



Brian Sandoval, Governor Bradley Crowell, Director Greg Lovato, Administrator

August 11, 2017 NV0024228

Stephen R. Clough, P.G., C.E.M. Remediation Director Nevada Environmental Response Trust 510 S. 4<sup>th</sup> St. Henderson, NV 89015

Mr. Clough:

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 (NDEP) has reviewed the Nevada Environmental Response Trust's NPDES permit application for their Pump & Treat Remediation Project located at East Athens Road, Henderson, Nevada, for a period of five (5) years.

The EPA reviewed the permit draft and the recommendations from EPA were duly addressed prior to the conclusion of the preliminary decisions on proposed action. The Las Vegas Review Journal published a public notice of NDEP's proposed action on June 19, 2017. Copies of the fact sheet, permit draft, and the public notice were sent to your office. The public notice and Fact Sheet were also sent to the Clark County Board of Commissioners, interested persons, and governmental agencies on NDEP's mailing list. Draft documents were posted on NDEP's website.

During the 30-day public comment period bureau received comments from the applicant. No other comments were received from general public. After consideration, NDEP is issuing the enclosed NPDES permit (#NV0024228) to the Nevada Environmental Response Trust for a period of five (5) years. This permit action does not constitute a significant change from the tentative determination set forth in the public notice.

The new permit will become effective on August 14, 2017 and will expire at midnight on August 13, 2022, provided all permit conditions are followed, and annual fees paid accordingly.

Enclosed for your filing needs are the Final Permit and Fact Sheet.

Please contact me at (775) 687-9432 or at <a href="mailto:smallgireddy@ndep.nv.gov">smallgireddy@ndep.nv.gov</a> should you have any questions regarding this permit or the permitting process.

Sincerely,

Sharada Maligireddy

Staff II Associate Engineer

Permits Branch

Bureau of Water Pollution Control

Enclosure: NV0024228 Fact Sheet & NV0024228 Final Permit

### Ecc:

Jeff Kinder, NDEP Deputy Administrator James Dotchin, P.E., NDEP-BISC Nick Brothers, P.E. NDEP-BWPC Joe Maez, P.E. NDEP-BWPC Weiquan Dong, P.E., NDEP-BISC Christa Smaling, NDEP-BISC Dan Pastor, Tetra Tech Brad Bijold, Tetra Tech Kimberly Schmidt Kuwabara, Ramboll

# Requested for Cc (w enclosures) Via NERT Sharefile Distribution:

Frederick Perdomo, Nevada Attorney General's Office Alison Fong, U.S. Environmental Protection Agency, Region 9 Mark Duffy, U.S. Environmental Protection Agency, Region 9 Jay Steinberg, NERT Trustee and not individually Andrew Steinberg, NERT Trustee and not individually Tanya C.O'Neill, Foley and Lardner, LLP Kirk Stowers, Broadbent Inc. Derek Amidon, Tetra Tech Kurt Fehling, The Fehling Group

# Permit Type: Manufacturing, Commercial, Mining and Silvicultural facility that discharges NON-PROCESS Wastewater

#### Permit No. NV0024228

#### **Nevada Division of Environmental Protection**

#### **AUTHORIZATION TO DISCHARGE**

In compliance with Chapter 445A of the Nevada Revised Statutes,

# NEVADA ENVIRONMENTAL RESPONSE TRUST 510 SOUTH 4TH STREET HENDERSON, NV - 89015

is authorized to discharge from a facility located at:

NEVADA ENVIRONMENTAL RESPONSE TRUST 800 EAST ATHENS ROAD, HENDERSON, NV - 89011 LATITUDE: 36.08549302, LONGITUDE: -114.987543 TOWNSHIP: T21S, RANGE: R63E, SECTION: S33

to receiving waters named:

LAS VEGAS WASH

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Sections A, B, and C hereof.

This permit shall become effective on August 14, 2017.

This permit and the authorization to discharge shall expire at midnight, August 13, 2022.

Signed this 11th day of August 2017.

Sharada Maligireddy

Staff Engineer

**Bureau of Water Pollution Control** 

#### **SECTION A**

## A.1. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS AND CONDITIONS

**A.1.1.** During the period beginning on the effective date of this permit, and lasting until the permit expires, the Permittee is authorized to:

pump and treat influent from dewatering activities associated with the Sunrise Mountain Weir and the Historical Lateral Weir construction project for the Las Vegas Wash to remove perchlorate contamination, and discharge the effluent back to Las Vegas Wash. The influent is collected via two pump stations namely the Sunrise Mountain Pump Station (SMPS) and the Historical Lateral Weir Pump Station (HLPS) to be treated at the permittee's central water treatment plant (CWTP).

Effluent samples and measurements taken in compliance with the monitoring requirements specified below shall be taken at:

Sample Location	Location Type	Location Name
001	774	001 COMBINED INFLUENT FROM SMPS & HLPS AT CWTP
002	Internal Outfall	002 BACKWASH WASTE PUMP
003	External Outfall	003 TREATED EFFLUENT
004		004 END OF MIXING ZONE LV WASH AMBIENT WATER QUALITY MONITORING POINT

**A.1.2.** The discharge shall be limited and monitored by the Permittee as specified below. As applicable, exceptions to standard language in this permit are identified and authorized in the Special Approvals / Conditions table:

# Discharge Limitations Table for Combined Influent Flow To Cwtp To Be Reported Monthly

		Discharge	Limitations		Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type		
Flow rate	Daily Maximum	<= 6900 Gallons per Minute (gal/min)		Intake	001	Continuous	METER		
рН	Value		M&R Standard Units (SU)	Intake	001	Biweekly	GRAB		
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Biweekly	COMPOS		
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Biweekly	COMPOS		
Perchlorate (ClO4)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Intake	001	Biweekly	COMPOS		
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS		
Ammonia nitrogen, total, (as N) 30 day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS		
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS		

# Discharge Limitations Table for Prior To Remix With Treated Effluent (Internal Monitoring Point) To Be Reported Monthly

		Discharge	Limitations		Monitor	ing Requiremen	nts
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	002	Biweekly	COMPOS
Flow rate	Monthly Total	M&R Gallons per Month (gal/mo)		Internal Monitoring Point	002	Continuous	METER
Perchiorate (CIO4)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	002	Biweekly	COMPOS

# Discharge Limitations Table for Treated Effluent Discharge Pipe (External Outfall) To Be Reported Monthly

		Discharge	Limitations		Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type		
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	003	Continuous	METER		
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	003	Weekly When Discharging	COMPOS		
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	003	Biweekly	GRAB		
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	003	Biweekly	GRAB		
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS		
Perchlorate (ClO4)	Daily Maximum		<= 18 Micrograms per Liter (ug/L)	Effluent Gross	003	Weekly When Discharging	COMPOS		
Manganese, total recoverable	Daily Maximum		<= 1.72 Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS		
Boron, total (as B)	Daily Maximum		<= 3.71 Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS		
Nitrogen, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS		
Phosphorus, total (as P)	Monthly Average	M&R Pounds per Day (lb/d)		Effluent Gross	003	Biweekly	COMPOS		
Ammonia nitrogen, total, (as N) 30 day <sup>[1]</sup>	Monthly Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS		
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter	Effluent Gross	003	Biweekly	COMPOS		

# Discharge Limitations Table for Treated Effluent Discharge Pipe (External Outfall) To Be Reported Monthly

		Discharge	Limitations	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
			(mg/L)					

# Notes (Discharge Limitations Table):

Please schedule sampling so as to try to match as closely as possible to the corresponding influent stream as this parameter is intended to monitor the changes in Ammonia through the treatment cycle.

