UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 21, 2008

In Reply Refer To: WTR-7

Greg Hoch
Tahoe Creamery
2244 Meridian Blvd
Minden, Nevada 89423

Re: May 22, 2008 Clean Water Act Inspection

Dear Mr. Hoch:

Enclosed is the July 18, 2008 report for our inspection of the Tahoe Creamery facility at the above address in Minden, Nevada. Please submit to EPA a short response letter to the Summary of Findings in Section 3.0 of this report by **September 15, 2008**. Your letter should include an individual response to each of the numbered findings in Section 3.0. Please send your letter to the attention of Anna Yen at EPA (and include the code "WTR-7" in the address above), with copies to Douglas County and Nevada Division of Environmental Protection.

The main findings are summarized below:

1. This facility is not subject to a federal categorical standard which has specific pollutant limits. The facility is not a significant industrial user.
2. This facility's wastewater discharge is primarily from washing and sanitizing.
3. Douglas County should develop local limits to protect the POTW.

We would like to thank you for your helpfulness and courtesy during the inspection. We remain available to you and Douglas County to assist in any way. If you have any questions, please call Anna Yen at (415) 972-3976 or e-mail her at yen.anna@epa.gov.

Sincerely,
<Original signed by>
Ken Greenberg
Chief, CWA Compliance Office

Enclosure

cc: Catherine Pool, Douglas County Community Development, enclosure by e-mail
Joe Maez, Nevada Division of Environmental Protection, enclosure by e-mail

U.S. Environmental Protection Agency
Region 9
Clean Water Act Compliance Office

NPDES Compliance Evaluation Inspection Report

Industrial User:	Tahoe Creamery
Industrial User Address:	2244 Meridian Blvd, Minden, NV 89423
Inspection Date:	May 22, 2008
EPA Region 9 Inspectors:	Anna Yen, Environmental Engineer Water Division, CWA Compliance Office
Douglas County Inspectors:	Catherine Pool, Civil Engineer Senior Douglas County Community Development
Facility Contact During Inspection:	Greg Hoch, Owner

Report Prepared by Anna Yen on July 18, 2008.

1.0 Scope and Purpose

The State of Nevada ("the State") does not have delegation of the CWA authority regarding pretreatment. The local publicly owned treatment works (POTW), the Douglas County North Valley Wastewater Treatment Plant, does not discharge to surface waters. The receiving water body is groundwater via percolation from reuse irrigation. Therefore, the State's Nevada Division of Environmental Protection (NDEP) has issued a groundwater permit and not an NPDES permit to the treatment plant.

Without an NPDES permit, the POTW does not have pretreatment requirements, and the municipality, Douglas County Community Development ("Douglas County" or "the County"), does not have a pretreatment program.[*] In effect, the discharge of industrial facilities is unregulated at the state and local levels. EPA provides pretreatment regulation of these facilities at the federal level. The purpose of the inspection on May 22, 2008 was to determine the standards and requirements that do apply to these facilities and to ensure compliance with those standards and requirements.

[*] Douglas County has been working on establishing local limits for the past several years.

1.1 General and Process Description

Tahoe Creamery began operations at this facility in 2005. This facility makes ice cream for wholesale distribution to 39 restaurants and currently two scoop shops in the area. It will soon be supplying pint-size containers of ice cream to local stores. At the time of the inspection, the facility produced about 3000 gallons per month. The facility owner said that he expected to increase production to 5000 gallons per month by the end of June.

The facility operates six days a week, from 6:00 am to 3:00 pm. In cold months (January and February) when demand is lower, the facility might operate only 5 days a week.

The facility purchases the pasteurized and homogenized ice cream mix in bags. The ice cream mix is the owner's proprietary recipe which a different company makes for Tahoe Creamery. The facility has two ice cream machines. Two bags of the ice cream mix are poured into an ice cream machine. When the machine is turned on, blades inside the machine spin to add air into the mixture, essentially "fluffing" up the ice cream. The process is complete in about 10 minutes. The ice cream is emptied into 2.5-gallon cardboard boxes. Any add-in ingredients are added by hand, for example, peanut butter, chocolate chips, etc., directly into the box as the ice cream is being transferred from the machine to the box. The 2.5-gallon cartons of finished product are stored in the facility's walk-in freezer, which is kept at -17°F.

The manufacturing area of the facility is just one room, with a refrigerator and sinks on one end, the ice cream machines at the other end, and the walk-in freezer along a wall in between. There is a small sink for washing hands and a larger three-basin sink for washing the "dishes." *See Photo 1 in the Appendix.* Two types of cleaning products are set up on the wall in an automatic dosing dispenser provided by the manufacturer of the cleaning products: a pot & pan cleaner, and a food-grade sanitizer. *See Photo 2 in the Appendix.* The dispenser is programmed to dose the correct ratio of cleaning product to water automatically. The sanitizing process for making ice cream is as follows:

- Dishes, meaning anything used in the ice cream process, e.g., spatulas, trays, were washed and sanitized the night before and air-dried.
- In the morning, these dishes are sanitized again with the same solution, which is a mixture of water and food-grade sanitizer.
- Before the solution is used, it is checked manually with a paper strip that functions like pH paper in that it turns to a certain color. However, this paper measures the ppm of the active ingredient in the sanitizer: dimethyl benzyl ammonium chloride. The sanitizer manufacturer's instructions are that the concentration must be in the range of 200 to 400 ppm. This is confirmed by the resulting color of the paper. Though the dispenser is set up to dose the correct ratio of sanitizer to water, the facility double-checks it with the paper strip.

