



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

## FACTSHEET (pursuant to NAC 445A.236)

**Permittee Name:** CITY OF CALIENTE  
100 DEPOT AVENUE  
CALIENTE, NV - 89008

**Permit Number:** NS0093010

**Location:** CALIENTE WASTEWATER TREATMENT FACILITY, LINCOLN  
1.5 MILES SW OF CALIENTE, CALIENTE, NV - 89008  
LATITUDE: 37.593056, LONGITUDE: -114.538611  
TOWNSHIP: 4S, RANGE: 66E, SECTION: 13

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	INFLUENT FLOW METER	Influent Structure		CALIENTE	NV	89008	LINCOLN	37.593056	-114.537222	FACULTATIVE PONDS
002	EFFLUENT DISCHARGE TO STORAGE RESERVOIR #1	Internal Outfall		CALIENTE	NV	89008	LINCOLN	37.5950	-114.537222	STORAGE RESERVOIR #1
003	IRRIGATION METER	Land Application Site		CALIENTE	NV	89008	LINCOLN	37.5950	-114.537222	REUSE FIELD
004	TAILWATER METER	Intake Structure		CALIENTE	NV	89008	LINCOLN	37.593059	-114.533333	STORAGE RESERVOIR #1
MW1	MONITORING WELL #1	Monitoring Well						37.592778	-114.538611	GROUNDWATER
MW2	MONITORING WELL #2	Monitoring Well						37.592778	-114.537222	GROUNDWATER
MW3	MONITORING WELL #3	Monitoring Well						37.601389	-114.5325	GROUNDWATER

### General:

The City of Caliente owns and operates the Caliente Wastewater Treatment Facility (CWTF), a facultative pond treatment plant designed to receive a maximum flow of 0.34 million gallons per day (MGD). The treatment plant, which is located 1.5 miles southwest of downtown Caliente, includes a control building, an influent splitting box, two 1/2-acre HDPE-lined primary treatment ponds (Cell #1 and #2, each with four aerators), two 1/2-acre HDPE-lined secondary treatment ponds (Cell #3 and #4, each with one aerator), two 10-acre HDPE-lined storage reservoirs, an irrigation pump station, a tailwater pump station, and three monitoring wells (MW #1, MW #2, and MW #3).

The treatment ponds can be operated in series (with flow progressing from cell #1 to cell #4) or in parallel (with flow routed from cell #1 to cell #3, and from cell #2 to cell #4). Treated effluent is discharged to the two storage reservoirs. Stored effluent is discharged, as needed, to an adjacent 55-acre agricultural reuse field for flood irrigation of forage crops. Following irrigation activities, collected tailwater is pumped back to the storage reservoirs.

### Discharge Characteristics:

During the previous 12 month period (January through December 2012), the following average discharge concentrations were reported:

1. 30-day average flow - 0.18 million gallons per day.
2. Daily maximum flow - 0.20 million gallons per day.
3. CBOD - 10 mg/L
4. Total suspended solids - 69 mg/L.
5. Total nitrogen - 6.3 mg/L.
6. pH - 8.40 S.U.

### Receiving Water:

Receiving water is groundwater of the State. During the previous 12 month period (January through December 2012) the following groundwater characteristics were reported:

#### MW #1:

1. Depth to groundwater - 7' 10"
2. Total dissolved solids - 488 mg/L
3. Chloride - 44 mg/L
4. Total nitrogen - 1.3 mg/L

#### MW #2:

1. Depth to groundwater - 1' 8"
2. Total dissolved solids - 2850 mg/L
3. Chloride - 388 mg/L
4. Total nitrogen - 2.4 mg/L

#### MW #3:

1. Depth to groundwater - 1' 3"
2. Total dissolved solids - 2250 mg/L
3. Chloride - 370 mg/L
4. Total nitrogen - 4.4 mg/L

### Summary of Changes From Previous Permit:

In order to maintain consistency with current NDEP policy and the monitoring requirements of similar treatment facilities, the following permit changes have been made:

#### General

1. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV93010 to NS0093010. This change does not reflect a change in the type of permit being issued. NEV and NS permits are for groundwater discharges to the State of Nevada. These are not to be confused with "NV" permits which are reserved for NPDES Permitting.

#### Influent Monitoring

1. The requirement to monitor sewage **influent** for CBOD has been removed from this permit. Effluent monitoring will still be required.
2. The requirement to monitor sewage **influent** for total suspended solids has been removed from this permit. Effluent monitoring will still be required.