# Discharge Limitations Table for End Of Mixing Zone Lv Wash Ambient Water Quality Monitoring Point (Receiving Water - Ambient) To Be Reported Monthly

		Discharg	e Limitations		Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Solids, total dissolved	Single Sample	[1]	<= 2400 Milligrams per Liter (mg/L)	Downstream Monitoring	004	Monthly When Discharging	DISCRT	
Manganese, total (as Mn)	Daily Maximum	[2]	<= 200 Micrograms per Liter (ug/L)	Monitoring 004		Monthly When Discharging	DISCRT	
Boron, total (as B)	Daily Maximum	[2]	<= 750 Micrograms per Liter (ug/L)	Downstream Monitoring	004	Monthly When Discharging	DISCRT	

# Notes (Discharge Limitations Table):

- 1. Total Dissolved Solids: 95% of S.V. samples <= 2400 mg/l (NAC 445A.2158 RMHQ)
- 2. NAC 445A.1236 Standards for toxic materials applicable to designated waters.

- A.2. 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. All compliance deliverables shall be addressed to the attention of the Bureau of Water Pollution Control.
- **A.2.1** The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

SOC - Schedule of Compliance Table

item #	Description	Due Date
1	Within 90 days of the permit effective date, the Permittee shall submit and obtain approval for final Operations & Maintanance (O&M) manual, wet stamped by a Nevada licensed professional engineer.	11/10/2017
2	Within 1 year of this permit issuance, all DMRs shall be submitted electronically through the Nevada NetDMR website: https://netdmr.ndep.nv.gov/netdmr/public/home/htm	8/10/2018

# SA - Special Approvals / Conditions Table

Item #	Description
1	If and when the construction activities at the Historic Lateral Weir renders the Outfall 004 inaccessible, upon Permittee's written request to the Bureau, the Permittee may be approved to collect samples from an alternative sampling point.

# DLV- Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	10/28/2017
2	Annual Report	Annually	1/28/2018

### A.3. MONITORING AND REPORTING

### A.3.1 Reporting

# A.3.1.1 Annual Reports

- A.3.1.1.1 Pursuant to the schedule defined in Section A, DLV- Deliverable Schedule for Reports, Plans, and Other Submittals (DLV Table), the Permittee shall submit a plot of concentration (y-axis) versus date (x-axis) for each analyzed constituent. The plot shall include data from the preceding five years or from the effective date of the permit whichever is shorter. Exemption: Graphing is not required for any constituent that has been below the detection limit for every analysis during the current year and the previous four years or the monitoring period if not required by the previous permit. Graphing of less than three data points is not required. The Permittee must explain why the analyzed constituents have not been graphed in the DMR cover letter.
- A.3.1.1.2 If required, all Annual, Biosolids Monitoring Report (BMR), Pretreatment, Total Inorganic Nitrogen (TIN), Salinity Control and Whole Effluent Toxicity Testing (WET) annual reports are due as defined in the Deliverable Table (DLV) Table.

# A.3.1.2 Quarterly Reporting:

- A.3.1.2.1 Monitoring results obtained pursuant to this permit for the previous three (3) month period shall be summarized and tabulated for each month and reported on a Discharge Monitoring Report (DMR) form. Quarterly reports shall be submitted for the quarterly periods corresponding to: January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. The DMR is to be received in this office no later than the 28th day of the month following the completed reporting period. If required, the Permittee shall submit data in an electronic format approved by the Division. Any data submitted that exceeds the limits of Part A.1 must be explained by a narrative. Summaries of laboratory results for analyses conducted by outside laboratories must accompany the DMR, and the full data package provided by the laboratory must be provided if requested in writing by the Division. If at any time the Permittee concludes that submitted data were incorrect, the Permittee shall notify the Division in writing, identify the incorrect data, and replace the incorrect data with corrected data, which shall thereafter be used for determining compliance with this permit.
- A.3.1.3 Compliance Reports: 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 scheduled date. Quarterly reports shall include documentation that identifies all Sanitary Sewer Overflows (SSO) or spills that occurred at the permitted facility or within the treatment works during the previous quarter in accordance with the permittees SSO/Spill Reporting Procedures.
- **A.3.1.4** Other information: Where the Permittee becomes aware of failure to submit any relevant facts in a permit application or the submittal of incorrect information in a permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or information.
- A.3.1.5 Planned Changes: The Permittee shall give notice to the Administrator as soon as

- possible of any planned alterations or additions to the permitted facility. Notice is required only when the alteration or addition to a permitted facility:
- A.3.1.5.1 May meet one of the criteria for determining whether a facility is a new source (40 CFR 122.29(b)); or
- **A.3.1.5.2** Could significantly change the nature or increase the quantity of pollutants discharged.
- A.3.1.6 Anticipated Noncompliance: 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. An original, signed copy of these, and all other reports required herein shall be submitted to the State at the following address:

Nevada Division of Environmental Protection Bureau of Water Pollution Control 901 South Stewart Street, Suite 4001 Carson City, Nevada 89701-5249

# A.3.2 Monitoring

- A.3.2.1 Representative Samples: Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. Additional samples and measurements collected at the non-discharge monitoring locations shall also be representative of the media and conditions being evaluated/monitored.
- **A.3.2.2** Recording the Results: For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:
- A.3.2.2.1 The exact place, date, and time of sampling;
- A.3.2.2.2 The dates the analyses were performed;
- A.3.2.2.3 The person(s) who performed the analyses;
- A.3.2.2.4 The analytical techniques or methods used; and
- A.3.2.2.5 The results of all required analyses, including reporting limits.
- A.3.2.3 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 DMR form. Such increased frequency shall also be indicated on the DMR. If a Permittee monitors more often than once per day, the Permittee shall compute the 7-day average or 30-day average by first averaging the samples for each day, and then averaging the daily averages or discrete samples representing all sampled days within the period; provided, however, that the Permittee may instead average all samples taken within the period if it notifies the Division that it will use this method.

