

STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

December 13, 2011

Mr. Jay Steinberg, President
Le Petomane XXVII, Inc.
Nevada Environmental Response Trust
35 East Wacker Drive, Ste. 1550
Chicago, IL 60611

Re: Issuance of NPDES Permit NV0023060, NERT -BMI Perchlorate Remediation Site Discharge to LV Wash, Clark County, Nevada

Dear Mr. Steinberg:

In accordance with provisions of the Nevada Water Pollution Control Law Chapter 445A of the Nevada Revised Statutes, the Department of Conservation and Natural Resources, Division of Environmental Protection has reviewed the following application for renewal of a NPDES permit to discharge treated groundwater to the Las Vegas Wash:

Permit Holder	Permit Number
Nevada Environmental Response Trust	NV0023060

This office published a public notice for our proposed action in the **November 4, 2011** edition of the **Las Vegas Review-Journal**. Copies of the draft permit, fact sheet, and public notice were sent to your office and to the Chairman of the Clark County Board of Commissioners. The public notice was also sent to interested persons and government agencies on our mailing list.

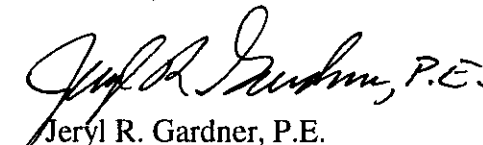
During the 30-day public comment period, no comments were received from the public, and no revisions were made to the permit and fact sheet. After consideration, the Division of Environmental Protection is renewing the enclosed permit for discharge of treated groundwater from the groundwater remediation systems, for a period of five (5) years. This action does not constitute a significant change from the tentative determinations set forth in the public notice. The enclosed renewal permit has also been sent to the Region IX Permits Issuance Section of the United States Environmental Protection Agency.

Mr Jay Steinberg/ NERT
Permit NV0023060
Page 2 of 2

The new permit will expire at midnight on **December 13, 2016**, providing all permit conditions are followed, and annual fees paid accordingly. The permit requires submittal of an updated Operations and Maintenance Manual, to be approved by the Division, by **January 31, 2012**. In accordance with the permit conditions, an annual review and services fee to maintain the discharge permit is due on **July 1, 2012**, and every year thereafter until the permit is terminated. The first Discharge Monitoring Report (DMR) under the new permit is due on **January 28, 2012**. You may download blank copies of the required DMR forms, in PDF or Microsoft Word format, from the division website at www.ndep.nv.gov/bwpc/npdes1.pdf or at www.ndep.nv.gov/bwpc/npdes1.doc, respectively. Should you have any questions regarding the DMRs, please contact the Bureau Compliance Coordinator, Diana Silsby, at (775) 687-9438.

Should you have any questions regarding the permit issuance, please call me at (775) 687-9423, or by email at jgardner@ndep.nv.gov.

Sincerely,



Jeryl R. Gardner, P.E.
NDEP Bureau of Water Pollution Control

Enclosures: NV0023060 Permit
NV0023060 Fact Sheet
Discharge Monitoring Report (DMR) Form

cc: Compliance Coordinator, BWPC (hand-delivered)
Shannon Harbour, P.E., BCA (electronic)
Greg Lovato, P.E., BCA (electronic)
Susan Crowley, Tronox LLC, PO Box 55, Henderson, NV 89009 (w/permit)
Mike Skromyda, Tronox, LLC, PO Box 55, Henderson, NV 89009 (w/permit)
Frederick Stater, Tronox, LLC, PO Box 55, Henderson, NV 89009 (w/permit)
Susan Brager, Chair-CCBC, 500 Grand Central Pkwy., 6th Floor, Las Vegas, NV 89155 (w/permit)
Reader File

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET (pursuant to NAC 445A.236)

Applicant: Nevada Environmental Response Trust
Le Petomane XXVII, Inc., Not individually but solely as the Designated
Nevada Environmental Trust Trustee
35 East Wacker Drive, Suite 1550
Chicago, Illinois 60611

Permit Number: NV0023060

Physical Address: Black Mountain Industrial Complex
560 W. Lake Mead Pkwy.
Henderson, Clark County, NV 89015
Latitude: 36° 02' 35.4" N Longitude: 114° 59' 58.7" W
Section 12, T22S, R62E MDB&M

Discharge Outfall: Outfall 001: Las Vegas Wash
Latitude: 36° 05' 15" N Longitude: 114° 59' 30" W

General: Permit NV0023060 was originally issued on August 7, 2000 to Kerr-McGee Chemical LLC, a forerunner of Tronox LLC. During subsequent permitting cycles for Permit NV0023060, Tronox LLC discharged treated groundwater, extracted for remediation purposes at their industrial site in the Black Mountain Industrial (BMI) Complex (subsequently renamed the Black Mountain Industrial Complex), Henderson, Clark County, Nevada, to the Las Vegas Wash. Tronox installed and operated two treatment systems: an ion exchange treatment system to remove chromium, and a Fluidized Bed Reactor (FBR) biological treatment system to remove perchlorate.

On January 12, 2009, Tronox Incorporated and 14 of its affiliates, (collectively Tronox), filed petitions under Chapter 11 of the Bankruptcy Code. Pursuant to its joint plan of reorganization, Tronox entered into an environmental settlement agreement and related agreements by which Tronox transferred all of its right, title, and interest to its property located at 560 West Lake Mead Parkway to the Nevada Environmental Response Trust (Trust). This transfer included, but was not limited to, the remediation treatment facility. The transfer became effective February 14, 2011. Permits associated with the remediation system, including Permit NV0023060, were transferred to the Trust at that time.

Flow: 1.45 MGD, 30-Day Average; 1.75 MGD, Daily Maximum.

Corrective Actions Sites: The facility is within the Basic Management Complex Area of Concern, a Bureau of Corrective Actions remediation site.

Well Head and Drinking Water Supply Protection: The treatment facility and the discharge location at the Las Vegas Wash are not within a Drinking Water Protection Area (DWPA) around any public water supply well. A Wellhead Protection Area (WHPA) has not been established for this location.

Discharge Flow and Characteristics: During the period from January 2006 through

December 2010, the following selected discharge characteristics demonstrating effective treatment were reported in the quarterly Discharge Monitoring Reports:

Parameter		Permit Limit	Average	Maximum	Minimum	# of Exceedances
Flow	30-Day Avg (MGD)	1.45	1.36	1.43	1.2	0
	Daily Maximum (MGD)	1.75	1.40	1.53	1.24	0
Biochemical Oxygen Demand	30-Day Average (mg/L)	25	5.17	23	1.5	0
	7-Day Average (mg/L)	40	10.8	60	1.5	1
	30-Day Average (lbs/day)	254	57.8	254.4	15.5	1
Perchlorate	30-Day Avg (µg/L)	18	4.65	12.4	0.51	0
	30-Day Average (lbs/day)	0.22	0.05	0.14	0.01	0
pH	Standard Units	6.5-9.0	7.05	8.1	6.3	2
Total Suspended Solids	30-Day Average (mg/L)	135	19.8	59.4	10.25	0
	30-Day Average (lbs/day)	1634	224.3	706.1	106.5	0
Chromium (VI)	7-Day Average (µg/l)	10	<0.05	<0.05	<0.05	0
Total Chromium	7-Day Average (µg/l)	100	21.1	71	5	0
Total Iron	30-Day Average (mg/L)	10	2.02	4.78	0.18	0
	30-Day Average (lbs/day)	121.03	22.66	54.91	1.91	0
Manganese	30-Day Average (mg/L)	5	0.95	1.7	0.46	0
	30-Day Average (lbs/day)	60.52	10.87	19.49	5.26	0
Total Phosphorus	30-Day Average (lbs/day)	20	6.15	20.53	0.41	1
Total Ammonia as N, 30-Day Average (lbs/day)		40	9.98	27.2	0.29	0
Total Inorganic Nitrogen, 7-Day Average (mg/L)		M&R	3.62	27	0.1	NA
Total Dissolved Solids (mg/L)		M&R	6540	8100	5590	NA
DO, 7-Day Average (mg/L)		M&R	7.03	11.2	4.31	NA
Nitrate (mg/L)		M&R	1.71	5.65	<0.1	NA

lbs/day: pounds per day
 mg/L: milligrams per liter

M&R: Monitor & Report
 µg/L: micrograms per liter

Receiving Water Characteristics: The receiving water for Outfall 001 is the Las Vegas Wash, with reach designated from Telephone Line Road to the confluence of discharges from the City of Las Vegas and the Clark County Wastewater Treatment Facilities. Beneficial uses for this reach of the Las Vegas Wash are listed in NAC 445A.198. Water quality standards for the specified reach of the Wash are listed in NAC 445A.199. The requirements to maintain existing higher quality waters apply.

