



# 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:** BENTLY PRESSURIZED BEARING CO  
1711 ORBIT WAY BLDG 2  
MINDEN, NV - 89423

**Permit Number:** NS0093007

**Location:** BENTLY PRESSURIZED BEARING CO., DOUGLAS  
PASTURE, MINDEN, NV - 89423  
LATITUDE: 39.019444, LONGITUDE: -119.770278  
TOWNSHIP: 13N, RANGE: 20E, SECTION: 5

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
03A	NORTHWEST TOWER INFLUENT	Internal Outfall		MINDEN	NV	89423	DOUGLAS	39.019444	-119.770278	GROUNDWATER
03B	NORTHWEST TOWER EFFLUENT	External Outfall		MINDEN	NV	89423	DOUGLAS	39.019444	-119.770278	GROUNDWATER
04A	FAR WEST TOWER INFLUENT	Internal Outfall		MINDEN	NV	89423	DOUGLAS	39.026667	-119.784167	GROUNDWATER
04B	FAR WEST TOWER EFFLUENT	External Outfall		MINDEN	NV	89423	DOUGLAS	39.026667	-119.784167	GROUNDWATER

### General:

Bently Pressurized Bearing Company has applied for renewal of groundwater discharge permit NS0093007, formerly NEV93007. This permit authorizes the discharge of treated effluent from two air stripping towers associated with Bureau of Corrective Actions groundwater remediation site B-000504. The towers are designed to treat contaminated groundwater using packed-bed counter current air stripping technology. Groundwater treatment has been occurring at this site since 1987. The principal contaminants are 1,1-dichloroethylene (1,1-DCE), 1,1,1-trichloroethane (1,1,1-TCA), and trichloroethylene (TCE). Initially, four air stripping towers and thirteen extraction wells were installed in an area located northwest of Minden-Tahoe Airport. Due to changing plume conditions, two of the original towers and ten of the extraction wells have been permanently taken out of service leaving the Northwest Tower (Outfalls 03A/03B) and the Far West Tower (Outfalls 04A/04B) as the only current discharging structures. The Northwest Tower receives influent from extraction well EX-18B, the Far West Tower receives influent from extraction wells EX-22B and EX-29B. Remediation activities at this site are conducted pursuant to the requirements of the Division's Bureau of Corrective Actions.

### Discharge Characteristics:

Results of effluent sampling performed at both air-stripping towers during the term of the previous permit, which began on March 25, 2008, have shown non-detect for the three chemicals of concern. During the same time period, total nitrogen in the discharge has averaged 2.1 mg/L at the Northwest Tower and 0.7 mg/L at the Far West Tower. Phosphorus has been detected at 0.1 mg/L in the discharge from the Far West Tower one time in the fourth quarter of 2011. No phosphorus has been detected in the discharge from the Northwest Tower during the term of the previous permit.

### Receiving Water:

Receiving water is groundwater of the State via percolation. Both air-stripping towers discharge treated

water to a series of irrigation ditches from which the water is either reused, or lost through percolation/evaporation.

**Summary of Changes From Previous Permit:**

1. The requirement to report nitrite + nitrate and total kjeldahl nitrogen has been removed from this Permit. The Permittee will be required to report total nitrogen.
2. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV93007 to NS0093007. 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:

**NS OTHER - Discharge Limitations Table for Sample Location 03A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1,1-Trichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,1,2-Trichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,1-Dichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,1-Dichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,2-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,2-Dichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,2-Dichloropropane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,3-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
1,4-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Benzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 03A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Dichlorobromomethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Bromoform	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Methyl bromide (Bromomethane)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Carbon tetrachloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Chlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Chloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Chloroform	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Methyl chloride (Chloromethane)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
cis-1,3- Dichloropropene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Dibromochloromethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Ethylbenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Methylene chloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 03A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Tetrachloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Toluene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
trans-1,2- Dichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
trans-1,3- Dichloropropene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Trichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Trichlorofluoromethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT
Vinyl chloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	03A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 03B (External Outfall) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Monthly Average	<= 0.20 Million Gallons per Day (Mgal/d)		Effluent Gross	03B	Continuous	METER

