-02 lbs/day
1,1-Dichloroethylene	2.33E+01 ug/l	7.20E-01 lbs/day
1,2-trans-Dichloroethylene1		
2,4-Dichlorophenol	5.76E+03 ug/l	1.78E+02 lbs/day
1,2-Dichloropropane	2.84E+02 ug/l	8.77E+00 lbs/day
1,3-Dichloropropylene	1.24E+04 ug/l	3.82E+02 lbs/day
2,4-Dimethylphenol	1.68E+04 ug/l	5.17E+02 lbs/day
2,4-Dinitrotoluene	6.63E+01 ug/l	2.05E+00 lbs/day
2,6-Dinitrotoluene		
1,2-Diphenylhydrazine	3.94E+00 ug/l	1.21E-01 lbs/day
Ethylbenzene	2.11E+05 ug/l	6.52E+03 lbs/day
Fluoranthene	2.70E+03 ug/l	8.32E+01 lbs/day
4-Chlorophenyl phenyl ether		
4-Bromophenyl phenyl ether		
Bis(2-chloroisopropyl) ether	1.24E+06 ug/l	3.82E+04 lbs/day
Bis(2-chloroethoxy) methane		
Methylene chloride (HM)	1.17E+04 ug/l	3.60E+02 lbs/day
Methyl chloride (HM)		
Methyl bromide (HM)		
Bromoform (HM)	2.62E+03 ug/l	8.10E+01 lbs/day
Dichlorobromomethane(HM)	1.60E+02 ug/l	4.95E+00 lbs/day
Chlorodibromomethane (HM)	2.48E+02 ug/l	7.65E+00 lbs/day
Hexachlorocyclopentadiene	1.24E+05 ug/l	3.82E+03 lbs/day
Isophorone	4.37E+03 ug/l	1.35E+02 lbs/day
Naphthalene		
Nitrobenzene	1.38E+04 ug/l	4.27E+02 lbs/day
2-Nitrophenol		
4-Nitrophenol		
2,4-Dinitrophenol	1.02E+05 ug/l	3.15E+03 lbs/day
4,6-Dinitro-o-cresol	5.58E+03 ug/l	1.72E+02 lbs/day
N-Nitrosodimethylamine	5.90E+01 ug/l	1.82E+00 lbs/day
N-Nitrosodiphenylamine	1.17E+02 ug/l	3.60E+00 lbs/day
N-Nitrosodi-n-propylamine	1.02E+01 ug/l	3.15E-01 lbs/day
Pentachlorophenol	5.98E+01 ug/l	1.84E+00 lbs/day
Phenol	3.35E+07 ug/l	1.03E+06 lbs/day
Bis(2-ethylhexyl)phthalate	4.30E+01 ug/l	1.33E+00 lbs/day
Butyl benzyl phthalate	3.79E+04 ug/l	1.17E+03 lbs/day
Di-n-butyl phthalate	8.75E+04 ug/l	2.70E+03 lbs/day
Di-n-octyl phthlate		
Diethyl phthalate	8.75E+05 ug/l	2.70E+04 lbs/day
Dimethyl phthlate	2.11E+07 ug/l	6.52E+05 lbs/day
Benzo(a)anthracene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Benzo(a)pyrene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Benzo(b)fluoranthene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Benzo(k)fluoranthene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Chrysene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Acenaphthylene (PAH)		
Anthracene (PAH)		
Dibenzo(a,h)anthracene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day
Indeno(1,2,3-cd)pyrene (PAH)	2.26E-01 ug/l	6.97E-03 lbs/day

Pyrene (PAH)	8.02E+04	ug/l	2.47E+03	lbs/day
Tetrachloroethylene	6.49E+01	ug/l	2.00E+00	lbs/day
Toluene	1.46E+06	ug/l	4.50E+04	lbs/day
Trichloroethylene	5.90E+02	ug/l	1.82E+01	lbs/day
Vinyl chloride	3.83E+03	ug/l	1.18E+02	lbs/day
Pesticides				
Aldrin	1.02E-03	ug/l	3.15E-05	lbs/day
Dieldrin	1.02E-03	ug/l	3.15E-05	lbs/day
Chlordane	4.30E-03	ug/l	1.33E-04	lbs/day
4,4'-DDT	4.30E-03	ug/l	1.33E-04	lbs/day
4,4'-DDE	4.30E-03	ug/l	1.33E-04	lbs/day
4,4'-DDD	6.12E-03	ug/l	1.89E-04	lbs/day
alpha-Endosulfan	1.46E+01	ug/l	4.50E-01	lbs/day
beta-Endosulfan	1.46E+01	ug/l	4.50E-01	lbs/day
Endosulfan sulfate	1.46E+01	ug/l	4.50E-01	lbs/day
Endrin	5.90E+00	ug/l	1.82E-01	lbs/day
Endrin aldehyde	5.90E+00	ug/l	1.82E-01	lbs/day
Heptachlor	1.53E-03	ug/l	4.72E-05	lbs/day
Heptachlor epoxide				
PCB's				
PCB 1242 (Arochlor 1242)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1254 (Arochlor 1254)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1221 (Arochlor 1221)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1232 (Arochlor 1232)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1248 (Arochlor 1248)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1260 (Arochlor 1260)	3.28E-04	ug/l	1.01E-05	lbs/day
PCB-1016 (Arochlor 1016)	3.28E-04	ug/l	1.01E-05	lbs/day
Pesticide				
Toxaphene	5.47E-03	ug/l	1.69E-04	lbs/day
Metals				
Antimony		ug/l		lbs/day
Arsenic		ug/l		lbs/day
Asbestos		ug/l		lbs/day
Beryllium				
Cadmium				
Chromium (III)				
Chromium (VI)				
Copper		ug/l		lbs/day
Cyanide		ug/l		lbs/day
Lead				
Mercury		ug/l		lbs/day
Nickel		ug/l		lbs/day
Selenium				
Silver				
Thallium		ug/l		lbs/day
Zinc				