Proposed Discharge Limitations and Special Conditions: Discharge samples and measurements taken in compliance with the monitoring requirements specified in Table 1 shall be taken after treatment and prior to the confluence with the Las Vegas Wash, at the locations specified below:

- a. INF = influent at the intake to the treatment train;
- b. EFF = effluent from treatment systems prior to discharge to Outfall 001; and,
- c. LW0.55 = (previously LM-6, also known as North Shore Road) located in the Las Vegas Wash, 0.55 mile upstream of the confluence of the Las Vegas Wash with Lake Mead.

The discharge shall be limited and monitored by the Permittee as specified in Table 1.

Table 1. Effluent Discharge Limitations, Sampling and Monitoring Requirements

Parameters	Units	Discharge Limitations			Monitoring Requirements		
		30-Day Average	Daily Maximum	30-Day Avg Load (lbs)	Sampling Locations	Monitoring Frequency	Monitoring Type
Flow Rate	MGD	1.45	1.75	---	EFF	Continuous	Flow meter
BOD ₅ (inhibited)	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		25	40	254	EFF		
Perchlorate	µg/l	M&R	M&R	M&R	INF	Daily discrete samples composited weekly	
		18	M&R	0.22	EFF		
pH	S.U.	6.5 to 9.0	---	---	EFF	Weekly	Discrete
Hexavalent Chromium	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	0.01	M&R	EFF		
Total Chromium	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	0.1	M&R	EFF		
TSS	mg/l	135	M&R	1,634	EFF	Weekly	Discrete
Total Iron	mg/l	10	M&R	121.03	EFF	Weekly	Discrete
Manganese	mg/l	5	---	60.52	EFF	Quarterly	Discrete
Total Phosphorus as P	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	20 *	EFF		
		* If the load in the Wash exceeds 434 ppd from 03/01-10/31, the Permittee shall negotiate an IWLA, or other approved method which ensures the WQS will be met.				LW0.55	Twice per month
Total Ammonia as N	mg/l	M&R	M&R	40 **	EFF	Weekly	Discrete
		** If the load in the Wash exceeds			LW0.55	Twice per	Discrete

		970 ppd from 04/01-09/30, the Permittee shall negotiate an IWLA, or other approved method which ensures the WQS will be met.				month	
Priority Pollutants (Attachment A)	mg/l or lbs	The Permittee shall demonstrate no increase in concentration or loading of "other" constituents as a result of discharge. The Permittee shall only be responsible for utilizing results which are > PQL. However, all data above MDL shall be reported.			EFF	Quarterly	Discrete
Color	ACU	M&R	M&R	---	INF	Weekly	Discrete
		M&R	M&R	---	EFF		
DO	mg/l	M&R	M&R	M&R	EFF	Weekly	Discrete
TIN as N	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	M&R	EFF		
Kjeldahl Nitrogen as N	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	M&R	EFF		
Nitrate as N	mg/l	M&R	---	M&R	EFF	Monthly	Discrete
Chlorate	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
Sulfate	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
Sulfide	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
TDS	mg/l	M&R	---	M&R	INF	Quarterly	Discrete
		M&R	---	M&R	EFF		
O&G	mg/l	M&R	---	M&R	EFF	Quarterly	Discrete
Boron	mg/l	M&R	---	M&R	EFF	Quarterly	Discrete
Chloride	mg/l	M&R	---	M&R	INF	Quarterly	Discrete
		M&R	---	M&R	EFF		
Acute WET		See permit condition I.A.22.			EFF	Monthly	Discrete

Definitions:

MGD: million gallons per day

M&R: Monitor and Report

µg/l: micrograms per liter

TSS: Total Suspended Solids

ppd: pounds per day

WQS: water quality standards

PQL: Practical Quantification Limit

ACU: Apparent Color Units

DO: Dissolved Oxygen

O&G: Oil and Gas

WET: Whole Effluent Toxicity

BOD₅: 5-day biological oxygen demand

mg/l: milligrams per liter

S.U.: Standard pH units

as P: As phosphorus

IWLA: Individual Waste Load Allocation

as N: As nitrogen

MDL: Method Detection Limit

TIN: Total Inorganic Nitrogen

TDS: Total Dissolved Solids

Σ: summation symbol

In-Stream Limitations and Background Monitoring Requirements: The permit requires background groundwater monitoring and monitoring in the Las Vegas Wash from just upstream of Outfall 001 to the Las Vegas Wash control point identified as LW5.5. Compliance is determined at the LW5.5 control point. The discharge is to be limited to maintain compliance with the downstream limits listed in Table 2.

Samples and measurements taken in compliance with the monitoring requirements specified in Table 2 shall be taken prior to discharge at Outfall 001, at the following locations:

- a. **UP** = upstream sampling location 150 feet upstream of Outfall 001 to the Wash;
- b. **LW6.05** = upstream sampling location in the Las Vegas Wash at LW6.05, 6.05 miles upstream of the confluence of the Las Vegas Wash with Lake Mead;
- c. **LW5.5** = downstream sampling location in the Las Vegas Wash at LW5.5, 5.5 miles upstream of the confluence of the Las Vegas Wash with Lake Mead; and,
- d. **UPMW** = background sampling location at the up-gradient groundwater monitoring well at the NERT facility.

Table 2. Background and In-Stream Limitations, Sampling and Monitoring Requirements

Parameters	Units	Downstream Action Thresholds apply at LW5.5		Sampling/Monitoring Requirements		
		30-Day Average	Daily Maximum	Sampling Locations	Monitoring Frequency	Monitoring Type *
TDS	mg/l	2,400	M&R	LW5.5	Quarterly	Discrete
		M&R	M&R	UP, LW6.05, UPMW		
TIN	mg/l	17	M&R	LW5.5	Twice per month	Discrete
		M&R	M&R	UP, LW6.05, UPMW	Quarterly	Discrete
Color	ACU	M&R	M&R	UP, LW6.05, LW5.5	Quarterly	Discrete
Total Iron	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Manganese	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Chromium	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Boron	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Chloride	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Priority Pollutants		M&R	M&R	UP, LW6.05, LW5.5	Annually	Discrete

* Permittee may composite LV Wash samples upon receiving Division approval of a sampling plan.

Rationale for Permit Requirements: The monitoring requirements and permit limits in Tables 1 and 2 have been established to ensure that the Las Vegas Wash is not degraded from the discharge of treated groundwater. The requirements are consistent with similar groundwater remediation system discharge permits. Individual parameters are discussed below.

Discharge Limitations:

Flow: Flow limitations for this permit are based on the design capacity of the treatment system. The limits have been retained from the previous permit.

