NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET

(pursuant to NAC 445A.236)

Applicant: Western Dairy Specialities, LLC
4 Austin Avenue
Yerington, Nevada 89447

Permit: NEV2007508

Location: Western Dairy Specialities
McCleod Street at US 95A South
Yerington, Lyon County, Nevada 89447

Latitude: 39° 00' 13" N; Longitude: 119° 10' 45" W

Township 13N, Range 25E, Section 10 MDB&M

Flow: Daily maximum: 0.025 Million gallons per day (MGD)
30-day Average: 0.025 MGD

Wellhead Protection: The facility is not located within an established wellhead protection capture zone or a Drinking Water Protection Area.

General: The Applicant has applied for a permit, NEV2007508, to discharge industrial process wastewater, the waste stream from a reverse osmosis (RO) water treatment system, to groundwaters of the State via percolation of irrigation water during the growing season and subsurface infiltration during the winter months from a milk processing plant. The RO system will use drinking water supplied by the City of Yerington as feed water and will generate ultra pure, total dissolved solids less than 2 mg/L, water for use in the milk process. The reject water will be higher in impurities than the feed water but is required to meet drinking water standards. The discharge will be used to irrigate lawn and other facility landscaping, primarily trees. The infiltration discharge will be via emitter lines in 24-inch deep, backfilled trenches. Disposal of other milk processing plant wastewaters is not authorized by this permit.

The milk processing facility has been designed to initially process approximately 450,000 gallons of milk per week and 650,000 gallons per week at full build out. The RO system reportedly has a design capacity that would result in a maximum industrial process wastewater flow of 0.03 MGD. Production at this rate would result in more treated water than will be necessary for milk processing. RO is a separation process that will use pressure to force water through a membrane that retains the impurities on one side and allows the pure water to pass to the other side.

The RO reject water will be pumped to two 10,000-gallon HDPE tanks that will be located in a separate 30-foot by 50-foot building. From the two tanks, the water will be either used for irrigation or disposed in the underground emitter line system. Additional City water is expected to be added to the tanks to supply adequate water for irrigation during the summer irrigation season.

The RO water treatment system manufacturer conducted a test of the proposed system on a sample of Yerington's public water supply with the following results:

Parameter	Concentration (mg/L)	Parameter	Concentration (mg/L)
Ammonia	0.00	Potassium	12.77
Nitrate	7.82	Calcium	92.62
Magnesium	28.75	Chloride	34.64

Barium		0.19	Boron		0.00
Sulfate		164.63	pH		8.02 SU
TDS		972.92	Sodium		99.29
Fluoride	1.06		Strontium	0.92	
Carbonate		3.36	Bicarbonate		424.25
Total Phosphorus		12.77			

Receiving Water Characteristics: The industrial process wastewaters are proposed to be discharged to the shallow groundwater, approximately 10 feet below ground surface. The depth to groundwater varies with irrigation season and flows to the north.

A query of the Division of Water Resources Well Log Database identified one well in Township 13N, Range 25E, Section 10. The water from the 14.38-inch diameter, 328-foot deep irrigation well with a screened interval from 94 feet to 328 feet was assumed not to be representative of the shallow aquifer, therefore, the water from this well was not characterized. The Applicant did not provide an analysis of the receiving water. Since the discharge will be required to meet drinking water standards, receiving water quality data was determined not to be essential.

Compliance History: This is a new permit; there is no compliance history.

Proposed Effluent Discharge Limitations: Measurements and effluent samples taken in compliance with the monitoring requirements specified in Part I.A.1. shall be collected at the following locations:

i. Recording flow meter on the reverse osmosis system discharge line; and

ii. Sample port on the reverse osmosis system discharge line.

The effluent discharge shall be limited and monitored in accordance with the following specifications:

TABLE I.A.1. - EFFLUENT DISCHARGE LIMITATIONS

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30 - Day Average	Daily Maximum	Sample Location	Measurement Frequency	Sample Type
Flow (mgd)	0.025	0.025	a.	Continuous[1]	Flow Meter
Outfall 001 Outfall 002	Monitor & Report				
Total Dissolved Solids, mg/L	---	1,000	b.	Quarterly	Discrete
Total Nitrogen, mg/L	---	10.0	b.	Quarterly	Discrete
Arsenic, mg/L	---	0.01	b.	Quarterly	Discrete
pH, SU	---	6.5 - 8.5	b.	Quarterly	Discrete
Sulfate, mg/L	---	250	b.	Annually[2]	Discrete
Fluoride, mg/L	---	2.0	b.	Annually[2]	Discrete

Notes:
1: With daily meter reading.
2: To be sampled in the fourth quarter and submitted to the Division with the Annual Report.

mgd:	Million gallons per day.	SU:	Standard units.
mg/L:	Milligrams per liter.		

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

-Within five (5) days of the initial discharge, the Permittee shall notify the Division of the start of discharge.

-Within forty-five (45) days of the initial discharge, the Permittee shall submit to the Division for review and approval an Operations and Maintenance Manual for reverse osmosis water treatment system and the beneficial uses of the system reject water.

-Within ten (10) days of initial discharge, and annually thereafter, the Permittee shall submit the cross-connection control documentation required by Part I.A.10. The cross-connection control inspection shall be conducted by an American Water Works Association certified cross-connection control specialist.

Rationale for Permit Requirements: Monitoring requirements for the parameters specified in the Effluent Discharge Limitations - Table I.A.1.have been established:

-to ensure that the design capacity of the reverse osmosis water treatment system reject water disposal system and irrigation water balance are not exceeded; and

-to characterize the wastewater to verify that groundwater will not be degraded by this discharge.

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

Procedures for Public Comment: The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwaters of the State, subject to the conditions contained within the permit is being sent to the **Mason Valley News** and the **Reno Gazette–Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail, time-stamped faxes, e-mails, or hand-delivered items) to the Division is 5:00 PM December 6, 2007.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

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

Prepared by: Bruce Holmgren
November 2007