Dioxin		
Dioxin (2,3,7,8-TCDD)	1.02E-07 ug/l	3.15E-09 lbs/day

Metals Effluent Limitations for Protection of All Beneficial Uses Based upon Water Quality Standards and Toxics Rule

	Class 4 Acute Agricultural ug/l	Class 3 Acute Aquatic Wildlife ug/l	Acute Toxics Drinking Water Source ug/l	Acute Toxics Wildlife ug/l	1C Acute Health Criteria ug/l	Acute Most Stringent ug/l	Class 3 Chronic Aquatic Wildlife ug/l
Aluminum		3061.4				3061.4	N/A
Antimony				31344.5		31344.5	
Arsenic		1406.7			0.0	1406.7	1380.0
Barium						0.0	
Beryllium						0.0	
Cadmium		46.8			0.0	46.8	3.7
Chromium (III)		29372.0			0.0	29372.0	2464.3
Chromium (VI)		53.8			0.0	53.82	55.18
Copper		242.5				242.5	208.2
Cyanide		91.2	1603672.0			91.2	37.9
Iron		3764.2				3764.2	
Lead		2836.0			0.0	2836.0	185.3
Mercury		9.95		1.09	0.0	1.09	0.087
Nickel		7993.9		33531.3		7993.9	1558.6
Selenium		70.9			0.0	70.9	9.6
Silver		277.9			0.0	277.9	
Thallium				45.9		45.9	
Zinc		1857.9				1857.9	3221.9
Boron	5467.1					5467.1	

Summary Effluent Limitations for Metals [Wasteload Allocation, TMDL]
[If Acute is more stringent than Chronic, then the Chronic takes on the Acute value.]

	WLA Acute ug/l	WLA Chronic ug/l	
Aluminum	3061.4	N/A	
Antimony	31344.50		
Arsenic	1406.7	1380.0	
Asbestos	0.00E+00		
Barium			
Beryllium			
Cadmium	46.8	3.7	
Chromium (III)	29372.0	2464	
Chromium (VI)	53.8	55.2	Acute Controls
Copper	242.5	208.2	

Cyanide	91.2	37.9	
Iron	3764.2		
Lead	2836.0	185.3	
Mercury	1.093	0.087	
Nickel	7993.9	1559	
Selenium	70.9	9.6	
Silver	277.9	N/A	
Thallium	45.9		
Zinc	1857.9	3221.9	Acute Controls
Boron	5467.06		

Other Effluent Limitations are based upon R317-1.

E. coli	126.0	organisms per 100 ml

X. Antidegradation Considerations

The Utah Antidegradation Policy allows for degradation of existing quality where it is determined that such lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are protected [R317-2-3]. It has been determined that certain chemical parameters introduced by this discharge will cause an increase of the concentration of said parameters in the receiving waters. Under no conditions will the increase in concentration be allowed to interfere with existing instream water uses.

The antidegradation rules and procedures allow for modification of effluent limits less than those based strictly upon mass balance equations utilizing 100% of the assimilative capacity of the receiving water. Additional factors include considerations for "Blue-ribbon" fisheries, special recreational areas, threatened and endangered species, and drinking water sources.

An Antidegradation Level I Review was conducted on this discharge and its effect on the receiving water. Based upon that review, it has been determined that an Antidegradation Level II Review is not required.

XI. Colorado River Salinity Forum Considerations

Discharges in the Colorado River Basin are required to have their discharge at a TDS loading of less than 1.00 tons/day unless certain exemptions apply. Refer to the Forum's Guidelines for additional information allowing for an exceedence of this value.

XII. Summary Comments

The mathematical modeling and best professional judgement indicate that violations of receiving water beneficial uses with their associated water quality standards, including important down-stream segments, will not occur for the evaluated parameters of concern as discussed above if the effluent limitations indicated above are met.

XIII. Notice of UPDES Requirement

This Addendum to the Statement of Basis does not authorize any entity or party to discharge to the waters of the State of Utah. That authority is granted through a UPDES permit issued by the Utah Division of Water Quality. The numbers presented here may be changed as a function of other factors. Dischargers are strongly urged to contact the Permits Section for further information. Permit writers may utilize other information to adjust these limits and/or to determine other limits based upon best available technology and other considerations provided that the values in this wasteload analysis [TMDL] are not compromised. See special provisions in Utah Water Quality Standards for adjustments in the Total Dissolved Solids values based upon background concentration.