BOD₅: Limits set at standards of secondary treatment, pursuant to 40 CFR §133.102. The limits have been retained from the previous permit.

Perchlorate: Based on the December 2008 USEPA “Interim Drinking Water Health Advisory for Perchlorate”, statistical review of all data collected since the remediation system started up, and Best Professional Judgment (BPJ) criteria, NDEP has set the perchlorate permit limit at 18 µg/L for the 30-Day Average. The 30-Day average was used to calculate the load limit in pounds per day. The limits have been retained from the previous permit. NDEP intends to retain the current limits until the EPA promulgates a water quality standard for perchlorate.

pH: Limited pursuant to NAC 445A.199. Limits are retained from previous permit.

Hexavalent Chromium: Limited pursuant to USEPA “National Recommended Water Quality Criteria”, Criterion Continuous Concentration (CCC, the chronic water quality criteria) as protective of aquatic life. The limit has been retained from the previous permit.

Total Chromium: Limited pursuant to NAC 445A.144. “Standards for Toxic Materials Applicable to Designated Waters”. The limit has been retained from the previous permit.

Total Suspended Solids: Limited pursuant to NAC 445A.199. The load limit is based on the water quality standard for this reach of the Wash, and the 30-day average flow limit. The limits are retained from the previous permit.

Total Iron: This permit limit has been retained from the previous permit.

Manganese: This permit limit has been retained from the previous permit.

Phosphorus and Ammonia: Waste Load Allocation (WLA) for Discharges into Las Vegas Wash: The Permittee is authorized to discharge the waste loads listed in Table 1 for Total Phosphorus as P and Total Ammonia as N, to the Las Vegas Wash. This permit condition constitutes a cooperative agreement between the City of Las Vegas, Clark County Water Reclamation District, and City of Henderson, and City of North Las Vegas, to allow discharge flexibility. The permit limits for Phosphorus and Ammonia have been retained from the previous permit.

Attachment A -Priority Pollutants: This attachment to the permit is the full-scan list of Priority Pollutants which are required to be sampled. No limits are imposed; Monitor and Report requirements for all parameters have been retained from the previous permit.

Acute WET Testing: Acute whole effluent toxicity requirement have been imposed to prevent discharges of toxic substances in toxic amounts. No changes are proposed from existing permit requirements.

Las Vegas Wash In-Stream Limitations, applied at LW5.5:

Total Dissolved Solids (TDS): The permit includes the goal of not more than a 400 mg/l increase in TDS over the drinking water supply, a goal established by the Colorado River

Salinity Forum. The Permittee has implemented the salinity public education required by the permit. This activity is a continuing requirement of the proposed permit. The permit limits have been retained from the previous permit.

Total Inorganic Nitrogen (TIN): Permit limit has been retained from the previous permit.

Other parameters (Color, Total Iron, Manganese, Chromium, Boron, Chloride, & Priority Pollutants): No limits are imposed; Monitor and Report requirements for all parameters have been retained from the previous permit.

Elimination of Monitoring Requirements:

The Permittee has requested elimination of the effluent monitoring requirements for the radiological parameters, Radium 226, Radium 228, and Gross Alpha particles. The request is based upon two facts: for the past 6 years, data collected weekly, shows no exceedances of the EPA drinking water rules, and the data is within the range of background concentrations. Based upon reasonable potential analysis, the NDEP proposes to remove the monitoring requirements for the radiological parameters in the renewal permit.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. Upon issuance of this permit, the Permittee shall achieve compliance with discharge limitations as described in this permit and in observance of prescribed schedules of compliance;
- b. By **January 31, 2012**, the Permittee shall submit to the Division for review and approval an updated Operations & Maintenance (O&M) Manual, prepared in accordance with appropriate sections of Guidance Document WTS-2, "Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant".
- c. **Table I.A.2. Monitoring:** On a quarterly basis, the Permittee shall submit an evaluation of the data collected pursuant to Table 2 at Telephone Line Road in the Las Vegas Wash (LW6.05, previously LW-2).

Within 30 days after the submission of the first quarterly analysis under subsection a. which shows that the 95th percentile of the data collected at Telephone Line Road for a pollutant in Table 2 exceeds an applicable water quality standard for that pollutant and the data show that the discharge authorized by this permit was a significant contributor to such exceedance, the Permittee shall submit a plan to investigate such exceedance. The plan may include a monitoring strategy, an evaluation of the standard and/or the location of the control point, and such other measures as the Permittee deems appropriate. The plan shall include a schedule for the investigation. In developing the plan, the Permittee will seek to work cooperatively with other dischargers to the Las Vegas Wash. The investigation plan

must be approved by the Division.

Upon approval of the investigation plan, the Permittee shall implement the plan, working with other Las Vegas Wash dischargers to the extent reasonably possible. Upon completion of the investigation, the Permittee shall submit a report to the Division with recommendations for future actions.

- d. **Total Dissolved Solids (TDS) (NAC 445A.143):** Nothing in this permit condition shall alleviate the responsibility of other parties under consent agreement to the Bureau of Corrective Action for the groundwater issues at the BML complex. Any work pertaining to TDS must recognize that the water quality standard for TDS (NAC 445A.199) must be maintained. **Prior to treating and discharging groundwater other than groundwater from the chromium treatment system,** the Permittee shall obtain approval from the Division and shall comply with and report the following information:
 - i. The Permittee shall continue to participate in regional solutions to the TDS issues in the Las Vegas Wash.
 - ii. The Permittee shall submit a quarterly report in accordance with I.B.1. which includes any progress made on reducing the TDS loading to the Wash either in directly reducing the loading to the wash from the discharge or regional projects the Permittee has participated in which reduce the loading off-site in the same watershed.
- e. The Permittee shall fully cooperate in good faith with any persons required by NDEP to treat the discharge subsequent to treatment by the Permittee.

Proposed Determination: The Division has made the tentative determination to renew the permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to issue a renewal NPDES permit for a five-year period, authorizing this facility to discharge into the Las Vegas Wash, subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **December 4, 2011 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the

geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Jeryl R. Gardner, P.E.

Date: December, 2011

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE

In compliance with the provisions of the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251 et. seq.; the "Act") and Chapter 445A of the Nevada Revised Statutes, the Permittee,

**Nevada Environmental Response Trust
Le Petomane XXVII, Inc.,
Not Individually, But Solely as the Designated Nevada Environmental Response Trust Trustee
35 East Wacker Drive, Suite 1550
Chicago, Illinois, 60611**

is authorized to discharge treated groundwater from the project located approximately at:

**560 W. Lake Mead Pkwy., Henderson
Clark County, Nevada 89015
Section 12, T22S R62E MDB&M
Latitude: 36° 02' 35.4" N Longitude: 114° 59' 58.7" W**

to receiving waters named:

**Las Vegas Wash, via Outfall 001
Latitude: 36° 05' 15" N Longitude: 114° 59' 30" W**


in accordance with the effluent discharge limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on **December 14, 2011**.

This permit shall expire at midnight **December 13, 2016**.

Signed this 13th day of December, 2011.




Jeryl R. Gardner, P.E.
Bureau of Water Pollution Control

PART I

I.A. DISCHARGE LIMITATIONS, MONITORING, AND CONDITIONS

I.A.1. Discharge Limitations: During the period beginning on the effective date of this permit, and lasting until the permit expires, the Permittee is authorized to discharge treated “seep” water, treated groundwater from the on-site chromium treatment system and upon approval from the Division, other sources of treated water (e.g. Athens Road well field and Seep Area well field) to the Las Vegas Wash via **Outfall 001, located at: Latitude: 36° 05' 15" N, Longitude: 114° 59' 30" W.**

Samples taken in compliance with the monitoring requirements specified in Table I.A.1. shall be taken after treatment and prior to discharge, at the following locations:

- a. **EFF** = effluent from treatment systems prior to discharge to Outfall 001;
- b. **INF** = influent at the intake to the treatment train; and,
- c. **LW0.55** = (previously LM-6, also known as North Shore Road) located in the Las Vegas Wash, 0.55 mile upstream of the confluence of the Las Vegas Wash with Lake Mead.