**NS OTHER - Discharge Limitations Table for Sample Location 03B (External Outfall) To Be Reported Quarterly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1-Dichloroethylene	Value		< 7 Micrograms per Liter (ug/L)	Effluent Gross	03B	Quarterly	DISCRT
1,1,1- Trichloroethane	Value		< 200 Micrograms per Liter (ug/L)	Effluent Gross	03B	Quarterly	DISCRT
Trichloroethylene	Value		< 5 Micrograms per Liter (ug/L)	Effluent Gross	03B	Quarterly	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 03B (External Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	03B	Annual	DISCRT
Phosphorus, total (as P)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	03B	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 04A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1,1-Trichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,1,2-Trichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,1-Dichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,1-Dichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,2-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,2-Dichloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,2-Dichloropropane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,3-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
1,4-Dichlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Benzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 04A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Dichlorobromomethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Bromoform	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Methyl bromide (Bromomethane)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Carbon tetrachloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Chlorobenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Chloroethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Chloroform	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Methyl chloride (Chloromethane)	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
cis-1,3- Dichloropropene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Dibromochloromethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Ethylbenzene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Methylene chloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 04A (Internal Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Tetrachloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Toluene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
trans-1,2- Dichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
trans-1,3- Dichloropropene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Trichloroethylene	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Trichlorofluoromethane	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT
Vinyl chloride	Value		M&R Micrograms per Liter (ug/L)	Intake from Well	04A	Annual	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 04B (External Outfall) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Monthly Average	<= 0.09 Million Gallons per Day (Mgal/d)		Effluent Gross	04B	Continuous	METER

**NS OTHER - Discharge Limitations Table for Sample Location 04B (External Outfall) To Be Reported Quarterly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1-Dichloroethylene	Value		< 7 Micrograms per Liter (ug/L)	Effluent Gross	04B	Quarterly	DISCRT
1,1,1- Trichloroethane	Value		< 200 Micrograms per Liter (ug/L)	Effluent Gross	04B	Quarterly	DISCRT
Trichloroethylene	Value		< 5 Micrograms per Liter (ug/L)	Effluent Gross	04B	Quarterly	DISCRT

**NS OTHER - Discharge Limitations Table for Sample Location 04B (External Outfall) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	04B	Annual	DISCRT
Phosphorus, total (as P)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	04B	Annual	DISCRT

**Rationale for Permit Requirements:**

Monitoring is required to track the amount of treated water discharged from each air-stripping tower, and to assess the quality of the effluent being discharged.

Volatile Organic Compounds (VOCs): Monitor & Report – VOC concentrations are monitored to allow the Permittee and the Division to track the make-up of the groundwater being treated in the air-stripping towers.

Flow: 0.290 million gallons per day (MGD) - The applicant has requested a 30-day average discharge flow of 0.20 MGD for Outfall 03B (Northwest Tower), and a 30-day average discharge flow of 0.09 MGD for Outfall 04B (Far West Tower).

1, 1-Dichloroethylene (1, 1-DCE): 7 µg/L - This constituent is limited to a concentration consistent with National Primary Drinking Water Regulations.

1, 1, 1-Trichloroethane (1, 1, 1-TCA): 200 µg/L - This constituent is limited to a concentration consistent with National Primary Drinking Water Regulations.

Trichloroethylene (TCE): 5 µg/L - This constituent is limited to a concentration consistent with National Primary Drinking Water Regulations.

Total Nitrogen: Monitor & Report – This constituent is monitored to provide information for the Division’s groundwater protection program.

Total Phosphorus: Monitor & Report – This constituent is monitored to provide information for the Division’s groundwater protection program.

**Special Conditions:**

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items
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**Flow:**

The Permittee has requested a 30-day average flow of up to 0.2 million gallons per day from the Northwest Tower and up to 0.09 million gallons per day from the Far West Tower.

**Corrective Action Sites:**

The remediation site associated with this discharge permit is located approximately 1.4 miles southeast of the Northwest Air Stripping Tower and approximately 2.2 miles southeast of the Far West Air Stripping Tower.

**Wellhead Protection Program:**

This facility is not located within a Drinking Water Protection Area or a Wellhead Protection Area established for any well sources.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Operation and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other Division-approved qualified person. If no updates or revisions are required, the Permittee shall submit a letter by the due date stating that there have been no changes to the previously approved O&M Manual. <sup>[1]</sup>	8/1/2014

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	7/28/2014
2	Annual Report	Annually	1/28/2015

**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. **4/25/2014**, 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 B. Marr III**  
Date: **3/20/2014**  
Title: **P.E.**