

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"),

LAKE SIDE POWER PLANT

is hereby authorized to discharge from its facility located at 1825 North Pioneer Lane Vineyard, Utah with the outfall located at latitude 40°19'46" and longitude 111°45'17", to receiving waters named

Lindon Hollow Creek into Utah Lake

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

This permit shall become effective on **June 1, 2012**

This permit and the authorization to discharge shall expire at midnight, January 31, 2015.

Signed this **31st day of May, 2012.**

Walter L. Baker, P.E.
Executive Secretary
Utah Water Quality Board

Table of Contents

Items of Interest	Page Number
I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	<u>33</u>
A. Description of Discharge Point	<u>33</u>
B. Narrative Standard	<u>33</u>
C. Specific Limitations and Self-Monitoring Requirements.....	<u>33</u>
II. STORM WATER DISCHARGE REQUIREMENTS	<u>1144</u>
A. Coverage of this Section	<u>1144</u>
B. Prohibition of Non-Storm Water Discharges	<u>1144</u>
C. Storm Water Pollution Prevention Plan Requirements	<u>1144</u>
D. Comprehensive Site Compliance Evaluation.....	<u>1747</u>
E. Monitoring and Reporting Requirements.....	<u>1818</u>
III. MONITORING, RECORDING AND REPORTING REQUIREMENTS	<u>2525</u>
A. Representative Sampling	<u>2525</u>
B. Monitoring Procedures.....	<u>2525</u>
C. Penalties for Tampering	<u>2525</u>
D. Reporting of Monitoring Results	<u>2525</u>
E. Compliance Schedules	<u>2525</u>
F. Additional Monitoring by the Permittee.....	<u>2525</u>
G. Records Contents	<u>2626</u>
H. Retention of Records	<u>2626</u>
I. Twenty-Four Hour Notice of Noncompliance Reporting.....	<u>2626</u>
J. Other Noncompliance Reporting.....	<u>2727</u>
K. Inspection and Entry	<u>2727</u>
IV. COMPLIANCE RESPONSIBILITIES	<u>2929</u>
A. Duty to Comply	<u>2929</u>
B. Penalties for Violations of Permit Conditions.....	<u>2929</u>
C. Need to Halt or Reduce Activity Not a Defense	<u>2929</u>
D. Duty to Mitigate.....	<u>2929</u>
E. Proper Operation and Maintenance	<u>2929</u>
F. Removed Substances	<u>2929</u>
G. Bypass of Treatment Facilities.....	<u>3030</u>
H. Upset Conditions.....	<u>3131</u>
I. Toxic Pollutants.....	<u>3232</u>
J. Changes in Discharge of Toxic Substances.....	<u>3232</u>
K. Industrial Pretreatment.....	<u>3333</u>
V. GENERAL REQUIREMENTS	<u>3434</u>
A. Planned Changes.....	<u>3434</u>
B. Anticipated Noncompliance.....	<u>3434</u>
C. Permit Actions	<u>3434</u>
D. Duty to Reapply.....	<u>3434</u>
E. Duty to Provide Information	<u>3434</u>
F. Other Information.....	<u>3434</u>
G. Signatory Requirements.....	<u>3434</u>
H. Penalties for Falsification	<u>3636</u>
I. Availability of Reports	<u>3636</u>
J. Oil and Hazardous Substance Liability	<u>3636</u>
K. Property Rights	<u>3636</u>
L. Severability	<u>3636</u>
M. Transfers.....	<u>3636</u>
N. State Laws.....	<u>3737</u>
O. Water Quality - Reopener Provision.....	<u>3737</u>
P. Toxicity Limitation - Reopener Provision.....	<u>3737</u>
VI. DEFINITIONS	<u>3838</u>

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Description of Discharge Point.

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are in 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*.

<u>Outfall Number</u>	<u>Location of Discharge Point</u>
001	The discharge is located at latitude 40°19'46" and longitude 111°45'17". The discharge is to Lindon Hollow Creek which flows to Utah Lake.
002	The discharge is located at latitude 40°19'54.45" and longitude 111°45'47.85". The discharge is through a pipe to Lindon Hollow Creek which flows to Utah Lake.