Water quality shall be limited and monitored by the Permittee as specified below:

Table I.A.1. Effluent Limitations, Sampling and Monitoring Requirements

Parameters	Units	Discharge Limitations			Monitoring Requirements		
		30-Day Avg	Daily Maximum	30-Day Avg (lbs)	Sampling Locations	Monitoring Frequency	Sample Type
Flow Rate	MGD	1.45	1.75	---	EFF	Continuous	Flow meter
BOD ₅ (inhibited)	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		25	40	254	EFF		
Perchlorate	µg/l	M&R	M&R	M&R	INF	Daily discrete samples composited weekly	
		18	M&R	0.22	EFF		
pH	S.U.	6.5 to 9.0	---	---	EFF	Weekly	Discrete
Hexavalent Chromium	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	0.01	M&R	EFF		
Total Chromium	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	0.1	M&R	EFF		
TSS	mg/l	135	M&R	1,634	EFF	Weekly	Discrete
Total Iron	mg/l	10	M&R	121.03	EFF	Weekly	Discrete
Manganese	mg/l	5	---	60.52	EFF	Quarterly	Discrete
Total Phosphorus as P	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	20 *	EFF		
		* If the load in the Wash exceeds 434 ppd from 03/01-10/31, the Permittee shall negotiate an IWLA, or other approved method that ensures the WQS will be met.				LW0.55	Twice per month

Total Ammonia as N	mg/l	M&R	M&R	40 **	EFF	Weekly	Discrete
		** If the load in the Wash exceeds 970 ppd from 04/01-09/30, the Permittee shall negotiate an IWLA, or other approved method which ensures the WQS will be met.			LW0.55	Twice per month	Discrete
Priority Pollutants (Attachment A)	mg/l or lbs	The Permittee shall demonstrate no increase in concentration or loading of "other" constituents as a result of discharge. The Permittee shall only be responsible for utilizing results which are > PQL. However, all data above the MDL shall be reported.			EFF	Quarterly	Discrete
Color	ACU	M&R	M&R	---	INF	Weekly	Discrete
		M&R	M&R	---	EFF		
TIN as N	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	M&R	EFF		
Kjeldahl Nitrogen as N	mg/l	M&R	M&R	M&R	INF	Weekly	Discrete
		M&R	M&R	M&R	EFF		
Nitrate as N	mg/l	M&R	---	M&R	EFF	Monthly	Discrete
DO	mg/l	M&R	M&R	M&R	EFF	Weekly	Discrete
Sulfate	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
TDS	mg/l	M&R	---	M&R	INF	Quarterly	Discrete
		M&R	---	M&R	EFF		
Sulfide	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
O&G	mg/l	M&R	---	M&R	EFF	Quarterly	Discrete
Boron	mg/l	M&R	---	M&R	EFF	Quarterly	Discrete
Chloride	mg/l	M&R	---	M&R	INF	Quarterly	Discrete
		M&R	---	M&R	EFF		
Chlorate	mg/l	M&R	---	M&R	INF	Monthly	Discrete
		M&R	---	M&R	EFF		
Acute WET		See permit condition I.A.22.			EFF	Monthly	Discrete

MGD: million gallons per day

M&R: Monitor and Report

µg/L: micrograms per liter

TSS: Total Suspended Solids

ppd: pounds per day

WQS: water quality standards

PQL: Practical Quantification Limit

ACU: Apparent Color Units

DO: Dissolved Oxygen

O&G: Oil and Gas

WET: Whole Effluent Toxicity

BOD₅: 5-day biological oxygen demand

mg/l: milligrams per liter

S.U.: Standard pH units

as P: As phosphorus

IWLA: Individual Waste Load Allocation

as N: As nitrogen

MDL: Method Detection Limit

TIN: Total Inorganic Nitrogen

TDS: Total Dissolved Solids

Σ: summation symbol

I.A.2. **In-Stream Limitations and Background Monitoring Requirements:** The permit requires background groundwater monitoring and monitoring in the Las Vegas Wash

from just upstream of Outfall 001 to the Las Vegas Wash control point identified as LW5.5. Compliance is determined at the LW5.5 control point. The discharge is to be limited to maintain compliance with the downstream limits listed in Table I.A.2.

Samples and measurements taken in compliance with the monitoring requirements specified in Table I.A.2 shall be taken prior to discharge at Outfall 001, at the following locations:

- a. UP = upstream samples taken 150 feet upstream of the discharge to the LV Wash;
- b. LW6.05 = upstream samples to be taken at Telephone Line Road, LW6.05;
- c. LW5.5 = downstream sample located in the Las Vegas Wash, 5.5 miles upstream of the confluence of the Las Vegas Wash with Lake Mead; and,
- d. UPMW = up-gradient groundwater monitoring well at the NERT facility.

Table I.A.2. In-Stream Limitations, Sampling and Monitoring Requirements

Parameters	Units	Downstream Action Thresholds apply at LW5.5		Sampling/Monitoring Requirements		
		30-Day Average	Daily Maximum	Sampling Locations	Monitoring Frequency	Sampling Type
TDS	mg/l	2,400	M&R	LW5.5	Quarterly	Discrete
		M&R	M&R	UP, LW6.05, UPMW		
TIN	mg/l	17	M&R	LW5.5	Twice per month	Discrete
		M&R	M&R	UP, LW6.05, UPMW	Quarterly	Discrete
Color	ACU	M&R	M&R	UP, LW6.05, LW5.5	Quarterly	Discrete
Total Iron	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Manganese	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Chromium	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Boron	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Chloride	mg/l	M&R	M&R	UP, LW6.05, LW5.5, UPMW	Quarterly	Discrete
Priority Pollutants		M&R	M&R	UP, LW6.05, LW5.5	Annually	Discrete

* Permittee may composite LV Wash samples upon Division approval of a sampling plan.

I.A.3. **Schedule of Compliance:** The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. By **January 31, 2012**, the Permittee shall submit an updated Operations and Maintenance (O&M) Manual, prepared in accordance with applicable sections of *WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*, to the Division for review and approval at the following address:

**Department of Conservation and Natural Resources
Division of Environmental Protection
Bureau of Water Pollution Control
ATTN: Compliance Coordinator
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701**

- c. **Table I.A.2. Monitoring:** On a quarterly basis, the Permittee shall submit an evaluation of the data collected pursuant to Table I.A.2 at Telephone Line Road in the Las Vegas Wash (LW6.05, previously LW-2).

Within 30 days after the submission of the first quarterly analysis under subsection a. which shows that the 95th percentile of the data collected at Telephone Line Road for a pollutant in Table I.A.2 exceeds an applicable water quality standard for that pollutant and the data show that the discharge authorized by this permit was a significant contributor to such exceedance, the Permittee shall submit a plan to investigate such exceedance. The plan may include a monitoring strategy, an evaluation of the standard and/or the location of the control point, and such other measures as the Permittee deems appropriate. The plan shall include a schedule for the investigation. In developing the plan, the Permittee will seek to work cooperatively with other dischargers to the Las Vegas Wash. The investigation plan must be approved by the Division.

Upon approval of the investigation plan, the Permittee shall implement the plan, working with other Las Vegas Wash dischargers to the extent reasonably possible. Upon completion of the investigation, the Permittee shall submit a report to the Division with recommendations for future actions.