Utah Division of Water Quality
801-538-6052
File Name: Gatsby_WLA_11-8-12.xls

APPENDIX - Coefficients and Other Model Information

CBOD Coeff. (Kd)20 1/day	CBOD Coeff. FORCED (Kd)/day	CBOD Coeff. (Ka)T 1/day	REAER. Coeff. (Ka)20 (Ka)/day	REAER. Coeff. FORCED 1/day	REAER. Coeff. (Ka)T 1/day	NBOD Coeff. (Kn)20 1/day	NBOD Coeff. (Kn)T 1/day
2.000	0.000	2.000	18.711	0.000	18.711	0.600	0.600

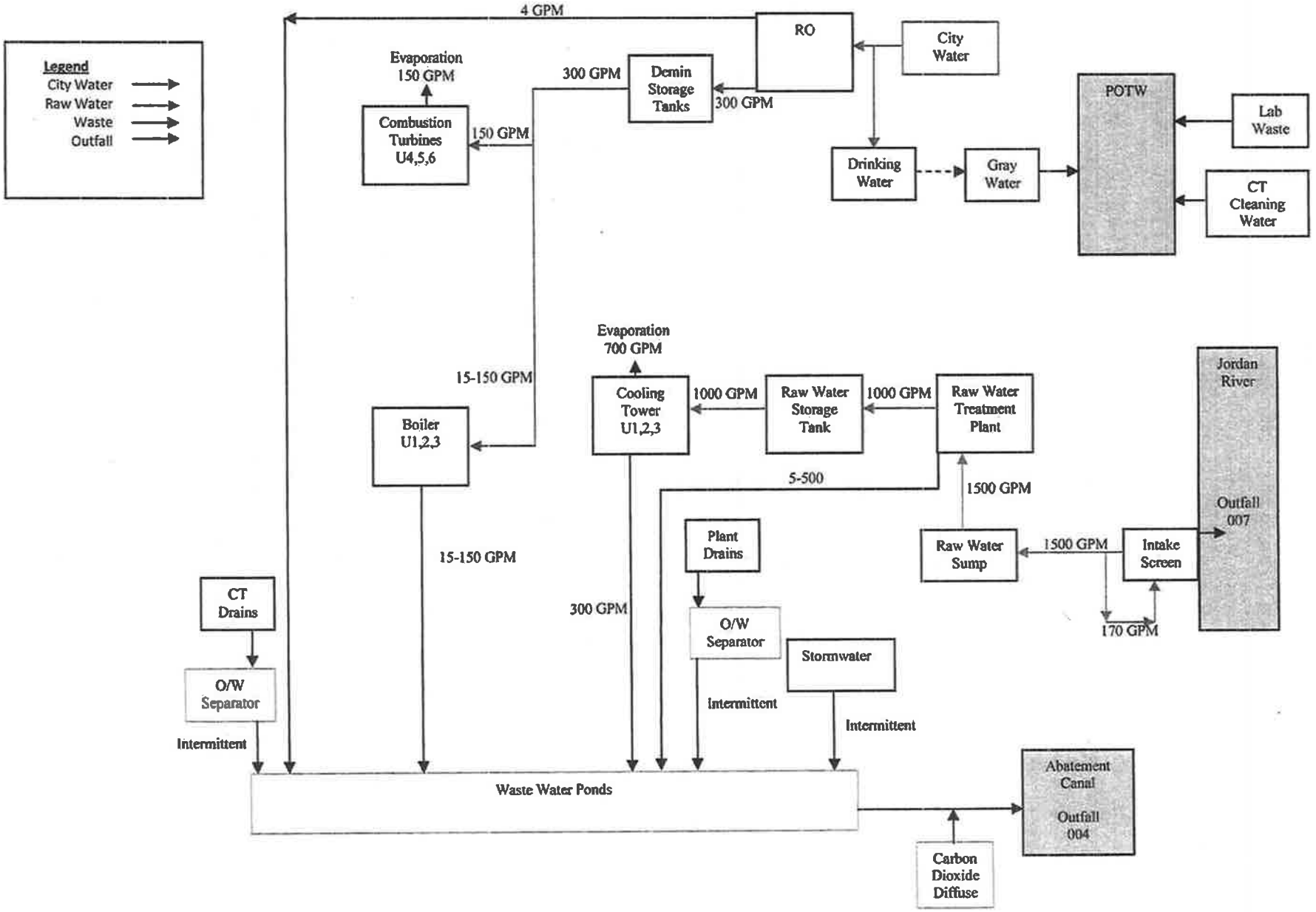
Open Coeff. (K4)20 1/day	Open Coeff. (K4)T 1/day	NH3 LOSS (K5)20 1/day	NH3 (K5)T 1/day	NO2+NO3 LOSS (K6)20 1/day	NO2+NO3 (K6)T 1/day	TRC Decay K(Cl)20 1/day	TRC K(Cl)(T) 1/day
0.000	0.000	4.000	4.000	0.000	0.000	32.000	32.000

BENTHIC DEMAND (SOD)20 gm/m2/day	BENTHIC DEMAND (SOD)T gm/m2/day
1.000	1.000

K1 CBOD {theta}	K2 Reaer. {theta}	K3 NH3 {theta}	K4 Open {theta}	K5 NH3 Loss {theta}	K6 NO2+3 {theta}	K(Cl) TRC {theta}	S Benthic {theta}
1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1

PACIFICORP ENERGY

Flow Diagram



pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and the following pretreatment standards for new sources (PSNS).

(a) There shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid.

(b) The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS pretreatment standards Maximum for 1 day (mg/l)
Copper, total	1.0

(c) [Reserved—Nonchemical Metal Cleaning Wastes].

(d)(1) The pollutants discharged in cooling tower blowdown shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS pretreatment standards Maximum for any time (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	
Chromium, total	0.2
Zinc, total	1.0

(2) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

(e) There shall be no discharge of wastewater pollutants from fly ash transport water.