- A.3.2.4 Test Procedures: Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the Act, under which such procedures may be required unless other procedures are approved by the Division. Other procedures used may be:
- A.3.2.4.1 Selected from SW-846;
- A.3.2.4.2 Selected from 40 CFR 503; or
- A.3.2.4.3 An alternate test procedure approved by the Nevada Division of Environmental Protection (NDEP), Environmental Laboratory Services and the federal Environmental Protection Agency (EPA).
- A.3.2.4.4 All laboratory analyses conducted in accordance with this discharge permit must have detection at or below the permit limits.
- **A.3.2.4.5** All analytical results must be generated by analytical laboratories certified by the state of Nevada laboratory certification program.
- **A.3.2.6 Reporting Limits:** Unless otherwise approved by the Division, the approved method of testing selected for analysis must have reporting limits which are:
- A.3.2.6.1 Half or less of the discharge limit; or, if there is no limit,
- A.3.2.6.2 Half or less of the applicable water quality criteria; or, if there is no limit or criteria,
- A.3.2.6.3 The lowest reasonably attainable using an approved test method.
- **A.3.2.6.4** This requirement does not apply if a water quality standard is lowered after the issuance of this permit; however, the Permittee shall review methods used and by letter notify the division if the reporting limit will exceed the new criterion, and if so the Division may reopen the permit to impose new monitoring requirements.
- A.3.2.7 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 five 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.
- A.3.2.8 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.
- A.4. Fees
- A.4.1. The Permittee shall remit an annual review and services fee in accordance with Nevada Administrative Code (NAC) 445A.232 starting July 01, 2018 and every year thereafter until the permit is terminated.

A.5.	Certified	Operators

- **A.5.1.** The facility shall be operated by a Nevada Certified Class Operator (or higher) of classification
  - X None, Level 1, Level 2, Level 3, or Level 4.
- A.6. Discharge Monitoring Reports (DMRs)
- A.6.1. DMRs must be signed by the facility's highest ranking certified operator. The first DMR submitted under this permit must include the written designation of the certified operator required by Section C, Signatures, Certification Required on Application and Reporting Forms, as the authorized representative to sign the DMRs. If the certified operator in responsible charge changes, a new designation letter must be submitted.
- **A.7. NDEP Submittal Address:** An original signed copy of these, and all other reports required herein, shall be submitted to the State at the following address:

Division of Environmental Protection Bureau of Water Pollution Control 901 South Stewart, Suite 4001 Carson City, Nevada 89701

### A.8. Narrative Standards:

- A.8.1 Discharges shall not cause the following standards to be violated in any surface waters of the state. Waters must be free from:
- **A.8.1.1** Substances that will settle to form sludge or bottom deposits in amounts sufficient to be unsightly, putrescent or odorous;
- **A.8.1.2** Floating debris, oil, grease, scum, and other floating materials in amounts sufficient to be unsightly;
- A.8.1.3 Materials in amounts sufficient to produce taste or odor in the water or detectable offflavor 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;
- **A.8.1.4** High temperature, biocides, organisms pathogenic to human beings, toxic, corrosive or other deleterious substances at levels or combinations sufficient to be toxic to human, animal, plant or aquatic life;
- **A.8.1.5** Radioactive materials that result in accumulations of radioactivity in plants or animals that result in a hazard to humans or harm to aquatic life;
- **A.8.1.6** Untreated or uncontrolled wastes or effluents that are reasonably amenable to treatment or control; and
- A.8.1.7 Substances or conditions, which interfere with the beneficial use of the receiving

waters.

- A.8.2 The 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.
- A.8.3 There shall be no objectionable odors from the collection system, treatment facility or disposal area, or biosolids treatment, use, storage or disposal area that the Permittee owns or operates.
- A.8.4 There shall be no discharge of substances that would cause a violation of water quality standards of the State of Nevada as defined by the permit. The permit may be reopened, and additional limits imposed, if it is determined that the discharge is causing a violation of ambient water quality standards of the State of Nevada.
- A.8.5 There shall be no discharge from the collection, treatment and disposal facilities except as authorized by this permit or in accordance with the Division's Spill Reporting Policy.
- A.8.6 The treatment and disposal facility shall be fenced and posted.
- A.8.7 There shall be no discharge of floating solids or visible foam in other than trace amounts.

# **SECTION B**

Site specific requirements are on the following pages:

- B.MZ. Zones of Mixing (Mixing Zone)
- **B.MZ.1.** Mixing Zone applications shall be prepared and submitted for approval in accordance with NAC 445A.
- **B.MZ.2.** Mixing Zones must be managed such that no violation of water quality standards occurs at any point designated by NDEP and no appreciable harm to beneficial uses, either designated or actual, will result from the proposed zone of mixing and such other information as NDEP may prescribe.

#### **SECTION C**

### C.1. Definitions

- C.1.1. CWA means the Clean Water Act (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 96-217, Public Law 96-576, Public Law 97-117, and Public Law 100-4.
- C.1.2. Waters of the State means all waters situated wholly or partly within or bordering upon this state including but not limited to all streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems, and drainage systems; and all bodies or accumulations of water, surface and underground, natural or artificial.
- C.1.3. 30-day average discharge means the total discharge during a month divided by the number of samples in the period for that discharge facility. 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.
- C.1.4. 7-day average concentration means the arithmetic mean of measurements made during a week. If there is more than one measurement per day, the measurements may be averaged in accordance with Section A (Monitoring: Additional Monitoring by Permittee).
- C.1.5. Daily maximum means the highest measurement during the monitoring period.
- C.1.6. 30-day average concentration, other than for fecal coliform bacteria, means the arithmetic mean of measurements made during a month. If there is more than one measurement per day, the measurements may be averaged in accordance with Section A (Monitoring: Additional Monitoring by Permittee). The "30-day average concentration" for fecal coliform bacteria means the geometric mean of measurements made during a month. The geometric mean is the "nth" root of the product of "n" numbers. Geometric mean calculations where there are non-detect results for fecal coliform shall use one half the detection limit as the value for the non-detect results.
- C.1.7. mg/L means milligrams per liter.
- C.1.8. gpd means gallons per day.
- C.1.9. MG means million gallons.
- C.1.10. MGD means million gallons per day.
- C.1.11. Mgal/d means million gallons per day.
- C.1.12. "-N" means measured as nitrogen.
- C.1.13. "-P" means measured as phosphorus.