- d. **Total Dissolved Solids (TDS) (NAC 445A.143):** Nothing in this permit condition shall alleviate the responsibility of other parties under consent agreement to the Bureau of Corrective Actions for the groundwater issues at the BMI complex. Any work pertaining to TDS must recognize that the water quality standard for TDS (NAC 445A.199) must be maintained. **Prior to treating and discharging groundwater other than groundwater from the chromium treatment system**, the Permittee shall obtain approval from the Division and shall comply with and report the following information:

- i. The Permittee shall continue to participate in regional solutions to the TDS issues in the Las Vegas Wash.
 - ii. The Permittee shall submit a quarterly report in accordance with I.B.1. which includes any progress made on reducing the TDS loading to the Wash either in directly reducing the loading to the wash from the discharge or regional projects the Permittee has participated in which reduce the loading off-site in the same watershed.
- e. The Permittee shall fully cooperate in good faith with any persons required by NDEP to treat the discharge subsequent to treatment by the Permittee.

I.A.4. **Annual Fee:** The Permittee shall remit an annual review and services fee in accordance with NAC 445A.232 starting **July 1, 2012** and every year thereafter until the permit is terminated.

I.A.5. **Treatment System Operation and Maintenance:** The Permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities, collection systems or pump stations installed or used by the Permittee in association with, or relative to, this permit or to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes optimum performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures.

I.A.6. **Narrative Standards:** Per Nevada Administrative Code (NAC) 445A.121, discharges shall not cause the following standards to be violated in any surface waters of the State. Waters must be free from:

- a. Substances that will settle to form sludge or bottom deposits in amounts sufficient to be unsightly, putrescent, or odorous;
- b. Floating debris, oil, grease, scum, and other floating materials in amounts sufficient to be unsightly;
- c. Materials in amounts sufficient to produce taste or odor in the water, detectable off-flavor in the flesh of fish, or in amounts sufficient to change the existing color, turbidity, or other conditions in the receiving stream to such a degree as to create a public nuisance;
- d. High temperature; biocides; organisms pathogenic to human beings; or toxic, corrosive, or other deleterious substances at levels or combinations sufficient to be toxic to human, animal, plant, or aquatic life;
- e. Radioactive materials resulting in accumulations of radioactivity in plants or animals hazardous or harmful to humans or aquatic life;
- f. Untreated or uncontrolled wastes or effluents that are reasonably amenable to treatment or control; and

- g. Substances or conditions which interfere with the beneficial use of the receiving waters.

Narrative standards are not considered violated when the natural conditions of the receiving water are outside the established limits, including periods of high or low flow. Where effluents are discharged to such waters, the discharges are not considered a contributor to substandard conditions provided maximum treatment in compliance with permit requirements is maintained.

- I.A.7. **Odors:** There shall be no objectionable odors from the collection system, treatment facility, disposal area or the biosolids treatment, use, storage, or disposal area.
- I.A.8. **Violation of Water Quality Standards:** There shall be no discharge of substances which are associated with the Permittee's operation that would cause a violation of water quality standards of the State of Nevada.
- I.A.9. **Authorized Discharges:** There shall be no discharge from the collection, treatment and disposal facilities except as authorized by this permit.
- I.A.10. **Visibility Parameters:** There shall be no discharge of floating solids or visible foam in other than trace amounts.
- I.A.11. **Facility Specifications:** The collection, treatment, and disposal facilities shall be constructed in conformance with plans approved by the Administrator of the Division. The plans must be approved by the Administrator prior to initiating construction activities. All changes to plans that have been approved by the Administrator must be re-approved by the Administrator prior to implementation.
- I.A.12. **Facility Maintenance:** The facility shall be maintained in conformance with the plans approved by the Division, Bureau of Water Pollution Control. The Division must authorize all changes to the approved plans prior to implementation.
- I.A.13. **Process Operations and Maintenance:** The facility shall be operated and maintained in accordance with the Operations and Maintenance (O&M) Manual, which must be approved by the Division. The O&M Manual shall be updated whenever there is a change in the operation of the facility.
- I.A.14. **Security:** The treatment and disposal facility shall be fenced and posted for hazard notification, with access restricted by means of a locked gate.
- I.A.15. **Best Management Practices:** The Permittee shall implement Best Management Practices (BMPs) at the facility in any and all forms prudent or necessary to protect groundwaters of the State.
- I.A.16. **Well Abandonment:** Abandonment of any groundwater monitoring wells shall be conducted under the approval of, and in accordance with the requirements established by, the Division and the State Engineer's office.

- I.A.17. **Presumption of Possession and Compliance:** Copies of this permit, any subsequent modifications, and the approved O&M Manual shall be maintained at the permitted facility at all times. The Permittee shall maintain on-site at the facility an operations logbook for the groundwater extraction and treatment system including, but not limited to: start-ups, shut-downs, and operational period; sampling dates and times; name(s) of personnel performing system maintenance and inspection; and maintenance procedures performed.
- I.A.18. **Stormwater Management Plan:** All *Stormwater Discharges Associated with Industrial Activity*, as defined in Code of Federal Regulations (CFR) 122.26 (b)(14), that are not otherwise controlled under this permit shall be covered by a separate stormwater permit for those discharges. Stormwater permit coverage must be obtained prior to the occurrence of a stormwater discharge associated with industrial activity.
- I.A.19. **Solid Waste Management:** All solid, toxic, or hazardous waste shall be properly handled and disposed of pursuant to applicable laws and regulations. Any sludge generated during this operation shall be characterized and disposed of in accordance with local, State, and Federal regulations.
- I.A.20. **Sludge Management:** Facilities that generate and dispose of sludge shall monitor the concentrations of arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, and pesticides and report in mg/dry kg of sludge.

Dry Sludge Disposal (metric tons/year)	Frequency of Sampling
>0 - <290	Each year
≥290 - <1500	Once per quarter
≥1500 - <15000	Once every 2 months
≥15000	Once a month

- I.A.21. **Authorized Representative:** The treatment facility shall be operated by a Nevada Certified Environmental Manager (CEM). The Discharge Monitoring Reports (DMRs) must be signed by the CEM. The first DMR submitted under this permit must include the written designation of the CEM (required by Part III A.2) as the authorized representative to sign the DMRs. If the CEM changes, a new designation letter must be submitted.
- I.A.22. **Whole Effluent Toxicity Testing:** Upon written notification by the Division, the Permittee shall conduct monthly toxicity tests on 24-hour composite effluent samples as described below on the discharge from Outfall 001. (The Division will require this testing after the issues with constituents not associated with the operations of the Permittee are resolved.)
- a. **Acute Toxicity:** The effluent shall be deemed acutely toxic when there is a statistically significant difference at the 95th% confidence interval between the survival of the control (0% effluent) test organisms and the survival of the test organisms in the 100% effluent at the following limits:

- i. The survival of test organisms in the undiluted effluent (100%) sample is less than 90 percent in six (6) out of eleven (11) consecutive samples; or
 - ii. The survival rate of test organisms in the undiluted effluent sample is less than 70 percent in any two of eleven consecutive samples.
- b. **Test Methods:**
- i. Flow Through and Static Replacement Protocols: The acute flow through or static replacement tests shall be conducted in general accordance with the procedures set out in the latest revision of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition", EPA-812-R-02-012. The Permittee shall conduct an acute 48-hour flow through or static replacement toxicity test using any Daphnid approved by the Division and an acute 96-hour flow through or static replacement toxicity test using fathead minnows, (*Pimephales promelas*). The source of the dilution water shall be reported with the test results.
 - ii. Alternative Species and Protocols: The Permittee may undertake an investigation of alternative site-specific toxicity test species and/or alternative, site-specific toxicity protocols. If alternative, site-specific toxicity test species or protocols are developed as a result of work by the Permittee, such species or protocols may be substituted for those specified in this permit on approval by the Division and EPA under 40 CFR Part 136. Alternative protocols must be compared to EPA protocols to demonstrate appropriateness and reliability.
- c. **Testing Schedule:**
- i. Routine Schedule: The Permittee shall conduct an acute toxicity test during the first week of the calendar month.
 - ii. Accelerated schedule: Whenever the effluent has been determined to be acutely toxic per I.A.22.a., the Permittee shall increase the frequency of acute toxicity testing to every other week. The accelerated testing shall be based on definitive tests using serial dilutions to determine the "No Observed Adverse Effects Concentration" (NOAEC).