Appendix A to Part 423—126 Priority Pollutants

top

001 Acenaphthene

002 Acrolein

003 Acrylonitrile

004 Benzene

005 Benzidine

006 Carbon tetrachloride (tetrachloromethane)

007 Chlorobenzene

008 1,2,4-trichlorobenzene

009 Hexachlorobenzene

010 1,2-dichloroethane

011 1,1,1-trichloroethane

012 Hexachloroethane

013 1,1-dichloroethane

014 1,1,2-trichloroethane

015 1,1,2,2-tetrachloroethane

016 Chloroethane

018 Bis(2-chloroethyl) ether

019 2-chloroethyl vinyl ether (mixed)

020 2-chloronaphthalene

021 2,4, 6-trichlorophenol

022 Parachlorometa cresol

023 Chloroform (trichloromethane)

024 2-chlorophenol

025 1,2-dichlorobenzene

026 1,3-dichlorobenzene

027 1,4-dichlorobenzene

028 3,3-dichlorobenzidine

029 1,1-dichloroethylene

030 1,2-trans-dichloroethylene

031 2,4-dichlorophenol

032 1,2-dichloropropane

033 1,2-dichloropropylene (1,3-dichloropropene)

034 2,4-dimethylphenol

035 2,4-dinitrotoluene

036 2,6-dinitrotoluene

037 1,2-diphenylhydrazine

038 Ethylbenzene

039 Fluoranthene

040 4-chlorophenyl phenyl ether

041 4-bromophenyl phenyl ether

042 Bis(2-chloroisopropyl) ether

043 Bis(2-chloroethoxy) methane

044 Methylene chloride (dichloromethane)

045 Methyl chloride (dichloromethane)

046 Methyl bromide (bromomethane)

047 Bromoform (tribromomethane)

048 Dichlorobromomethane

051 Chlorodibromomethane

052 Hexachlorobutadiene

053 Hexachloromyclopentadiene

054 Isophorone

055 Naphthalene

056 Nitrobenzene

057 2-nitrophenol

058 4-nitrophenol

059 2,4-dinitrophenol

060 4,6-dinitro-o-cresol

061 N-nitrosodimethylamine

062 N-nitrosodiphenylamine

063 N-nitrosodi-n-propylamin

064 Pentachlorophenol

065 Phenol

066 Bis(2-ethylhexyl) phthalate

067 Butyl benzyl phthalate

068 Di-N-Butyl Phthalate

069 Di-n-octyl phthalate

070 Diethyl Phthalate

071 Dimethyl phthalate

072 1,2-benzanthracene (benzo(a) anthracene

073 Benzo(a)pyrene (3,4-benzo-pyrene)

074 3,4-Benzofluoranthene (benzo(b) fluoranthene)

075 11,12-benzofluoranthene (benzo(b) fluoranthene)

076 Chrysene

077 Acenaphthylene

078 Anthracene

079 1,12-benzoperylene (benzo(ghi) perylene)

080 Fluorene

081 Phenanthrene

082 1,2,5,6-dibenzanthracene (dibenzo(,h) anthracene)

083 Indeno (,1,2,3-cd) pyrene (2,3-o-pheynylene pyrene)

084 Pyrene

085 Tetrachloroethylene

086 Toluene

087 Trichloroethylene

088 Vinyl chloride (chloroethylene)

089 Aldrin

090 Dieldrin

091 Chlordane (technical mixture and metabolites)

092 4,4-DDT

093 4,4-DDE (p,p-DDX)

094 4,4-DDD (p,p-TDE)

095 Alpha-endosulfan

096 Beta-endosulfan

097 Endosulfan sulfate

098 Endrin

099 Endrin aldehyde

100 Heptachlor

101 Heptachlor epoxide (BHC-hexachlorocyclohexane)

102 Alpha-BHC

103 Beta-BHC

104 Gamma-BHC (lindane)

105 Delta-BHC (PCB-polychlorinated biphenyls)

106 PCB–1242 (Arochlor 1242)

107 PCB–1254 (Arochlor 1254)

108 PCB–1221 (Arochlor 1221)

109 PCB–1232 (Arochlor 1232)

110 PCB–1248 (Arochlor 1248)

111 PCB–1260 (Arochlor 1260)

112 PCB–1016 (Arochlor 1016)

113 Toxaphene

114 Antimony

115 Arsenic

116 Asbestos

117 Beryllium

118 Cadmium

119 Chromium

120 Copper

121 Cyanide, Total

122 Lead

123 Mercury

124 Nickel

125 Selenium

126 Silver

127 Thallium

126 Silver

128 Zinc

129 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)

Browse Previous | Browse Next

FACILITY/ 2012 UPDES #	ADDRESS	CONTACT (S)	Month	DMRs on time? (Y/N)	No. of Exc.	EFF Avg. Flow(MGD)	EFF Max. Flow (MGD)	PH MIN	PH MAX	TSS	SS	Iron, total (mg/L)	TDS (mg/L) daily max.	TDS (lbs/day) 2000 max.	O/G	FAC mg/L
Gadsby Station PacifiCorp UT0000116 Oufall 004A	1407 West N. Temple SLC, UT 004A	Bill Domichael 801-220-7708	J	Y	0	0.638	0.814	8.01	8.08	6.0	na	0.137			3.1	0.03
			F	Y	0	0.091	0.692	8.07	8.77	11.0	na	Report quarterly			<3	0.1
			M	Y	0	0.719	1.13	7.33	7.81	7.0	na	Report quarterly			<3	0.01
			A	Y	0	0.38	1.026	8.0	8.4	6.0	na	<0.100			3.8	0.01
			M	Y	0	0.62	1.115	8.03	8.11	5.0	na	NA			<3.0	0.02
			J	Y	0	0.732	1.189	7.45	8.11	7.4	na	NA			3.2	0.01/0.02
			J	Y	0	0.519	0.905	7.71	8.64	15.6	na	0.131			3.6	0.02/0.04
			A	Y	0	0.711	1.536	7.41	8.11	22.8,22.8,22.8	na	NA			<3.0	0.018/0.02
			S	Y	0	0.808	1.055	7.34	8.23	16.8/16.8/16.8	na	NA			<0.3	0.012/0.02
			O													
			N													
			D													
		Average														0.0409091