B. 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.

C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 001 and Outfall 002. Once Discharge from Outfall 002 is established, Outfall 001 will cease to be used, and no further discharge of process water will be permitted. Such discharges shall be limited and monitored by the permittee as specified below:

The permit limitations for the existing discharge from Outfall 001 are:

Part I – Effluent Limitations
Permit No UT0025623

Parameter	Initial Effluent Limitations			
	Monthly Average Maximum	Weekly Average Maximum	Minimum	Maximum
Flow MGD	-	-	-	2
TSS, mg/L	25	35	-	-
TDS, mg/L	-	-	-	1297
pH, Standard Units	-	-	6.5	9
Iron, mg/L	-	-	-	1
Total Chromium, mg/L	-	-	-	0.2
Chromium VI, mg/L	-	-	-	0.04
Total Zinc, mg/L	-	-	-	0.6
Copper, mg/L	-	-	-	0.14
TRC, mg/L	-	-	-	0.06
Oil & Grease, mg/L	-	-	-	10
WET Chronic Biomonitoring	-	-	-	IC25 > 38% effluent
Temperature °F				°F
Sum (Jul-Sept)				104.3
Fall (Oct-Dec)				89.9
Winter (Jan-Mar)				75.5
Spr (Apr-Jun)				89.9

The permit limitations for the future discharge from Outfall 002, prior to facility expansion are:

Parameter	Interim Effluent Limitations				
	Monthly Average Maximum	Weekly Average Maximum	Minimum	Maximum	Maximum Mass Loading
Flow MGD	-	-	-	2	-
TSS, mg/L	25	35	-	-	-
TDS, mg/L	-	-	-	2371	-
pH, Standard Units	-	-	6.5	9	-
Iron, mg/L	-	-	-	1	-
Total Chromium, mg/L	-	-	-	0.2	-
Chromium VI, mg/L	-	-	-	0.022	-
Total Zinc, mg/L	-	-	-	0.6	-
Copper, mg/L	-	-	-	1	-
Copper, lbs./yr.	-	-	-	-	432
TRC, mg/L	-	-	-	0.03	-
Oil & Grease, mg/L	-	-	-	10	-
WET Chronic Biomonitoring	-	-	-	IC25 > 38% effluent	-
Temperature °F				°F	
Sum (Jul-Sept)				87.2	-
Fall (Oct-Dec)				87.0	-
Winter (Jan-Mar)				87.7	-
Spr (Apr-Jun)				104.5	-

The final permit limitations for the future discharge from Outfall 002, after the facility expansions are: (The table is included in the renewal permit, and is not changing in this modification)

Part I – Effluent Limitations
Permit No UT0025623

Parameter	Final Effluent Limitations				
	Monthly Average Maximum	Weekly Average Maximum	Minimum	Maximum	Maximum Mass Loading
Flow MGD					
Sum (Jul-Sept)	-	-	-	2.9	-
Fall (Oct-Dec)	-	-	-	2.3	-
Winter (Jan-Mar)	-	-	-	2.2	-
Spr (Apr-Jun)	-	-	-	2.7	-
TSS, mg/L	25	35	-	-	-
TDS, mg/L	-	-	-	-	-
Sum (Jul-Sept)	-	-	-	2371	-
Fall (Oct-Dec)	-	-	-	2371	-
Winter (Jan-Mar)	-	-	-	2363	-
Spr (Apr-Jun)	-	-	-	2371	-
pH, Standard Units	-	-	6.5	9	-
Iron, mg/L	-	-	-	1	-
Total Chromium,mg/L	-	-	-	0.2	-
Chromium VI, mg/L	-	-	-	0.022	-
Total Zinc, mg/L	-	-	-	0.6	-
Copper, mg/L	-	-	-	1	-
Copper, lbs./yr.	-	-	-	-	lbs/Qtr
Sum (Jul-Sept)	-	-	-	-	167
Fall (Oct-Dec)	-	-	-	-	132
Winter (Jan-Mar)	-	-	-	-	124
Spr (Apr-Jun)	-	-	-	-	154
TRC, mg/L	-	-	-	-	-
Sum (Jul-Sept)	-	-	-	0.03	-
Fall (Oct-Dec)	-	-	-	0.05	-
Winter (Jan-Mar)	-	-	-	0.06	-
Spr (Apr-Jun)	-	-	-	0.06	-
Oil & Grease, mg/L	-	-	-	10	-
WET Chronic Biomonitoring	-	-	-	IC25 > 38% effluent	-
Temperature °F				°F	
Sum (Jul-Sept)	-	-	-	81.8	-
Fall (Oct-Dec)	-	-	-	82.9	-
Winter (Jan-Mar)	-	-	-	84.4	-
Spr (Apr-Jun)	-	-	-	93.1	-