The concentration range of the dilution series must include or contain the critical dilution defined as the in-stream waste concentration (IWC) determined under low-flow conditions. Where the calculated NOAEC for growth and survival is equal to or greater than the critical dilution in four (4) consecutive accelerated tests, the Permittee may resume a routine test schedule.

- d. **Follow-up Responses:** Whenever the acute toxicity effluent limitation as defined under either paragraph I.A.22.a.i or ii has been exceeded, **and** one or more of the tests conducted under I.A.22.c.ii. fails, the Permittee shall:
- i. Initiate an investigation within 24 hours of the exceeded toxicity limitation to identify the cause(s) of toxicity in general accordance with EPA/600/6-91/003, EPA/600/3-88/035, other EPA guidance documents or manuals and any subsequent revisions and/or alternative methods if approved by the Division.

After the initiation of the investigation phase pursuant to this condition, the Permittee may suspend the accelerated testing required by I.A.16.c.ii as long as the routine testing required by I.A.16.c.i is resumed.
 - ii. Conduct an evaluation of findings, when relevant and/or appropriate, in general accordance with EPA/600/R-92/081, other EPA guidance documents or manuals and any subsequent revisions and/or alternative methods, if approved by the Division; and
 - iii. Notify the Division and EPA within fifteen (15) days of identifying an exceeded toxicity limitation to provide the following information:
 - (1). Times and dates when the limitation was exceeded;
 - (2). The findings of the identification investigation or other investigation to identify the cause(s) of the toxicity and a plan for continuing the identification investigation if initial data and information is inconclusive;
 - (3). Proposed actions the Permittee has taken or will take to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity; and
 - (4). Where corrective actions have not been completed, an expeditious schedule to implement all corrective actions.
- e. In no event shall the discharger cause any impairment of the receiving water or of the beneficial uses, nor cause a violation of any other provision of this permit, Clean Water Act and State or local regulation or law by discharging constituents which are the responsibility of the Permittee.
- f. **Toxicity Testing Reopener:** This permit may be reopened and modified by the permitting authority to include effluent limits, additional testing and/or other appropriate actions to address demonstrated effluent toxicity. This permit may also be reopened and modified by the permitting authority to incorporate alternative permit conditions reflecting State Water Quality Standards revisions related to effluent toxicity.

- g. **Annual Survival Summary:** In addition to the quarterly DMR submittals, the Permittee shall submit an **annual report** prepared by the laboratory which provides an evaluation of the survival rates of both the control and the 100% effluent. This report shall be submitted with the **fourth quarter report every year** as applicable.

I.A.23. **Prerogative to Reopen:** This permit may be reopened and modified by the Division to incorporate the results of changes made in water quality standards, in response to a reevaluation of effluent analysis, or in response to additional scientific evidence as a minor modification.

I.B. MONITORING AND REPORTING

I.B.1. Reporting:

- a. **Annual Reports:** The fourth quarter report shall contain a plot of date (x-axis) versus concentration (y-axis) for each analyzed constituent with results detected at a frequency of 25% of the samples analyzed. The plot shall include data from the preceding five years, if available. Any data point from the current year that is greater than the limits in Part I.A.1 must be explained by a narrative.
- b. **Quarterly Reporting:** Monitoring results obtained pursuant to Section I.A of the permit for the previous three (3) month period shall be summarized for each month and reported on a Discharge Monitoring Report (DMR) form. Quarterly updates of system operation, corresponding to those submitted as a function of requirements from the Bureau of Corrective Actions, and updates regarding identified analytical methods capable of achieving reduced practical quantitation limits (PQLs) for site-specific samples shall be included. The DMR is to be received in this office no later than the 28th day of the month following the completed reporting period. The Permittee shall also submit the data in electronic format. The first report is due on **January 28, 2012**. Laboratory results for analyses conducted by outside laboratories must accompany the DMR.
- c. **Compliance Report** 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.
- d. **Other information** Where 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 in any report to the Administrator, it shall promptly submit such facts or information.
- e. **Planned changes** The Permittee shall give notice to the Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition to a permitted

facility:

- i. May meet one of the criteria for determining whether a facility is a new source (40 CFR 122.29(b)); or
 - ii. Could significantly change the nature or increase the quantity of pollutants discharged; or
 - iii. Results in a significant change to the Permittee's sludge management practice or disposal sites.
- f. **Anticipated Non-Compliance:** The Permittee shall give advance notice to the Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- g. An original signed copy of these, and all other reports required herein, shall be submitted to the State at the following address:

**Department of Conservation and Natural Resources
Nevada Division of Environmental Protection
Bureau of Water Pollution Control
ATTN: Compliance Coordinator
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701**

- h. A signed copy of all Discharge Monitoring Reports and any other reports shall be submitted to the Regional Administrator at the following address:

**U.S. Environmental Protection Agency, Region IX
NPDES/DMR WTR-7-1
75 Hawthorne Street
San Francisco, CA 94105**

I.B.2. Monitoring

- i. **Representative Samples:** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.
- ii. **Test Procedures:** Monitoring for the analysis of pollutants shall be conducted according to test procedures approved under 40 CFR 136 published pursuant to Section 304(h) of the Act, or SW-846, or in the case of sludge disposal, approved under 40 CFR 503, or other procedures as approved by the Administrator in the permit. Analysis shall be performed by a State of Nevada certified laboratory.
- iii. **Recording the Results:** For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- i. The exact place, date, and time of sampling;
 - ii. The dates the analyses were performed;
 - iii. The person(s) who performed the analyses;
 - iv. The analytical techniques or methods used; and
 - v. The results of all required analyses.
- iv. **Additional Monitoring by Permittee:** If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated on the DMR.
- v. **Records Retention:** All records and information resulting from the monitoring activities, permit application, reporting required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years, or longer if required by the Administrator. Records of monitoring information required by this permit related to the Permittee's sewage sludge use and/or disposal activities shall be retained for a period of at least 5 years or longer as required by 40 CFR 503.
- vi. **Detection Limits:** All laboratory analysis conducted in accordance with this discharge permit must meet the following criteria:
- i. The most sensitive analytical method specified or approved in either 40 CFR 136 or SW-846 shall be used, which is required or approved by the Nevada state laboratory certification program; and
 - ii. Each parameter shall have detection at or below the permit limits or the method detection limit as defined in the analytical method; or
 - iii. The Permittee is considered in compliance if the reported results are less than the established permit limit or laboratory reporting limit.
- vii. **Modification of Monitoring Frequency and Sample Type:** After considering monitoring data, stream flow, discharge flow and receiving water conditions, the Administrator, may for just cause, modify the monitoring frequency and/or sample type by issuing an order to the Permittee.

I.B.3. Definitions:

- i. The "30-day average discharge" means the total discharge during a month divided by the number of samples in the period that the facility was

discharging. Where less than daily sampling is required by this permit, the 30-day average discharge shall be determined by the summation of all the measured discharges divided by the number of samples during the period when the measurements were made.