FACILITY/ 2011 UPDES #	ADDRESS	CONTACT(S)	Month	DMRs on time? (Y/N)	No. of Exc.	EFF Avg. Flow(MGD)	EFF Max. Flow (MGD)	PH MIN	PH MAX	TSS	SS	Iron, total (mg/L)	TDS (mg/L) daily max.	TDS (lbs/day) 2000 max	O/G	FAC mg/L
Gadsby Station	1407 West N.	Bill Domichael	J	Y	0	0.515	0.85	7.66	7.94	4.0	n/a	0.11	n/a	n/a	<3.0	0.07
PacifiCorp	Temple SLC, UT	801-220-7708	F	Y	0	0.578	0.921	7.66	8.06	<3.0		n/a			4.2	0.02
UT0000116	004A		M	Y	0	1.007	1.352	7.88	8.02	<3.0		n/a			<3.0	0.04
Oufall 004A			A	Y	0	0.469	1.405	8.0	8.2	<3.0		0.151			<3.0	0.04
			M	Y	0	0.137	0.7	7.28	8.2	10.0/10.0		n/a			3.0	0.03
			J	Y	0	0.563	1.083	6.83	7.93	5.0/5.0		na			<3.0	0.07
			J	Y	0	0.858	1.036	7.85	8.25	2.0/2.0		0.137			<3.0	0.04
			A	Y	0	0.82	1.014	7.86	8.75	4.0/4.0		N/A			3.3	0.05
			S	Y	0	0.892	1.298	7.88	8.04	1.0		n/a			3.1	0.05
			O	Y	0	0.729	1.175	7.98	8.2	11.0/11.0		0.165			3.3	0.04
			N	Y	0	0.575	1.093	7.98	8.16	<1/29.0		na			3.5	0
			D													
		Average				0.630375	1.1005	6.83	8.75	2.5		0.1326667			3.5333333	0.0409091

FACILITY/ 2010 UPDES #	ADDRESS	CONTACT(S)	Month	DMRs on time? (Y/N)	No. of Exc.	EFF Avg. Flow(MGD)	EFF Max. Flow (MGD)	PH MIN	PH MAX	TSS	SS	Iron, total (mg/L)	TDS (mg/L) daily max.	TDS (lbs/day) 2000 max	O/G	FAC mg/L
Gadsby Station	1407 West N.	Bill Domichael	J	Y	0	0.44	0.883	8.05	8.38	<3.0	n/a	0.3	n/a	n/a	3.5	0.02
PacifiCorp	Temple SLC, UT	801-220-7708	F	Y	0	0.063	0.171	8.2	8.6	<3.0		n/a			<3.0	0.02
UT0000116	004A		M	Y	0	0.216	0.695	6.73	8.45	<3.0		n/a			<5.0	0.03
Outfall 004A			A	Y	0	1.24	1.744	8.0	8.0	8.0		<0.1			<3.0	0.03
			M	Y	0	0.641	1.067	7.87	8.35	8.0		n/a			<3.0	0.03
			J	Y	0	0.784	1.691	7.86	8.4	10.0		n/a			<3.0	0.03
			J	Y	0	0.925	1.209	6.91	8.02	<3.0		0.136			<3.0	0.04
			A	Y	0	0.966	1.508	7.84	8.05	3		n/a			<4.0	0.02
			S	Y	0	0.926	1.129	7.95	8.04	7.0		n/a			<3.0	0.02
			O	Y	0	1.009	1.368	7.78	8.25	14.0		0.292			3	0.04
			N	Y	0	0.707	1.199	7.81	7.99	7.0		n/a			3.9	0.04
			D		0	0.619	0.835	7.66	7.97	<3		na			<3.0	0.02
		Average				0.71133333	1.12491667	6.73	8.45	8.1		0.2426667			3.4666667	0.0290909

2009 Discharge Monitoring Report Tracking
PacifiCorp Individual Permits

FACILITY/ UPDES #	ADDRESS	CONTACT(S)	Month	DMRs on time? (Y/N)	No. of Exc.	EFF Avg Flow(MGD)	EFF Max Flow (MGD)	PH MIN	PH MAX	TSS	SS	Iron, total (mg/L)	TDS (mg/L) daily max.	TDS (lbs/day) 2000 max	O/G	FAC in mg/L	
Gadsby Station	1407 West N.	Bill Domichael	J	Y	0	0.184	0.695	8.17	8.6	4.0	n/a	<0.05	n/a	n/a	3.4	0.02	
PacifiCorp	Temple SLC, UT	801-220-7708	F	Y	0	0.715	0.98	7.97	8.13	9.0		n/a			6.6	0.05	
UT0000116	004A		M	Y	0	0.311	1.177	7.33	8.22	5.0		n/a			3.5	0.05	
Outfall 004A			A	Y	0	0.185	0.313	7.66	8.64	8.0		0.32			3.5	0.05	
			M	Y	0	0.426	0.734	7.52	8.07	8.0		n/a			3.3	0.06	
2009 Data			J	Y	0	0.687	1.125	7.77	7.85	9.0		n/a			4.7	0.05	
			J	Y	0	0.891	1.339	7.6	8.18	4.0		0.37			4.5	0.03	
			A	Y	0	0.898	1.236	8.1	8.35	<3.0		n/a			<3.0	0.03	
			S	Y	0	0.983	1.255	7.91	8.36	<3.0		n/a			4.3	0.03	
			O	Y	0	0.804	1.288	8.15	8.3	7.0		0.38			5.5	0.03	
			N	Y	0	0.603	1.418	7.69	8.09	5.0		n/a			4.6	0.03	
			D	Y	0	0.602	0.981	7.8	8.14	4.0		n/a			<3.0	0.03	