- C.1.14. mg/kg means milligrams per kilogram.
- C.1.15. DWB means Dry Weight Basis.
- C.1.16. CFU means Colony Forming Unit.
- C.1.17. MPN means Most Probable Number.
- C.1.18. mL means milliliter.
- C.1.19. NMP means Nutrient Management Plan.
- C.1.20. AC means acre.
- C.1.21. Ibs/A means pounds per acre.
- C.1.22. Ibs/day means pounds per day.
- C.1.23. TDS means total dissolved solids.
- C.1.24. Cfs means cubic feet per second.
- C.1.25. CP means center pivot.
- C.1.26. S means summer.
- C.1.27. W means winter.
- C.1.28. Discrete sample means any individual sample collected in less than 15 minutes.
- **C.1.29.** 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.
- C.1.30. 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.
- **C.1.31.** Acute Toxicity is defined in the whole effluent testing procedures presented in this permit Section A (Whole Effluent Toxicity Testing).
- **C.1.32. Biosolids** are non-hazardous sewage sludge or domestic septage as defined in 40 CFR 503.9.
- **C.1.33.** A "bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- C.1.34. 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.
- C.1.35. Sewage sludge means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.
- **C.1.36. Agricultural land** means land on which a food crop, a feed crop, or a fiber crop is grown. This includes rangeland and land used as pasture.
- **C.1.37. Agronomic rate** means the whole sludge application rate (dry weight basis) designed:
- **C.1.37.1.** To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and
- **C.1.37.2.** To minimize the amount of nitrogen that passes below the root zone of the crop or vegetation grown on the land to the groundwater.
- C.1.38. Manure means animal excrement and is defined to include bedding, compost, and raw materials or other materials commingled with animal excrement or set aside for disposal.
- **C.1.39. Production area** means the portion of the facility that is not used for land application and includes all areas used for animal product production activities. This includes but is not limited to the animal confinement areas, the manure storage areas, the raw materials storage areas, and the waste containment areas.
- **C.1.40. Process wastewater** means water directly or indirectly used in the operation of the facility for any of the following:
- C.1.40.1. Spillage or overflow from animal watering systems;
- **C.1.40.2.** Washing, cleaning, or flushing pens, barns, manure pits, or other process components;
- C.1.40.3. Direct contact swimming, washing, or spray cooling of animals;
- **C.1.40.4.** Dust control, not including uncontaminated groundwater used outside of the production area; and
- **C.1.40.5.** Any water which comes into contact with, or is a constituent of, any raw materials, products, or byproducts including manure, feed, milk, eggs or bedding.
- C.1.41. Land application means the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

- C.1.42. Land application area means land under the control of the Permittee, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied.
- C.1.43. 25-year, 24-hour storm event means a precipitation event with a probable recurrence interval of once in twenty-five years, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.
- C.1.44. 100-year, 24-hour storm event means a precipitation event with a probable recurrence interval of once in one hundred years, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.
- C.1.45. Chronic precipitation event means a series of wet weather conditions that precludes reducing the volume of properly designed, constructed, operated, and maintained waste storage and/or treatment facilities and that total a volume in excess of the 25-year, 24-hour storm event.
- C.1.46. Vegetated buffer means a permanent strip of dense perennial vegetation established parallel to the contours of, and perpendicular to, the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants leaving the field and reaching surface waters.
- **C.1.47.** Feed crops means crops produced primarily for consumption by animals.
- **C.1.48.** Food crops means crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.
- C.2. Operations and Maintenance (O&M) manual:
- C.2.1. Pursuant to Section A, the O&M manual shall be prepared and submitted to NDEP for review in accordance with the Division's Operations and Maintenance Manual guidance (WTS-2). <a href="http://ndep.nv.gov/bwpc/wts-2.pdf">http://ndep.nv.gov/bwpc/wts-2.pdf</a>
- **C.2.2.** The operator shall inspect the site at the frequency prescribed in the O&M Manual.
- **C.2.3.** The Permittee shall maintain an operations logbook (hardcopy or electronic) on-site as referenced in the O&M manual.
- **C.2.4.** The logbook shall include the name of the operator, date, time, and general condition of the facility.
- C.3. 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:
- **C.3.1.** May meet one of the criteria for determining whether a facility is a new source (40 CFR 122.29 (b));

- **C.3.2.** Could significantly change the nature or increase the quantity of pollutants discharged; or
- **C.3.3.** Results in a significant change to the Permittee's sludge management practice or disposal sites.
- **C.4.** 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.
- C.5. 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. The permit may be modified to specify and limit any pollutants not previously limited.
- C.6. Facilities Operation-Proper Operation and Maintenance: The Permittee shall at all times maintain in good working order and properly operate all treatment and control facilities, collection systems, and pump stations installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures.
- C.7. 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 non-complying discharge. The Permittee shall carry out such measures, as reasonable, to prevent significant adverse impacts on human health or the environment. If the monitoring program (as required by this permit) identifies exceedances of ambient water quality standards at the boundary of the mixing zone, the Permittee shall notify the Division of the exceedances and describe any mitigation measures being implemented as part of the quarterly monitoring report requirements.
- C.8. Noncompliance, Unauthorized Discharge, Bypass and Upset
- C.8.1. Any diversion, bypass, spill, overflow or discharge of treated or untreated wastewater from a treatment works or other permitted facilities under the control of the Permittee to navigable waters is prohibited except as authorized by this permit. The Division may take enforcement action for a diversion, bypass, spill, overflow, or discharge of treated or untreated wastewater to waters of the state 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.
- **C.8.2.** The Permittee shall notify the Administrator at (775) 687-9418 during normal business hours AND through the NDEP Spill Hotline (1-888-331-6337) within twenty-

four (24) hours after identifying any diversion, bypass, spill, upset, overflow or release of treated or untreated discharge from the treatment works or other permitted facilities under the control of the Permittee that imminently and substantially endangers human health, the environment, or reaches a waters of the state. 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:

- **C.8.2.1.** Time, date, and duration of discharge;
- C.8.2.2. Exact location and estimated amount of discharge;
- C.8.2.3. Flow path and any bodies of water which the discharge reached;
- C.8.2.4. The specific cause of the discharge;
- **C.8.2.5.** The preventive and/or corrective actions taken to mitigate the spill;
- C.8.2.6. Future preventative actions to ensure a similar spill will not recur; and,
- **C.8.2.7.** Assessment of public contact with the spill and any notification provided to other public or private entities that may have been affected by the spill.
- **C.8.2.8.** The Administrator reserves the right to waive the requirement for this written report on a case-by-case basis, or request additional information.
- **C.8.3.** The following shall be included as information which must be reported within 24 hours:
- C.8.3.1. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- C.8.3.2. Any upset which exceeds any effluent limitation in the permit; and
- **C.8.3.3.** Violation of a limitation for any toxic pollutant or any pollutant identified as the method to control a toxic pollutant.
- C.8.4. The Permittee shall report all instances of noncompliance not reported under Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset) at the time monitoring reports are submitted. The reports shall contain the information listed in Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- C.8.5. 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 the applicable section of Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset including Prohibition of Bypass).
- **C.8.6.** 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.
- **C.8.7. Prohibition of Bypass:** Bypass is prohibited, and the Administrator may take enforcement action against a Permittee for bypass, unless:

- **C.8.7.1.** Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- C.8.7.2. 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 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
- **C.8.7.3.** The Permittee submitted notices as required under Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- C.8.8. 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 Section C.
- **C.8.9. Effect of an upset:** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset: Conditions necessary for a demonstration of an upset) are met.
- **C.8.10.** 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:
- C.8.10.1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
- **C.8.10.2.** The permitted facility was at the time being properly operated;
- C.8.10.3. The Permittee submitted notice of the upset as required under this section; and
- **C.8.10.4.** The Permittee complied with any remedial measures required under Section C (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- C.8.11. 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.
- C.9. All solid waste screening and sewage sludge shall be disposed of or reused in a manner approved by the Division and the County. Facilities that generate and dispose of sewage sludge, or prepare it for reuse, shall monitor the concentrations of arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium and zinc and report in mg/dry kg of sludge as outlined below. A monitoring report which includes the analytical data, volume disposed of, facility name, address, phone number and contact where sludge was disposed or reused shall be submitted with the quarterly Discharge Monitoring Report (DMR). Facilities which sample annually shall submit the information annually with the 4th quarter DMR.