#### Groundwater Monitoring

1. The requirement to monitor the amount of nitrate as nitrogen in MW #1, MW #2, and MW #3 has been removed from this permit.
2. The requirement to monitor the elevation of groundwater in MW #1, MW #2, and MW #3 has been

removed from this permit.

#### Effluent Reuse Limitations

1. The requirement to include the Annual Application Volume, Allowable Annual Nitrogen Loading, and actual Annual Nitrogen Loading in the quarterly reports has been removed from this permit. These calculations are still required to be performed in accordance with permit section B.RU. to determine compliance with the Division approved Effluent Management Plan.
2. The Permittee shall submit a document each quarter confirming adherence to the approved Effluent Management Plan as required by the Special Approvals/Conditions Table and permit section B.RU.

#### **Proposed Effluent Limitations:**

The Division proposes the following permit limitations and monitoring requirements:

**WWTP Discharge Limitations Table for Sample Location 001 (Influent 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	<= 0.27 Million Gallons per Day (Mgal/d)		Intake	M01	Continuous	METER
Flow rate	30 Day Maximum	<= 0.34 Million Gallons per Day (Mgal/d)		Intake	M01	Continuous	METER

**WWTP Discharge Limitations Table for Sample Location 002 (Internal Outfall) 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
BOD, carbonaceous, 05 day, 20 C	Value		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Value		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Minimum Value		>= 6 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Maximum Value		<= 9 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT

**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
Nitrogen, total	Value		<= 10 Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	MW1	Quarterly	VISUAL
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Quarterly	DISCRT

**Groundwater Monitoring Wells Table for Sample Location Mw2 (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
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	MW2	Quarterly	VISUAL
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Quarterly	DISCRT
Nitrogen, total	Value		<= 10 Milligrams per Liter (mg/L)	Groundwater	MW2	Quarterly	DISCRT

**Groundwater Monitoring Wells Table for Sample Location Mw3 (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
Depth to water level ft below landsurface	Value	M&R Feet (ft)		Groundwater	MW3	Quarterly	VISUAL
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Quarterly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Quarterly	DISCRT
Nitrogen, total	Value		<= 10 Milligrams per Liter (mg/L)	Groundwater	MW3	Quarterly	DISCRT

**Re-use Discharge Limitations Table for Sample Location 003 (Land Application Site) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Prior to Irrigation	M02	Continuous	METER

**Re-use Discharge Limitations Table for Sample Location 004 (Intake Structure) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow, total	Monthly Total	M&R Million Gallons (Mgal)		Intake	004	Continuous	METER

**Special Conditions:**

SA – Special Approvals / Conditions Table

Item #	Description
1	Each quarter, the Permittee shall submit a document confirming adherence to the approved EMP. This document shall be signed, and shall contain the following certification.  "I certify that, for each month during the previous quarterly reporting period, all operational procedures and calculated application rates outlined in the approved Effluent Management Plan were adhered to."

**Flow:**

CWTF currently receives approximately 0.20 MGD of domestic and commercial wastewater. The Permittee has requested a 30-day average flow of 0.27 MGD, and a daily maximum flow of 0.34 MGD.

**Corrective Action Sites:**

There are no Bureau of Corrective Actions remediation sites within 1 mile of this facility.

**Wellhead Protection Program:**

This facility is not located within a drinking water protection area or an established wellhead protection area.

**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 O&M Manual shall be prepared and stamped by a Nevada Registered Professional Engineer or other qualified person. <sup>[1]</sup>	7/1/2013
2	The Permittee shall submit two (2) copies of an updated Effluent Management Plan (EMP) for review and approval by the Division. The EMP shall be prepared and stamped by a Nevada Registered Professional Engineer or other qualified person. <sup>[2]</sup>	7/1/2013

Notes (Schedule of Compliance Table):

- If no updates or revisions are required, the Permittee shall submit a letter by the above due date stating that there have been no changes to the previously approved O&M Manual.
- If no updates or revisions are required, the Permittee shall submit a letter by the above due date stating that there have been no changes to the previously approved EMP.

**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	Effluent Management Plan adherence statement	Quarterly	7/28/2013
3	Annual Report	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 **Lincoln County Record and 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. **4/22/2013**, 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: **3/19/2013**

Title: **P.E.**