RO
City Water
Raw Water Treatment
Abatement Canal Outfall
CO2 Diffuser
Plant Drains
Boiler U1.2.3
Jordan River Intake & Outfall 007
U3 Cooling Tower
U2 Cooling Tower
O/W Separator
U1 Cooling Tower
Storm Water
Combustion Turbines U4,5,6
1.5 million gallon Settling Ponds
O/W Separator
Google earth

Permit No. UT0000116
Minor Industrial

FILE COPY

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"*),

PACIFICORP – GADSBY PLANT

is hereby authorized to discharge from its facility located at 1359 West North Temple, Salt Lake City, Utah, with Outfall 004 located at latitude 40° 76' 89" and longitude 111° 93' 05", and Outfall 007 located at latitude 40° 76' 87" and longitude 111° 92' 64", to receiving waters named

Salt Lake Abatement Canal and the Jordan River

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

This permit shall become effective on June 1, 2013.

This permit and the authorization to discharge shall expire at midnight, May 31, 2018.

Signed this 4th day of June, 2013.

John J. Whitehead
Acting Director
Utah Division of Water Quality

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Definitions.

1. 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.

2. 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.

3. "Daily Maximum" ("Daily Max.") is the maximum value allowable in any single sample or instantaneous measurement.

4. "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.

5. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

6. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.

7. "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.

8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

9. "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.

10. "Director" means Director of the Utah Division of Water Quality.

11. "EPA" means the United States Environmental Protection Agency.

12. "Act" means the "*Utah Water Quality Act*".

13. "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 plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

14. "*CWA*" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.

15. "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.

16. "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.

17. "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.

18. "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.

19. "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*).

20. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

21. "Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

22. "Waste pile" means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

23. "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in *Weather*

Bureau Technical Paper No. 40, May 1961 and *NOAA Atlas 2,* 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

B. Description of Discharge Points.

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 Points
004	Continuous discharge from the treatment ponds to the Salt Lake Abatement Canal at latitude 40° 76' 89" and longitude 111° 93' 05".
007	East side of property along the Jordan River back flushing Jordan River rinse water from the intake screens at latitude 40° 76' 87" and longitude 111° 92' 64".

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. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 004. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations a/				Monitoring Requirements	
Effluent	Average		Daily	Daily	Measurement	Sample
Characteristics	30-Day	7-Day	Minimum	Maximum	Frequency	Type
Flow, MGD	Report	NA	NA	3.7	Continuous	Recorder
Total Suspended Solids, mg/L	25	35	NA	100	Monthly	Grab or Comp
Oil & Grease, mg/L b/	NA	NA	NA	10	Monthly/Sheen	Grab
pH, standard units	NA	NA	6.5	9.0	Monthly	Grab
Total Chromium, mg/L c/	0.2	NA	NA	0.2	Quarterly	Grab or Comp
Total Zinc, mg/L c/	1.0	NA	NA	1.0	Quarterly	Grab or Comp
Free Avail. Chlorine, mg/L	0.2	NA	NA	0.5	Weekly	Grab

N.A. - Not Applicable

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.

There shall be not discharge of polychlorinated biphenyl compounds such as those that were commonly used in transformer fluids.

The blowdown from the cooling towers shall contain no detectable amounts of the 126 priority pollutants (Appendix A of 40 CFR Part 423) due to chemicals added for cooling tower maintenance. Compliance with this requirement may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the cooling tower blowdown by the analytical methods in 40 CFR Part 136. These calculations must be based on the cooling tower blowdown only and shall not include dilution by any other effluent streams. A list of the certified analytical contents of all biofouling and maintenance formulations (Manufacturer's certification as to contents and priority pollutants status) shall be submitted along with the engineering calculations. The engineering calculations shall be updated annually or whenever there is a change in the chemicals used or an increase in the application rate of the chemicals. If chemical usage, both type and quantity has not changed during the year, a letter certifying to that fact is adequate to demonstrate continued compliance with the requirement.

There shall be no discharge of metal cleaning wastes or chemical metal cleaning wastes.

a/ See Definitions, *Part I.A* for definition of terms.

b/ In addition to the monthly sampling requirement for Oil & Grease, a sample for Oil and Grease shall also be immediately taken whenever a sheen is observed on the effluent or there is another reason to believe oil is present.

c/ Total chromium and total zinc samples shall be taken from cooling tower blowdown only and shall not include dilution from any other effluent stream. These parameters shall be taken at the same location as the 126 priority pollutants and shall not exceed the limitations in the effluent table for Outfall 004. Total zinc and total chromium are not required to be sampled at Outfall 004. If the cooling tower does not blowdown in a quarterly period enter N.A.