- ii. The "daily maximum" is the highest measurement recorded during the monitoring period.
- iii. The "30-day average concentration", other than for fecal coliform bacteria, means the arithmetic mean of measurements made during a month. The "30-day average concentration" for fecal coliform bacteria means the geometric mean of measurements made during a month. The geometric mean is the " n^{th} " root of the product of " n " numbers. Geometric mean calculations and arithmetic mean calculations where there are non-detect results shall use one half the detection limit as the value for the non-detect results.
- iv. A "discrete" sample means any individual sample collected in less than 15 minutes.
- v. For flow-rate measurements a "composite" sample means the arithmetic mean of no fewer than six individual measurements taken at equal time intervals for 24 hours, or for the duration of discharge, whichever is shorter.

For other than flow-rate a "composite" sample means a combination of no fewer than six individual flow-weighted samples obtained at equal time intervals for 24 hours, or for the duration of discharge, whichever is shorter. Flow-weighted sample means that the volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling.
- vi. Acute toxicity is defined in the whole effluent testing procedures presented in this permit in I.A.16.
- vii. Biosolids are non-hazardous sewage sludge or domestic septage as these terms are defined in 40 CFR 503.9.
- viii. PQL is the Practical Quantitation Limit as defined in SW-846. MDL is the Method Detection Limit as defined in SW-846.

PART II

II.A. MANAGEMENT REQUIREMENTS

- II.A.1. **Change in Discharge:** All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not

violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Any changes to the permitted treatment facility must comply with Nevada Administrative Code (NAC) 445A.283 to 445A.285. Pursuant to NAC 445A.263, the permit may be modified to specify and limit any pollutants not previously limited.

II.A.2. **Adverse Impact-Duty to Mitigate:** The Permittee shall take all reasonable steps to minimize releases to the environment resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. The Permittee shall carry out such measures, as reasonable, to prevent significant adverse impacts on human health or the environment.

II.A.3. **Noncompliance, Unauthorized Discharge, Bypassing and Upset:**

- a. Any diversion, bypass, spill, overflow or discharge of treated or untreated wastewater from wastewater treatment or conveyance facilities under the control of the Permittee is prohibited except as authorized by this permit. In the event the Permittee has knowledge that a diversion, bypass, spill, overflow or discharge not authorized by this permit is probable, the Permittee shall notify the Administrator immediately.
- b. The Permittee shall notify the Administrator within twenty-four (24) hours of any diversion, bypass, spill, upset, overflow or release of treated or untreated discharge other than that which is authorized by the permit. A written report shall be submitted to the Administrator within five (5) days of diversion, bypass, spill, overflow, upset or discharge, detailing the entire incident including:
 - i. Time and date of discharge;
 - ii. Exact location and estimated amount of discharge;
 - iii. Flow path and any bodies of water which the discharge reached;
 - iv. The specific cause of the discharge; and
 - v. The preventive and/or corrective actions taken.
- c. The following shall be included as information which must be reported within 24 hours:
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - ii. Any upset which exceeds any effluent limitation in the permit;
 - iii. Violation of a limitation for any toxic pollutant or any pollutant identified as the method to control a toxic pollutant.

- d. The Permittee shall report all instances of noncompliance not reported under Part II.A.4.b. at the time monitoring reports are submitted. The reports shall contain the information listed in Part II.A.4.b.
- e. A “bypass” means the intentional diversion of waste streams from any portion of a treatment facility.
 - i. **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 a and b of this section.
 - ii. **Anticipated bypass:** If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of bypass.
- f. **Prohibition of Bypass:** Bypass is prohibited, and the Administrator may take enforcement action against a Permittee for bypass, unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
 - ii. 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 down time. 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 preventative maintenance; and
 - iii. The Permittee submitted notices as required under paragraph e of this section.
- g. The Administrator may approve an anticipated bypass, after considering its adverse effects, if the Administrator determines that it will meet the three conditions listed in paragraph f of this section.
- h. An “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.
- i. **Effect of an upset:** An upset constitutes an affirmative defense to an action brought for non-compliance with such technology-based permit effluent limitations if the requirements of paragraph j of this section are met.

- j. **Conditions necessary for a demonstration of an 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:
- i. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The Permittee submitted notice of the upset as required under paragraph c of this section; and
 - iv. The Permittee complied with any remedial measures required under II.A.3.
- k. In selecting the appropriate enforcement option, the Administrator shall consider whether or not the noncompliance was the result of an upset. The burden of proof is on the Permittee to establish that an upset occurred.

II.A.4. **Removed Substances:** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollution from such materials from entering any navigable waters.

II.A.5. **Safeguards to Electric Power Failure:** In order to maintain compliance with the effluent limitations and prohibitions of this permit the Permittee shall either:

- a. Provide at the time of discharge an alternative power source sufficient to operate the wastewater control facilities;
- b. Halt or reduce all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

II.B. RESPONSIBILITIES

II.B.1. **Right of Entry and Inspection:** The Permittee shall allow the Administrator and/or his authorized representatives, upon the presentation of credentials, to:

- a. Enter at reasonable times upon the Permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. Have access to and copy any records required to be kept under the terms and conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations required in this permit;

- d. Perform any necessary sampling or monitoring to determine compliance with this permit at any location for any parameter.

II.B.2. **Transfer of Ownership or Control:** In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the Permittee shall notify the succeeding owner or controller of the existence of this permit, by letter, a copy of which shall be forwarded to the Administrator. The Administrator may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary. Division approval is required for all permit transfers.

II.B.3. **Availability of Reports:** Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Administrator. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.

II.B.4. **Furnishing False Information and Tampering with Monitoring Devices:** Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained by the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than \$10,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, provided pursuant to NRS 445A.300 to 445A.730, inclusive.

II.B.5. **Penalty for Violation of Permit Conditions:** Nevada Revised Statutes NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.705.

II.B.6. **Permit Modification, Suspension or Revocation:**

- a. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following (NAC 445A.261:
 - i. Violation of any terms or conditions of this permit; or
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or

- iv. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
 - v. There are material and substantial alterations or additions to the permitted facility or activity; or
 - vi. The Administrator has received new information; or
 - vii. The standards or regulations have changed; or
 - viii. The Administrator has received notification that the permit will be transferred.
- b. **Minor Modifications:** With the consent of the Permittee and without public notice, the Administrator may make minor modifications in a permit to:
- i. Correct typographical errors;
 - ii. Clarify permit language;
 - iii. Require more frequent monitoring or reporting;
 - iv. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the permit and does not interfere with attainment of the final compliance date;
 - v. Allow for change in ownership; change the construction schedule for a new discharger provided that all equipment is installed and operational prior to discharge; or
 - vi. Delete an outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

II.B.7. **Toxic Pollutants:** Notwithstanding Part II.B.6. above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

II.B.8. **Liability:** 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 Federal, State or local laws, regulations, or ordinances.

II.B.9. **Property Rights:** The issuance of this permit does not convey any property rights, in

either real or personal property, 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.

- II.B.10. **Severability:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions 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.
- II.B.11. **Duty to Comply:** The Permittee shall 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 re-issuance, or modification; or denial of a permit renewal application.
- II.B.12. **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 this permit.
- II.B.13. **Duty to Provide Information:** The Permittee shall furnish to the Administrator, within a reasonable time, any relevant information which the Administrator 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 Administrator, upon request, copies of records required to be kept by this permit.

PART III

III.A. OTHER REQUIREMENTS

- III.A.1. **Reapplication:** If the Permittee desires to continue to discharge, he shall reapply not later than 180 days before this permit expires on the application forms then in use. POTW's with NPDES permits shall submit the sludge information listed at 40 CFR 501.15(a)(2) with the renewal application. The renewal application shall be accompanied by the fee required by NAC 445A.232.
- III.A.2. **Signatures, Certification Required on Application and Reporting Forms:**

- a. All applications, reports, or information submitted to the Administrator shall be signed and certified by making 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.”