Dry Biosolids Disposal rate in metric tons/yr.

Frequency

>0 - <290

each year

≥290 -<1500 once a quarter

≥1500 -<15000 once every 2 months
≥15000 once a month

- **C.10. 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.
- **C.11. Safeguards to Electric Power Failure:** In order to maintain compliance with the effluent limitations and prohibitions of this permit the Permittee shall either:
- **C.11.1.** Provide at the time of discharge an alternative power source sufficient to operate the wastewater control facilities; or
- **C.11.2.** Halt or reduce all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
- **C.12. Right of Entry and Inspection:** The Permittee shall allow the Administrator and/or his authorized representatives, upon the presentation of credentials, to:
- C.12.1. 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;
- **C.12.2.** Have access to and copy any records required to be kept under the terms and conditions of this permit at reasonable times;
- **C.12.3.** Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations required in this permit; and
- **C.12.4.** Perform any necessary sampling or monitoring to determine compliance with this permit at any location for any parameter.
- C.13. 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. The Administrator shall approve ALL transfers of permits.
- C.14. Availability of Reports: Except for data determined to be confidential under Nevada Revised Statute (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.
- **C.15.** Furnishing False Information and Tampering with Monitoring Devices: Any person who intentionally or with criminal negligence 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.

- C.16. Penalty for Violation of Permit Conditions: 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.
- C.17. Permit Modification, Suspension or Revocation: 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:
- C.17.1. Violation of any terms or conditions of this permit;
- C.17.2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- **C.17.3.** A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- C.17.4. 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:
- C.17.5. Material and substantial alterations or additions to the permitted facility or activity;
- C.17.6. The Administrator has received new information;
- C.17.7. The standards or regulations have changed; or
- **C.17.8.** The Administrator has received notification that the permit will be transferred.
- **C.18. Minor Modifications:** With the consent of the Permittee and without public notice, the Administrator may make minor modifications in a permit to:
- C.18.1. Correct typographical errors;
- C.18.2. Clarify permit language;
- **C.18.3.** Require more frequent monitoring or reporting:
- C.18.4. 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;
- C.18.5. Allow for change in ownership;

- **C.18.6.** Change the construction schedule for a new discharger provided that all equipment is installed and operational prior to discharge;
- C.18.7. 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; or
- **C.18.8.** Reallocate the IWLA as long as the ΣIWLA does not change.
- C.19. Toxic Pollutants: Notwithstanding Section C (Permit Modification, Suspension or Revocation), 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.
- C.20. 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. However, except for any toxic effluent standards and prohibitions imposed under section 307 of the Clean Water Act or toxic water quality standards set forth in NAC 445A.144, compliance with this permit constitutes compliance with Clean Water Act sections 301, 302, 306, 307, 318, 403, 405(a) and (b), and with NRS 445A.300 through 445A.730.
- **C.21. 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.
- **C.22. 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.
- C.23. 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; permit termination; revocation and reissuance, or modification; or denial of a permit renewal application.
- C.24. 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.
- C.25. 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.
- **C.26. 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. The Permittee shall submit the sludge information listed in 40 CFR 501.15(a)(2) with the renewal application. The renewal application shall be accompanied by the fee required by NAC 445A.232.
- C.27. Signatures, Certification Required on Application and Reporting Forms: 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."
- **C.27.1.** All applications, reports or other information submitted to the Administrator shall be signed by one of the following:
- C.27.1.1. 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;
- C.27.1.2. A general partner of the partnership;
- C.27.1.3. The proprietor of the sole proprietorship; or
- **C.27.1.4** A principal executive officer, ranking elected official or other authorized employee of the municipal, state or other public facility.
- C.28. Changes to Authorization: If an authorization under Section C.27 (Signatures, Certification Required on Application and Reporting Forms) 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 Section C.27 (Signatures, Certification Required on Application and Reporting Forms) must be submitted to the Administrator prior to or together with any reports, information, or applications to be signed by an authorized representative.
- C.29. Holding Pond Conditions: If any wastewater from the Permittee's facilities is placed in ponds owned or operated by the Permittee, such ponds shall be located and constructed so as to:
- **C.29.1.** Contain with no discharge the once-in-the twenty-five year, 24-hour storm at said location;
- **C.29.2.** The integrity of the pond must withstand the once-in-one-hundred year flood of said location; and
- **C.29.3.** Prevent escape of wastewater by leakage other than as authorized by this permit, unless otherwise approved by the Division.
- C.30. Publicly Owned Treatment Works [40 CFR 122.42(b)]: All POTWs must provide

- adequate notice to the Administrator of the following:
- C.30.1. Any new introduction of pollutants into the Permittee's facilities from an indirect discharger which would be subject to section 301 or 306 of the Act if it were directly discharging those pollutants;
- **C.30.2.** Any substantial change in the volume or character of pollutants being introduced into the Permittee's facilities by a source introducing pollutants into the Permittee's facilities at the time of issuance of the permit.;
- C.30.3. For the purposes of this part, adequate notice shall include information on: (1) the quality and quantity of effluent introduced into the Permittee's facilities and (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the Permittee's facilities.
- C.31. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers
  [40 CFR 122.42(a)]: In addition to the reporting requirements under 40 CFR
  122.41(I), all existing manufacturing, commercial, mining, and silvicultural dischargers
  must notify the Administrator as soon as they know or have reason to believe:
- **C.31.1.** 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":
- C.31.1.1. One hundred micrograms per liter (100 µg/l);
- C.31.1.2. 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;
- **C.31.1.3.** Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
- C.31.1.4. The level established by the Administrator in accordance with 40 CFR 122.44(f).
- C.31.2. 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":
- C.31.2.1. Five hundred micrograms per liter (500 µg/l);
- C.31.2.2. One milligram per liter (1 mg/l) for antimony;
- C.31.2.3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
- C.31.2.4. The level established by the Administrator in accordance with 40 CFR 122.44(f).