2. Effective immediately and lasting the duration of this permit, the permittee is authorized to back flush only from Outfall 007. There shall be no chemicals added to the intake raw water sump because this water is used for back flushing the intake screens. No samples are required from Outfall 007.

3 Samples taken in compliance with the monitoring requirements specified above for Outfall 004 shall be taken at the following locations: at the outfall prior to mixing with the receiving stream.

II. STORM WATER DISCHARGE REQUIREMENTS

A. Coverage of This Section

1. Discharges Covered Under This Section. The requirements listed under this section shall apply to storm water discharges from the industrial facility.

a. Site Coverage. This section covers discharges of storm water associated with industrial activity to waters of the State from the confines of the facility listed on the cover page. Specific monitoring requirements have been included and are based on the requirements of the UPDES Multi Sector General Permit for Storm Water Discharges Associated with Industrial Activity, Permit No. UTR000000, specifically Appendix II Sector O.

B. Prohibition of Non-Storm Water Discharges

1. The following non-storm water discharges may be authorized under this permit provided the non-storm water component of the discharge is in compliance with this section; discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushing; drinking fountain water; irrigation drainage and lawn watering; routine external building wash down water where detergents or other compounds have not been used in the process; pavement wash waters where spills or leaks of toxic or hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

C. Storm Water Pollution Prevention Plan Requirements

1. Contents of the Plan. The plan shall include, at a minimum, the following items:

a. Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

b. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials, which may be reasonably expected to have the potential as a significant pollutant source. Each plan shall include, at a minimum:

(1) Drainage. A site map indicating drainage areas and storm water outfalls. For each area of the facility that generates storm water discharges associated with the waste water treatment related activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an identification of the types of pollutants that are likely to be present in storm water discharges associated with the activity. Factors to consider include the toxicity of the pollutant; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or

hazardous pollutants. Flows with a significant potential for causing erosion shall be identified. The site map shall include but not be limited to:

(a) Drainage direction and discharge points from all wastewater associated discharges.

(b) Location of any erosion and sediment control structure or other control measures utilized for reducing pollutants in storm water runoff.

(c) Location of any handling, loading, unloading or storage of chemicals or potential pollutants such as caustics, hydraulic fluids, lubricants, solvents or other petroleum products, or hazardous wastes and where these may be exposed to precipitation.

(d) Locations where any major spills or leaks of toxic or hazardous materials have occurred

(e) Location of any sand or salt piles.

(f) Location of fueling stations or vehicle and equipment maintenance and cleaning areas that are exposed to precipitation.

(g) Location of receiving streams or other surface water bodies.

(h) Locations of outfalls and the types of discharges contained in the drainage areas of the outfalls.

(2) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the effective date of this permit; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the effective date of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(4) Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) Summary of Potential Pollutant Sources and Risk Assessment. A narrative description of the potential pollutant sources from the following activities associated with treatment works: access roads/rail lines; loading and unloading operations; outdoor storage activities; material handling sites; outdoor vehicle

storage or maintenance sites; significant dust or particulate generating processes; and onsite waste disposal practices. Specific potential pollutants shall be identified where known.

c. Measures and Controls. The facility shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(1) Nonstructural Controls

(a) Good Housekeeping. All areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. These are practices that would minimize the generation of pollutants at the source or before it would be necessary to employ sediment ponds or other control measures at the discharge outlets. Areas where good housekeeping practices should be implemented are storage areas for raw materials, waste materials and finished products; loading/unloading areas and waste disposal areas for hazardous and non-hazardous wastes. Examples of good housekeeping measures include; sweeping; labeling drums containing hazardous materials; and preventive monitoring practices or equivalent measures.

(b) Preventive Maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures. Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.

(d) Inspections. In addition to the comprehensive site evaluation required under paragraph D. of this part, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a periodic basis. The following areas shall be included in all inspections: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; and vents and stacks from industrial activities. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the facility is encouraged.

(e) Employee Training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but training should be held at least annually (once per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and control; fueling procedures; general good housekeeping practices; proper procedures for using fertilizers, herbicides and pesticides.

(f) Record Keeping and Internal Reporting Procedures. A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(2) Non-storm Water Discharges.

(a) Certification. The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with Part V.G. of this permit

(b) Exceptions. Except for flows from fire fighting activities, sources of non-storm water listed in paragraph B. (Prohibition of Non-storm Water Discharges) of this section that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(c) Failure to Certify. Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the *Director* within 180 days of the effective date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State which are not authorized by a *UPDES* permit are unlawful, and must be terminated.

(3) Sediment and Erosion Control. The plan shall identify areas, which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(4) Management of Runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity {*see* (Description of Potential Pollutant Sources)} shall be considered when determining reasonable and appropriate measures. Appropriate measures or other equivalent measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices and discharging storm water through the waste water facility for treatment.

d. Comprehensive Site Compliance Evaluation

Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with paragraph C.1.b. (Description of Potential Pollutant Sources) of this section and pollution prevention measures and controls identified in the plan in accordance with paragraph C.7. (Measures and Controls) of this section shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(3) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph *i.* (above) shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution

prevention plan and this permit. The report shall be signed in accordance with Part V.G (Signatory Requirements) of this permit.

(4) Deadlines for Plan Preparation and Compliance. The facility shall prepare and implement a plan in compliance with the provisions of this section within 270 days of the effective date of this permit.

(5) Keeping Plans Current. The facility shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified by the plan, or in otherwise achieving the general objective of controlling pollutants in storm water discharges associated with the activities at the facility.