| NA – Not Applicable.

*a The TRC limit developed in the WLA is a more stringent limit than that found in 40 CFR 423.15 and is considered more protective than limiting the times allowed for utilizing and discharging chlorine.

*b Oil & Grease sampled when a sheen is present or visible.

Self-Monitoring & Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Instantaneous	MGD
Temperature, Effluent	2 x Week	Grab	°F
TDS, Effluent			mg/L
TSS, Effluent			mg/L
pH, Effluent			SU
TRC, Effluent *a			Daily
Oil & Grease, Effluent *b	Monthly		mg/L
Total Phosphorus, Effluent *c	Monthly		mg/L
Total Zinc, Effluent	Monthly	Grab	mg/L
Total Chromium, Effluent			mg/L
Chromium VI			mg/L
Iron, Effluent			mg/L
Copper, Effluent			Weekly
WET, Chronic Biomonitoring Ceriodaphnia Dubia and Pimephales Promelas (fathead minnows)	Quarterly	Grab	Pass/Fail
METALS			
Cyanide, Effluent	Quarterly	Grab	mg/L
Aluminum Effluent			mg/L
Arsenic Effluent			mg/L
Cadmium Effluent			mg/L
Lead Effluent			mg/L
Mercury Effluent			mg/L
Nickel Effluent			mg/L
Selenium Effluent			mg/L
Silver Effluent			mg/L

NA – Not Applicable

*a The TRC limit developed in the WLA is a more stringent limit than that found in 40 CFR 423.15 and is considered more protective than limiting the times allowed for utilizing and discharging chlorine..

- *b Oil & Grease sampled when a sheen is present or visible.
- *c Total Phosphorus is being sampled in conjunction with work being done on a TMDL for Utah Lake. Sampling twice monthly for the first year of discharging, reporting the monthly average, and then sampling drops to monthly. This sampling was included in an agreement with the Lake Side Power Plant facility team. There is no limit associated with Total Phosphorus for this facility at the present time.
- *d See Definitions, *Part VI* for definition of terms.

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.

Low volume wastes, as defined in 40 CFR Part 423 (Steam Electric Power Generating Point Source Category), will be generated at the site and discharged in the effluent, but will not exceed the applicable effluent discharge limits.

2. Whole Effluent Testing - Chronic Toxicity.

Starting on the effective date of the permit, the permittee shall quarterly conduct chronic short-term toxicity tests on a grab sample of the final effluent. The sample shall be collected at outfall 001 up until outfall 002 becomes active. From then on the samples will be from outfall 002.

The monitoring frequency shall be quarterly. Samples shall be collected on a two day progression; i.e., if the first sample is on a Monday, during the next sampling period, sampling shall be on a Wednesday. If chronic toxicity is detected, the test shall be repeated in less than four weeks from the date the initial sample was taken. The need for any additional samples, and/or a Toxicity Reduction Evaluation (TRE, see Part I.D.3.) shall be determined by the Executive Secretary. If the second test shows no chronic toxicity, routine monitoring shall be resumed.

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, 4th Edition, (EPA 821/R-02-13), October 2002* as per 40 CFR 136.3(a) *TABLE 1A-LIST OF APPROVED BIOLOGICAL METHODS*. Testing shall alternate species quarterly with test species consisting of Ceriodaphnia dubia and Pimephales promelas (fathead minnow).