Brian Sandoval, Governor Bradley Crowell, Director Greg Lovato, Administrator

# FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: NEVADA ENVIRONMENTAL RESPONSE TRUST

510 SOUTH 4TH STREET HENDERSON, NV - 89015

Permit Number: NV0024228

Location: NEVADA ENVIRONMENTAL RESPONSE TRUST, CLARK

800 EAST ATHENS ROAD, HENDERSON, NV - 89011 LATITUDE: 36.08549302, LONGITUDE: -114.987543 TOWNSHIP: T21S, RANGE: R63E, SECTION: S33

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State		Outfall County	Latitude	Longitude	Receiving Water
I()()1	001 COMBINED INFLUENT FROM SMPS & HLPS AT CWTP	Influent Structure		HENDERSON	NV	89015	CLARK	36.085671	I-114 QXXQXQ	LAS VEGAS WASH
002	002 BACKWASH WASTE PUMP	Internal Outfall		HENDERSON	NV	89015	CLARK	36.084971	-114.988793	LAS VEGAS WASH
003	003 TREATED EFFLUENT	External Outfall		HENDERSON	NV	89015	CLARK	36.086902	-114.986951	LAS VEGAS WASH
004	WASH AMBIENT WATER QUALITY	Receiving Water - Ambient		HENDERSON	NV	89015	CLARK	36.089819	1-114 47435N	LAS VEGAS WASH

#### General:

The Permittee, Nevada Environmental Response Trust (NERT), has applied for a permit to pump & treat the influent, originated from the dewatering activities associated with Southern Nevada Water Authority's (SNWA) construction of Sunrise Mountain Weir & Historic Lateral Weir, for the removal of perchlorate. Nevada Division of Environment Protection's Bureau of Industrial Cleanup (NDEP-BISC) identified a need to mitigate the anticipated accelerated discharge of perchlorate to the Las Vegas Wash (the Wash) from the existing perchlorate plume under and by the Wash from dewatering activities during the above cited construction of Weirs. Further, the current permit request and the proposed treatment plan by NERT is the Permittee's response to the requirement set forth by NDEP's Finding and Order issued on April 12, 2016. This Order, in turn, was a result of an ongoing perchlorate mitigation plan for the general area and currently regulated per the permit #NV0023060.

The SNWA will be pumping and handing over the influent from their dewatering activities from the respective weir construction sites and per project plan, in the vicinity of the Weir sites, and will be routed to two pump stations which in turn shall be received by NERT for treatment. Variable Frequency Drive controlled pumps (6 in total with up to 3,500 gallons per minute (GPM) capacity each) convey the water to a Strong Base Anion Exchange (SBA-IX) system at Central Water Treatment Plant (CWTP) located nearer to the Sunrise Mountain Weir via 24" diameter HDPE piping. At CWTP, suspended solids with specific gravity > 2.0 are captured by hydro-cyclones, followed by multi-media filters to further remove solid particles larger than 10 microns. Next in flow sequence are SBA-IX units to treat and remove perchlorate from the water to below 18 micrograms/I concentration levels. The underflow from the hydro-cyclones and the backwash from the multi-media filters are stored in separate storage tanks and will be re-blended with the treated water adding some of the TSS back, but only up to about a maximum TSS of 120 mg/l at the end of the pipe from the CWTP. When full, solids from the cyclone waste tank will be hauled to a non-hazardous landfill for disposal.

The treatment system, by design, has sufficient spare capacity for each of the key design elements to meet the remediation goal and to ensure uninterrupted operations synchronous with the Weir construction. Per NERT's 100% design documents, City of Henderson's requirement to have a hydrant and a storage tank for fire protection water has been included in the plan for the CWTP. At this time, NDEP's comments and feed back through the 75% design document review have been addressed as expected through the most recent 100% final design specifications, plans, and the treatment process control narrative. The Permittee shall continue to work with the NDEP through the review phase of the final design plan and O&M approval.

Discharge to the Las Vegas Wash from this facility shall commence only after the Permittee obtains the permit, construction following the approval for 100% Design Documents. The Permittee shall also submit a final Operations & Maintenance (O&M) manuals for the Bureau's approval (the schedule of compliance item #1).

# **Discharge Characteristics:**

Flow: <= 9.94 MGD

Per Permittee's reported Water Quality data as sampled from three monitoring wells WMW6.55S,WMW6.15S, and WMW5.58SI from January 2015 & February 2016, in conjunction with the approved Mass-Balance Approach in translating the water quality standards at the end of end of the preapproved Ambient Water Quality Monitoring Point to the end of the pipe concentrations, of Total Dissolved Solids (TDS), Manganese (Mn), and Boron (B) concentrations, are expected to be as follows:

Perchlorate: Per the most recent data, as reported by the Permittee, the influent has Perchlorate in the range of 370 micrograms/liter to 1,900 micrograms/liter. The treatment process is designed to achieve Perchlorate removal to <= 18 micrograms/liter in the effluent.

TDS: Range from 1,800 mg/l to 4,200 mg/l in the treated influent. The process is not expected to change the TDS. Per mass-balance approach this TDS is not expected to cause exceedance in the water quality standard (WQS) of 2400 mg/L at the end of approved reference end of mixing zone/ambient water quality monitoring point.

Mn: <=1.72 mg/l in the effluent & <= 0.200 mg/l at the downstream Ambient Water Quality monitoring point.

B: <=3.71 mg/l in the effluent & <= 0.75 mg/l at the downstream Ambient Water Quality monitoring point.

Nitrate as N: Non Detect (ND) to 8.08 mg/l

Inorganic Nitrogen: Nitrate/Nitrite as N:  $0.19 \text{ mg/l J} - 8.2 \text{ mg/l J}^*$  (\*J- estimated value when the mass spectral data indicates the constituent is present or constituent is above Method Detection Limit, as the case may be, but below the Contract Required Quantification Limit ) with the reported values between the laboratory method detection limit and the laboratory practical quantitation limit. This may further reduce based on the design chemical reactions in the treatment system.

Oil & Grease: WMW6.55S sample result is 6.2mg/l while all the other samples are ND.

TSS: <= 135 mg/l in the effluent from the treatment plant.

Total P is in the range of 0.035 mg/l J - 0.077 mg/l

Ammonia as N is Non Detect (ND)

Iron, Chromium (Total and Hexavalent), Total Kjeldahl Nitrogen (TKN), Sulfide and the rest of the toxic materials of concern as applicable for the designated waters are wither below the level of concentrations of concern or ND.

New constituents in the waste stream: Based on the Ion exchange reactions of the specific SBA-IX system,

the waste stream shall have added chloride ions but in a very low concentration.

# **Receiving Water:**

The treated effluent is received back by the Las Vegas Wash near Pabco Road, and will homogenize with the Wash at about 4000 feet downstream, at the end of the mixing zone.

# **Summary of Changes From Previous Permit:**

This is a new permit.

# **Proposed Effluent Limitations:**

The permit limits and monitoring requirements have been established to meet the requirement to maintain higher water quality (RMHQ) standards and to prevent degradation of the receiving water.