D. Monitoring and Reporting Requirements

1. Quarterly Visual Examination of Storm Water Quality. The facility shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination must be made at least once in each of the following designated periods during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event: January through March; April through June; July through September; and October through December.

a. Sample and Data Collection. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

b. Visual Storm Water Discharge Examination Reports. Visual examination reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

c. Representative Discharge. Based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate

of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

d. Adverse Conditions. When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the results of the visual examination. Adverse weather conditions, which may prohibit the collection of samples, include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

e. Inactive and Unstaffed Site. When a discharger is unable to conduct visual storm water examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible.

f. Analytical Monitoring Requirements. During the second and fourth year of the permit the facility must monitor their storm water discharges associated with industrial activity at least quarterly (4 times per year) except as provided in paragraphs of this section titled (Sampling Waiver), (Representative Discharge), and (Alternative Certification). The facility is required to monitor their storm water discharges for the pollutants of concern listed in the table below. Facilities must report in accordance with the (Reporting) section. In addition to the parameters listed in the table, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

Monitoring Requirements for Industrial Inorganic Chemicals

Pollutant of Concern	Cut-Off Concentration
Total Recoverable Iron	1.0 mg/L

g. Monitoring Periods. The facility shall monitor samples collected during the sampling periods of: January to March, April to June, July to September, and October to December for the years specified in paragraph above.

h. Sample Type. A minimum of one grab sample shall be taken. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first

hour of the discharge, and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the non-storm water discharge.

i. Sampling Waiver.

(1) Adverse Conditions. When a discharger is unable to collect samples within a specified sampling period due to adverse climatic conditions, the discharger shall collect a substitute sample from a separate qualifying event in the next period and submit the data along with data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

(2) Low Concentration Waiver. When the average concentration for a pollutant calculated from all monitoring data collected from an outfall during the second year monitoring period is less than the corresponding value for that pollutant listed in the above Table under the column Monitoring Cut-Off Concentration, a facility may waive monitoring and reporting requirements in the fourth year monitoring period. The facility must submit to the *Director*, in lieu of the monitoring data, a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility which drains to the outfall for which sampling was waived.

(3) Inactive and Unstaffed Site. When a discharger is unable to conduct quarterly chemical storm water sampling at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirements as long as the facility remains inactive and unstaffed. The facility must submit to the *Director*, in lieu of monitoring data, a certification statement on the *SWDMR* stating that the site is inactive and unstaffed so that collecting a sample during a qualifying event is not possible.

E. *EPCRA Section 313* Requirements.

1. In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:

a. Curbing, culverts, gutters, sewers, or other forms of drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or

b. Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.

2. No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section

313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

3. Material storage areas for Section 313 water priority chemicals other than liquids that are subject to runoff, leaching, or wind shall incorporate drainage or other control features that will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.

4. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

5. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

6. Drainage from areas covered by paragraphs *(1)*, *(2)*, *(3)*, or *(4)* of this part (above) should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

   Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.

   If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.

   Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

7. Other areas of the facility (those not addressed in paragraphs *(1)*, *(2)*, *(3)*, or *(4)*), from which runoff that may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

8. All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures that

could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered that may result in significant releases of Section 313 water priority chemicals to waters of the State, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the State shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

9. Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

10. Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year. Training shall address: pollution control laws and regulations, the storm water pollution prevention plan and the particular features of the facility and its operation that are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

III. 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. Reporting of Monitoring Results.
Monitoring results obtained during the previous month shall be summarized for each month and reported monthly 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. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports, 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:

original to: Department of Environmental Quality
Division of Water Quality
195 North 1950 West
PO Box 144870
Salt Lake City, Utah 84114-4870

E. 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.

F. 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.

G. 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.

H. 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.

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.

2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:

   a. Any noncompliance which may endanger health or the environment;

   b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.)*;

   c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*); or,

   d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.

3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. 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.

4. 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.

5. Reports shall be submitted to the addresses in *Part II.D, 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.D* are submitted. The reports shall contain the information listed in *Part II.I.3*.

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.

IV. 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 the provisions of paragraphs 2 and 3 of this section. Return of removed substances, as described in *Part III.F*, to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

2. Notice:

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under *Part II.I, Twenty-four Hour Reporting*.

3. Prohibition of bypass.

a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:

(1) The 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; and,

(3) The permittee submitted notices as required under paragraph 2 of this section.

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 above in paragraph 3.a of this section.

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.

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).

V. 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*.

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) testing, a WET limitation, a compliance schedule, a compliance date, additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.

FILE COPY

Mike Herkimer <mherkimer@utah.gov>

PacifiCorp Gadsby UPDES Permit Review

1 message

Shakespear, Brett <Brett.Shakespear@pacificorp.com> Thu, May 2, 2013 at 11:32 AM
To: "mherkimer@utah.gov" <mherkimer@utah.gov>

Mike,

After reviewing the PacifiCorp Gadsby UPDES permit that is currently out for public notice, PacifiCorp has the following comments.

1. Part II, A.1.a: Multi-sector general permit UTR000000, Appendix II Sector G. PacifiCorp believes this should be "Sector O".

2. Part III, I.1: Division of Water Quality phone is listed as 801-538-6146. Is this correct, or should it be 801-536-4301?

Please let me know if you have any questions regarding these comments.

Thanks,

Brett Shakespear

Senior Environmental Analyst

PacifiCorp Energy

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Salt Lake City, Utah 84116

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