



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

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: WILLIAMS RIDGE TECHNOLOGY PARK
PO BOX 485
GARDNERVILLE, NV - 89410

Permit Number: NS0096006

Location: WILLIAMS RIDGE WASTEWATER TREATMENT FACILITY, DOUGLAS
1198 SAWMILL ROAD, GARDNERVILLE, NV - 89410
LATITUDE: 38.930833, LONGITUDE: -119.706389
TOWNSHIP: 12N, RANGE: 20E, SECTION: 02

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	EFFLUENT DISCHARGE COMPARTMENT	External Outfall		GARDNERVILLE	NV	89410	DOUGLAS	38.930833	-119.706389	GROUNDWATER
INF	LIFT STATION	Intake Structure		GARDNERVILLE	NV	89410	DOUGLAS	38.921806	-119.698472	TREATMENT PLANT
MW1	MONITORING WELL #1	Monitoring Well		GARDNERVILLE	NV	89410	DOUGLAS	38.930694	-119.7075	GROUNDWATER

General:

Williams Ridge Technology Park (Williams Ridge) has applied for renewal of groundwater discharge permit NS0096006, formerly NEV96006. Williams Ridge owns and operates the Williams Ridge Wastewater Treatment Facility (WRWTF).

Williams Ridge is an office and industrial park located approximately 3 miles southeast of downtown Gardnerville, in Douglas County. The below-grade (buried) package wastewater treatment plant, manufactured by Advanced Environmental Systems, is designed to treat no more than 20,000 gallons per day of domestic wastewater. Industrial wastewater flows are not allowed due to potential toxicity with the biological treatment process. The treatment plant's contract operator, SPB Utilities, works with the technology park tenants to exclude any non-domestic flows from the wastewater treatment facility. WRWTF is located approximately one-half mile northwest of the technology park, east of the Allerman Canal.

Influent from the industrial park flows by gravity into a lift station where the flow rate is calculated based on lift station pump run times. From the lift station, wastewater is pumped to the treatment plant. WRWTF operates as a sequencing batch reactor and utilizes a continual flow process consisting of aeration, settling, and decant phases. A methanol drip feed system is used to provide an external carbon source to enhance denitrification of the treated effluent during the settling and decant phases.

Secondary-treated and denitrified effluent is disposed in a leach field which is located due west of the treatment facility. The leach field distribution pipes are buried at a depth of 7 feet. Three piezometers are routinely monitored to ensure that the effluent percolates and does not mound.

Discharge Characteristics:

During the term of the previous permit, which began on October 29, 2007, the following average discharge

concentrations were reported:

1. BOD - 14.5 mg/L. This constituent's maximum permit limit of 45 mg/L was exceeded four times.
2. Total suspended solids - 8.9 mg/L.
3. Total nitrogen as nitrogen - 9.4. This constituent's maximum permit limit of 10 mg/L was exceeded 21 times. These exceedances have been attributed to low influent flows and equipment calibration. There have been no exceedances since October of 2011.
4. pH - 7.66 S.U.

Receiving Water:

Receiving water is groundwater of the State. During the 12 month period from January 2012 through December 2012, groundwater sampled from monitoring well MW #1 showed the following average characteristics:

1. Total nitrogen as nitrogen - 0.4 mg/L.
2. Total dissolved solids - 265 mg/L.
3. Chloride - 4.1 mg/L.
4. Depth to groundwater - 43.7 feet below ground surface.
5. Fecal coliform - 2.2 CFU

Summary of Changes From Previous Permit:

In order to maintain consistency with current NDEP policy, and the monitoring requirements of other treatment facilities that do not discharge to surface water, the following permit changes have been made:

1. The requirement to monitor sewage influent for BOD and total suspended solids has been removed from this permit.
2. The requirement to monitor the amount of nitrate as nitrogen and the elevation of groundwater in MW #1 has been removed from this permit.
3. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV96006 to NS0096006. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The discharge shall be limited and monitored by the Permittee as specified in the following tables:

WWTP Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	30 Day Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Solids, total suspended	30 Day Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Nitrogen, total	30 Day Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
pH, minimum	Monthly Minimum		>= 6 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
pH, maximum	Monthly Maximum		<= 9 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT

WWTP Discharge Limitations Table for Sample Location Inf (Intake Structure) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	< .02 Million Gallons per Day (Mgal/d)		Intake	INF	Continuous	METER
Flow rate	30 Day Maximum	<= .02 Million Gallons per Day (Mgal/d)		Intake	INF	Continuous	METER

Groundwater Monitoring Wells Table for Sample Location Mw1 (Monitoring Well) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	S a m p l e Type
Coliform, fecal, colony forming units	Value		M&R Colony Forming Units per 100ml T (CFU/100mL)	Groundwater	MW1	Quarterly	DISCRT
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	MW1	Quarterly	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Nitrogen, total	Value		< 10 Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT

Rationale for Permit Requirements:

Monitoring is required to ensure that the treatment plant capacity is not exceeded, to assess the level of treatment being provided, and to monitor groundwater quality. The Division's rationale for the proposed effluent limitations is as follows:

1. Flow - Influent flow is measured to ensure that the design capacity of the treatment plant is not exceeded.
2. BOD - The Division's 30-day maximum secondary treatment standard for BOD is 45 mg/L.
3. TSS - The Division's 30-day maximum secondary treatment standard for TSS is 45 mg/L.
4. Total Nitrogen - To protect State groundwater resources, the Division requires the effluent to meet a total nitrogen limitation of 10.0 mg/L.
5. pH - The Division requires secondary-treated effluent to meet a pH limit between 6.0 and 9.0 Standard Units.
6. Groundwater - The Division requires quarterly groundwater monitoring for depth to groundwater, chloride, total nitrogen, total dissolved solids, and fecal coliform to ensure that State groundwater resources are not degraded.

Fecal Coliform:

Although the secondary-treated effluent is not disinfected at this time, a tablet chlorination system is in place if the need to disinfect arises. Fecal coliform levels are currently monitored quarterly in the on-site monitoring well. Fecal coliform levels have averaged 2.2 CFU during the previous term of this permit.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	There shall be no discharge of industrial wastewater to the treatment facility.
2	The Permittee shall monitor and record the depth of effluent in each leach field piezometer on a monthly basis. The results of this monitoring shall be kept in the on-site logbook required by section B.TF.7.

Flow:

This facility is designed to treat 20,000 gallons per day.

Corrective Action Sites:

There is one Bureau of Corrective Actions remediation site (B-000025) located within one mile of this facility. The NDEP case officer for this site does not believe that the renewal of this discharge permit will have a negative impact on the ongoing remediation activities.

Wellhead Protection Program:

This facility is located within a 10-year wellhead protection area. This facility is also within the 6,000 foot buffer zone of one public supply well ranked as highly vulnerable to inorganic compounds. Groundwater monitoring is required.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The updated O&M Manual shall include a section discussing the equipment and methods used to denitrify the effluent prior to disposal. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other qualified person. ^[1]	8/31/2013

Notes (Schedule of Compliance Table):

1. O&M Manuals prepared by Nevada Registered Professional Engineers must be signed and stamped in accordance with NAC 625.610.

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Reports	Quarterly	7/28/2013
2	Annual Reports	Annually	1/28/2014

Procedures for Public Comment:

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal and The Record Courier** 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. **6/17/2013**, 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.650.

Proposed Determination:

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

Prepared by: **Arthur Marr III**

Date: **5/8/2013**

Title: **P.E.**