# Discharge Limitations Table for Combined Influent Flow To Cwtp To Be Reported Monthly

		Discharge Lim	itations	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Flow rate	Daily Maximum	<= 6900 Gallons per Minute (gal/min)		Intake	001	Continuous	METER	
рН	Value		M&R Standard Units (SU)	Intake	001	Biweekly	GRAB	
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Biweekly	COMPOS	
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Biweekly	COMPOS	
Perchlorate (ClO4)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Intake	001	Biweekly	COMPOS	
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS	
Ammonia nitrogen, total, (as N) 30 day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS	
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Monthly When Discharging	COMPOS	

# Discharge Limitations Table for Prior To Remix With Treated Effluent (Internal Monitoring Point) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	002	Biweekly	COMPOS
Flow rate	Monthly Total	M&R Gallons per Month (gal/mo)		Internal Monitoring Point	002	Continuous	METER
Perchlorate (ClO4)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	002	Biweekly	COMPOS

# Discharge Limitations Table for Treated Effluent Discharge Pipe (External Outfall) To Be Reported Monthly

Discharge Limitations					Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Effluent Gross	003	Continuous	METER	
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	003	Weekly When Discharging	COMPOS	
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	003	Biweekly	GRAB	
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	003	Biweekly	GRAB	
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS	
Perchlorate (CIO4)	Daily Maximum		<= 18 Micrograms per Liter (ug/L)	Effluent Gross	003	Weekly When Discharging	COMPOS	
Manganese, total recoverable	Daily Maximum		<= 1.72 Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS	
Boron, total (as B)	Daily Maximum		<= 3.71 Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS	
Nitrogen, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS	
Phosphorus, total (as P)	Monthly Average	M&R Pounds per Day (lb/d)		Effluent Gross	003	Biweekly	COMPOS	
Ammonia nitrogen, total, (as N) 30 day <sup>[1]</sup>	Monthly Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Biweekly	COMPOS	
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter	Effluent Gross	003	Biweekly	COMPOS	

# Discharge Limitations Table for Treated Effluent Discharge Pipe (External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	-	Measurement Frequency	Sample Type
			(mg/L)				

# Notes (Discharge Limitations Table):

<sup>1.</sup> Please schedule sampling so as to try to match as closely as possible to the corresponding influent stream as this parameter is intended to monitor the changes in Ammonia through the treatment cycle.

# Discharge Limitations Table for End Of Mixing Zone Lv Wash Ambient Water Quality Monitoring Point (Receiving Water - Ambient) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Single Sample	[1]	<= 2400 Milligrams per Liter (mg/L)	Downstream Monitoring	004	Monthly When Discharging	DISCRT
Manganese, total (as Mn)	Daily Maximum	[2]	<= 200 Micrograms per Liter (ug/L)	Downstream Monitoring	004	Monthly When Discharging	DISCRT
Boron, total (as B)	Daily Maximum	[2]	<= 750 Micrograms per Liter (ug/L)	Downstream Monitoring	004	Monthly When Discharging	DISCRT

# Notes (Discharge Limitations Table):

- 1. Total Dissolved Solids: 95% of S.V. samples <= 2400 mg/l (NAC 445A.2158 RMHQ)
- NAC 445A.1236 Standards for toxic materials applicable to designated waters.

## **Proposed Technology Based Effluent Limitations:**

There are no EPA established TBELs for the Perchlorate. Perchlorate in the effluent is limited to <= 18 micrograms/liter based on the best professional judgment (BPJ) of the permitting authority. BPJ is arrived at by taking into consideration: (a) Remediation projects currently underway to remove the perchlorate from groundwater in the vicinity; (b) This limit is consistent with the expected perchlorate removal efficiency of the specific treatment technology proposed by the permittee.

## **Proposed Water Quality-Based Effluent Limitations:**

WQBELs are set per NAC 445A.1236 & NAC 445A.2158.

pH & TSS levels at the end of the CWTP per NAC445A.1236 & NAC 445A.2158 to be achieved at the Outfall 003.

TDS, Mn, and B limits (per NAC445A.2158 & NAC445A.1236) to be achieved at the approved end of the mixing zone (AWQMP-Outfall 004).

### **Rationale for Permit Requirements:**

Effluent Water Quality limitations are set primarily with reference to NAC445A.1236 & NAC 445A.2158 as applicable at the boundary of the approved end of mixing-zone for the discharges from the facility.

The influent is characterized as chiefly consisting of existing surface waters and a smaller portion of shallow groundwater of the Las Vegas Wash located down gradient to BMI complex. NDEP-BISC estimated reach time for the shallow groundwater portion of the influent is few hours to a maximum of few days. Further the treatment process, by design, does not add to the Ammonia and P. As such the discharge from the facility shall not contribute to any new ammonia and P loading.

Ammonia: Ammonia is ND in the influent representative samples, hence no waste load allocations(WLA)

need to be made at this time. However, there is a slight chance this may change depending on the concentrations of ammonium in the influent and the changes in pH, if any, due to the IX chemical reactions. Collecting ammonia as M&R will help the general water quality improvement goals of NDEP for the Wash.

Total Phosphorous(P): Las Vegas Wash has total phosphorous nonpoint source load allocation of 90 lb/day. From the estimates based on the influent data, the facility might contribute about 3lb/day P when operating at the full treatment capacity or upto a maximum of 6.38 lb/day under the highest observed concentrations in the representative sample. Additionally per the Memo dated June 9th from the Bureau of Water Quality Planning, 'total Phosphorous discharge loads associated with groundwater dewatering activities in the Las Vegas Wash area can be assumed to be part of the base phosphorous load recognized in the 1989 Lake Mead Total Phosphorous TMDL Load Allocation.' M&R of Total P at the end of the pipe at CWTP through the TMDL effective period of March 1 to October 31 in particular and the rest of the year in general is to ensure the P in the effluent is well within the loading allocations.

Permittee's outfall will be within a few hundred feet of existing outfalls (American Pacific Corporation, NERT, Titanium Metals Corporation (two outfalls), and City of Henderson (CoH)) to the Wash. Further the existing NERT site for their BMI Complex ((#NV0023060) has an approved, per NAC 445A.295-302, end of mixing zone point to be monitored, on the basis of tracer-dye study. The Permittee requested to incorporate same location, 5.5 miles upstream of the confluence of the Las Vegas Wash with Lake Mead, as the end of the mixing-zone. The distance between the discharge point to the point of this homogenization point is about 4000 feet. As the discharge volume from this facility is about 4 times compared to the discharges from the NERT site, makes this reference point a conservative approach. Request to be approved as reference end of the mixing zone or downstream Ambient Water Quality Monitoring Point (AWQMP) has been accepted.

TDS,Mn, and B: TDS, Mn, and Boron in the shallow groundwater of the Las Vegas Wash in the general area are the other potential constituents of concern in the effluent per the sampling done using the three monitoring wells (WMW6.55S, WMW6.15S, and WMW5.58SI) and from other available data. The Permittee used the 7Q10 approach for identifying the critical low flows for the Wash and either maximum reported concentrations when available or maximum permit limits as critical concentrations for TDS, Mn, and B. The Permittee's request for end of the pipe limits based on estimates arrived at by the mass-balance approach and data as collected from the existing monitoring well sampling as well as last ten years data from the co-dischargers to the reference stretch of the Wash is statistically significant and appropriate; hence are accepted as requested with an expectation for the Permittee to continue to meet the reference water quality standards per NAC 445A.1236 and RMHQ & water quality standards for beneficial uses per NAC 445A.2158 at the AWQMP. The limits for Mn & B at the outfall 003 are set per the approved mass-balance calculations.