- b. All applications, reports or other information submitted to the Administrator shall be signed by one of the following:
 - i. A principal executive officer of the corporation (of at least the level of vice president) or his authorized representative who is responsible for the overall operation of the facility from which the discharge described in the application or reporting form originates; or
 - ii. A general partner of the partnership; or
 - iii. The proprietor of the sole proprietorship; or
 - iv. A principal executive officer, ranking elected official or other authorized employee of the municipal, state or other public facility.
- c. **Changes to Authorization:** If an authorization under paragraph b. of this section 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 b. of this section must be submitted to the Administrator prior to or together with any reports, information, or applications to be signed by an authorized representative.

III.A.3. The Permittee shall notify the Administrator as soon as they know or have reason to believe:

- a. 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":
 - i. One hundred micrograms per liter (100 µg/l);
 - ii. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - iv. The level established by the Administrator in accordance with 40 CFR 122.44(f).
- b. 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":

- i. Five hundred micrograms per liter (500 $\mu\text{g/l}$);
- ii. One milligram per liter (1 mg/l) for antimony;
- iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7);
- iv. The level established by the Administrator in accordance with 40 CFR 122.44(f).

**Attachment A
Priority Pollutants**

<u>BASE NEUTRAL EXTRACTIBLES</u>		<u>VOLATILE ORGANICS</u>		<u>PESTICIDES</u>		<u>ACID EXTRACTABLES</u>		<u>METALS</u>		<u>DIOXINS</u>		<u>OTHER</u>	
Storet Code	Name	Storet Code	Name	Storet Code	Name	Storet Code	Name	Storet Code	Name	Storet Code	Name	Storet Code	Name
34551	1,2,4-Trichlorobenzene	34506	1,1,1-Trichloroethane	39310	4,4-DDD	34621	2,4,6-Trichlorophenol	01268	Antimony	34675	2,3,7,8-TCDD	00948	Asbestos
34536	1,2-Dichlorobenzene	34516	1,1,2,2-Tetrachloroethane	39320	4,4-DDE	34601	2,4-Dichlorophenol	00978	Arsenic			00720	Cyanide, total
34346	1,2-Diphenylhydrazine	34511	1,1,2-Trichloroethane	39300	4,4-DDT	34606	2,4-Dimethylphenol	00998	Beryllium				
34566	1,3-Dichlorobenzene	34496	1,1-Dichloroethane	39330	Aldrin	34616	2,4-Dinitrophenol	01113	Cadmium				
34571	1,4-Dichlorobenzene	34501	1,1-Dichloroethylene	39336	Alpha-BHC	34586	2-Chlorophenol	01118	Chromium				
34611	2,4-Dinitrotoluene	32103	1,2-Dichloroethane	34361	Endosulfan I (alpha)	03615	2-Methyl-4,6-dinitrophenol	01119	Copper				
34626	2,6-Dinitrotoluene	34541	1,2-Dichloropropane	39338	Beta-BHC	34591	2-Nitrophenol	01114	Lead				
34581	2-Chloronaphthalene	34546	Trans-1,2-Dichloroethylene	34356	Endosulfan II (beta)	70012	4-Chloro-3-methylphenol	71901	Mercury				
34631	1,3-Dichlorobenzidine	77163	1,3-Dichloropropene (mixed)	39350	Chlordane (Technical)	34646	4-Nitrophenol	01074	Nickel				
34636	4-Bromophenyl phenyl ether	34576	2-Chloroethyl vinyl ether	34198	Delta-BHC	39032	Pentachlorophenol	00981	Selenium				
34641	4-Chlorophenyl phenyl ether	34210	Acrolein	39380	Dieldrin	34694	Phenol	01079	Silver				
34205	Acenaphthene	34215	Acrylonitrile	34351	Endosulfan sulfate			00982	Thallium				
34200	Acenaphthylene	34030	Benzene	39390	Endrin			01094	Zinc				
34220	Anthracene	32104	Bromoform	34366	Endrin aldehyde								
39120	Benzidine	32102	Carbon tetrachloride	39344	Gamma-BHC (Lindane)								
34526	Benzo(a)anthracene	34301	Chlorobenzene	39410	Heptachlor								
34247	Benzo(a)pyrene	85811	Chloroethane	39420	Heptachlor epoxide								
34230	Benzo(b)fluoranthene	32106	Chloroform	34671	Aroclor (PCB) 1016								
34521	Benzo(g,h,i)perylene	32105	Dibromochloromethane	39488	Aroclor (PCB) 1221								
34242	Benzo(k)fluoranthene	32101	Bromodichloromethane	39492	Aroclor (PCB) 1232								
34278	Bis(2-Chloroethoxy) methane	34371	Ethylbenzene	39496	Aroclor (PCB) 1242								
34273	Bis(2-chloroethyl) ether	34413	Bromomethane	39500	Aroclor (PCB) 1248								
34283	Bis(2-Chloroisopropyl) ether	34418	Chloromethane	39504	Aroclor (PCB) 1254								
39100	Bis(2-ethylhexyl) phthalate	34423	Dichloromethane	39508	Aroclor (PCB) 1260								
34292	Butyl benzyl phthalate	34475	Tetrachloroethylene	39400	Toxaphene								
34320	Chrysene	34010	Toluene										
34556	Dibenzo(a,h)anthracene	39180	Trichloroethylene										
34336	Diethyl phthalate	39175	Vinyl chloride										
34341	Dimethyl phthalate												
39110	Di-n-butyl phthalate												
34596	Di-n-octyl phthalate												
34376	Fluoranthene												
34381	Fluorene												
39700	Hexachlorobenzene												
34391	Hexachlorobutadiene												
34386	Hexachlorocyclopentadiene												
34396	Hexachloroethane												
34403	Indeno(1,2,3-cd)pyrene												
34408	Isophorone												
34696	Naphthalene												
34447	Nitrobenzene												
34438	N-Nitrosodimethylamine												
34428	N-Nitrosodi-n-propylamine												
34433	N-Nitrosodiphenylamine												
34461	Phenanthrene												
34469	Pyrene												

Note: Priority Pollutants shall be analyzed using approved Environmental Protection Agency (EPA) Methods, and/or an appropriate combination of these methods to verify compliance with applicable water quality standards.

PERMITTEE ADDRESS
(Include Facility Name/Location if different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2000-0015

NAME: Nevada Environmental Response Trust
ADDRESS: 35 E. Wacker Dr., Ste. 1550
Chicago, IL 60611

NV0023060	NA
PERMIT NUMBER	REUSE SUPPLIER PERMIT NUMBER

NOTE: Read instructions before completing this form.

Pg. 1 of ___

FACILITY: BMI Complex perchlorate remediation
LOCATION: 560 W Lake Mead Pkwy, Henderson, NV

OUTFALL:

MONITORING PERIOD							REPORTING QUARTER	
YEAR	MONTH	DAY	To	YEAR	MONTH	DAY	QUARTER	YEAR

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				No. of Exceptions	Frequency of Analysis	Sample Type
		30-DAY AVERAGE	MAXIMUM	Units	MINIMUM	AVERAGE	MAXIMUM	Units			
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
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	Permit Requirement										
	Sample Measurement										
	Permit Requirement										
	Sample Measurement										
	Permit Requirement										

Name/Title Principal Executive Officer
(Typed or Printed)

TELEPHONE No.:

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information. I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. §1001 and 33 U.S.C. §1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

Signature of Principal Executive Officer or Authorized Agent

DATE: _____

Month Day Year

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)