TDS: Per the approved mass-balance calculations, a TDS limit of 15,968 mg/l in the effluent is expected to meet RMHQ limit for TDS <= 2400 mg/l at the AWQMP per NAC 445A.2158. However, the maximum recorded TDS in the reference data is less than 4,500 mg/l. As such M&R for TDS is more appropriate than setting the three times higher 15,968 mg/l limit from the mass-balance as numerical limit.

TSS & pH: TSS & pH at outfall 003 are limited pursuant to NAC 445A.2158.

Perchlorate: Per the Finding & Order Requiring Engineering Evaluation & Analysis dated April 12, 2016, NDEP-BISC identified and established limits for the potential for accelerated discharge of perchlorate from BMI complex, an adjoining Perchlorate Plume site, to the Wash as a result of proposed dewatering activities associated with the Sunrise Mountain & Historic Lateral Weir Construction . As such, the Permittee's Pump & Treat project goal is to fulfill the obligation to contain and treat the potential accelerated discharge of Perchlorate to the Wash, prior to releasing the effluent back into the Wash to below 18 micrograms/l. By this Order, as per the most recent updated version, NERT is also under obligation to be ready to receive and treat the influent from dewatering activities by October 1, 2017. The perchlorate limit <= 18 micrograms in the effluent from this facility reflects the primary project goal.

Total Inorganic Nitrogen: RMHQ of Inorganic Nitrogen per NAC 445A.2158 is 17 mg/l. Due to the very low influent concentration and likely reduction in the concentration per the chemistry to treatment process, the

M&R for Inorganic Nitrogen at the end of the CWTP is sufficient.

Priority Pollutants: The project's maximum scheduled project time is about two years, and current data has no priority pollutants that need immediate attention. As such customary annual M&R is not needed.

Chloride monitoring not needed: IX process related chemical constituent addition to the waste stream: Based on the Ion exchange reactions of the specific SBA-IX system, the waste stream shall have added chloride ions from the resin (as exchanged for the perchlorate ions, 1 to 1 ratio). Based on the influent perchlorate concentrations being removed (perchlorate in the influent maximum 1.9 mg/l), there is no potential for degradation of receiving water as well as not a significant concentration to affect potential for corrosion of plumbing system.

The monitoring frequency: The biweekly monitoring frequency is chosen so as to be able to monitor the effluent through each batch of the IX resin and Membrane filter use. The monitoring frequency of monthly when discharging for the AWQMP is deemed sufficient to identify any unexpected exceedances so they can be addressed promptly.

# **Special Conditions:**

# SA – Special Approvals / Conditions Table

Iten #	Description
1	If and when the construction activities at the Historic Lateral Weir renders the Outfall 004 inaccessible, upon Permittee's written request to the Bureau, the Permittee may be approved to collect samples from an alternative sampling point.

### Flow:

Daily maximum of 6900 GPM (9.94 MGD).

### **Corrective Action Sites:**

The NERT site (BMI Complex) adjoining the general construction project is undergoing corrective action under the oversight of NDEP-BISC. Discharges to the Wash from this NERT site are covered under NPDES permit NV0023060. The Pump & Treat activities covered under the current permit are the direct result of and account for the potential perchlorate discharge from this BMI Complex.

No other BISC and any BCA sites of concern that could be impacted by the dewatering activities associated with the current permit have been identified.

# **Wellhead Protection Program:**

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.

# **Schedule of Compliance:**

# SOC - Schedule of Compliance Table

Item #	Description	Due Date
1	Within 90 days of the permit effective date, the Permittee shall submit and obtain approval for final Operations & Maintanance (O&M) manual, wet stamped by a Nevada licensed professional engineer.	11/10/2017
2	Within 1 year of this permit issuance, all DMRs shall be submitted electronically through the Nevada NetDMR website: <a href="https://netdmr.ndep.nv.gov/netdmr/public/home/htm">https://netdmr.ndep.nv.gov/netdmr/public/home/htm</a>	8/10/2018

#### **Deliverable Schedule:**

DLV- Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	10/28/2017
2	Annual Report	Annually	1/28/2018

#### **Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to surface waters of the State of Nevada 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 until 5:00 P.M. **7/18/2017**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX 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 determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

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

### **Proposed Determination:**

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: Sharada Maligireddy

Date: 6/16/2017
Title: Staff Engineer

#### STATE OF NEVADA



Department of Conservation & Natural Resources

Brian Sandoval, Governor Bradley Crowell, Director Greg Lovato, Administrator

NV0024228

August 11, 2017

Clark County Board of Commissioners 500 S Grand Central Pkwy 6<sup>th</sup> Floor Las Vegas, Nevada 89155

Dear Commissioner:

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 (NDEP) has reviewed the Nevada Environmental Response Trust's NPDES permit application for their Pump & Treat Remediation Project located at East Athens Road, Henderson, Nevada, for a period of five (5) years.

The EPA reviewed the permit draft and the recommendations from EPA were duly addressed prior to the conclusion of the preliminary decisions on proposed action. The Las Vegas Review Journal published a public notice of NDEP's proposed action on June 19, 2017. Copies of the fact sheet and the public notice were sent to your office. The public notice and Fact Sheet were also sent to other interested persons, and governmental agencies on NDEP's mailing list. Draft documents were posted on NDEP's website.

During the 30-day public comment period bureau received comments from the applicant. No other comments were received from general public. After consideration, NDEP is issuing the enclosed NPDES permit (#NV0024228) to the Nevada Environmental Response Trust for a period of five (5) years. This permit action does not constitute a significant change from the earlier tentative determinations.

The new permit will become effective on August 14, 2017 and will expire at midnight on August 13, 2022, provided all permit conditions are followed, and annual fees paid accordingly.

Please contact me at (775) 687-9432 or at <a href="mailto:smallgireddy@ndep.nv.gov">smallgireddy@ndep.nv.gov</a> should you have any questions regarding this permit or the permitting process.

Sincerely,

sharada Maligireddy
Staff 2 Associate Engli

Staff 2, Associate Engineer

Bureau of Water Pollution Control

Enclosures: NV0024228 Permit Copy

# Memo

**To:** Nicholas Brothers, Bureau of Water Pollution Control

From: Randy Pahl, Bureau of Water Quality Planning

cc: Paul Comba, Bureau Chief, BWQP

**Date:** June 9, 2017

Re: Discharges to Las Vegas Wash from Groundwater Dewatering Activities and the

Lake Mead Total Phosphorus TMDL

For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas Wash area can be assumed to be part of the base phosphorus load recognized in the 1989 Lake Mead Total Phosphorus TMDL Load Allocation.