The sanitizer solution is also used in two other places: (1) the spatulas between batches of different flavors of ice cream, and (2) the ice cream machines. For the spatulas, a bucket of the sanitizer solution is kept next to the ice cream machines during the day for regular use. *See Photo 3 in the Appendix.* For the ice cream machines, the solution is

transferred by bucket and poured into each ice cream machine. Each ice cream machine holds approximately 2.5 gallons. After a few minutes, the solution is then drained out of the machines into the same bucket and emptied into the sink. Both sinks drain into a floor drain in the corner of the room. *See Photo 4 in the Appendix.* The facility owner stated that the floor drains of the entire building lead to a grease trap before discharging to the local sewer system. The existence of the grease trap was not confirmed during the inspection. The facility shares the building with several other tenants including a restaurant.

At the end of each day, the dishes are cleaned as follows:

- One basin of the three-basin sink is filled with a solution of water and pot & pan cleaner. Dishes are washed in the first basin.
- The dishes are rinsed with water in the second basin.
- The third basin is filled with a solution of water and the food-grade sanitizer. The dishes are soaked in this solution, then removed to air-dry so that they will be ready for use the next morning.

The floors are washed at the end of each day with a solution of water and the pot & pan cleaner. Buckets of the solution are poured on the floor, the floor is scrubbed with a brush, and the floor is rinsed off with a high-pressure wash hose. *See Photo 5 in the Appendix.* The dirty water drains down a trench drain that runs the length of most of the room. *See Photo 6 in the Appendix.* The facility owner stated that this drain also leads to the building's grease trap before discharging to the local sewer system.

The ice cream machines are not rinsed out between batches of different flavors of ice cream. The facility simply plans each day to make ice cream from mild to stronger flavors, making only complementary flavors in a single day.

The freezer is defrosted and cleaned out once per year, using the same pot & pan cleaner and a similar procedure used to scrub the floors. Condensate during defrosting of the freezing leads to the corner floor drain. *See Photo 4 in the Appendix.* The refrigerator is cleaned out once per month by simply wiping it down with a rag.

1.2 Facility Wastewater Sources and Other Wastes

Tahoe Creamery generates wastewater from the following sources:

- Dish washing and sanitizing
- Sanitizing of ice cream machines
- Floor cleaning

All wastewater discharges to the floor drains, which lead to the building grease trap before flowing to the local sewer system.

1.3 Facility Process Wastewater Treatment System

No treatment system.

1.4 Wastewater Discharge

This facility discharges to the sewer system only wastewater from cleaning and sanitizing. The floor cleaner is a standard pot and pan cleaner. The sanitizer is food-grade. Its active ingredient is dimethyl benzyl ammonium chloride. Both cleaning products are diluted with water. This facility's discharge of wastewater to the local sewer system would contain these compounds and would likely also contain small amounts of organics as well as oil and grease.

This wastewater discharges to the Douglas County North Valley Wastewater Treatment Plant. The treatment plant is owned and operated by Douglas County. The Douglas County North Valley Wastewater Treatment Plant is operated under a State groundwater permit (No. NEV60025).

2.0 Compliance with Federal Categorical Standards

This facility would be subject to the federal categorical standard for dairy products processing, 40 CFR 405, Subpart H – (Ice Cream, Frozen Desserts, Novelties and Other Dairy Desserts Subcategory); however, this categorical standard does not contain any specific pollutant limits for pretreatment standards. The applicable paragraph, 40 CFR 405.86, simply states that the facility must comply with the pretreatment standards in 40 CFR 403.

2.1 Compliance with Other Federal Pretreatment Requirements

This facility is not a significant industrial user (SIU) because it is not subject to a federal categorical standard which has specific pollutant limits. In addition, it discharges less than 25,000 gallons per day of process wastewater to the POTW. Its wastewater is from washing and sanitizing. Based on observations during the inspection, EPA concludes that the facility has no reasonable potential for adversely affecting the POTW's operation or for violating Pretreatment Standards.

2.2 Compliance with Local Limits

Douglas County has not yet established any local limits. Douglas County should develop local limits to protect the POTW from adverse impacts and to help prevent violations of its State-issued permit.

Though this facility's wastewater discharge is not expected to have an adverse effect on the POTW's operation, the discharge should be sampled, upstream of the building's grease trap, to determine pollutant levels, particularly oil and grease, BOD, and pH. In addition, Douglas County should inspect the condition and effectiveness of the grease trap for the building.

3.0 Summary of Findings

1. This facility is not subject to a federal categorical standard which has specific pollutant limits. However, the facility must comply with the pretreatment standards in 40 CFR 403.
2. This facility is not an SIU.
3. The facility's wastewater discharge is primarily from washing and sanitizing.
4. The facility has two floor drains that lead to the local sewer system.
5. Douglas County should develop local limits to protect the POTW and should determine the level of pollutants in the facility's wastewater discharge.

Appendix: Photos

Photo 1

Three-basin sink with dosing system of cleaning products on wall
Taken by Anna Yen on May 22, 2008

Photo 2

Automatic dosing system of sanitizer and cleaner
Taken by Anna Yen on May 22, 2008

Photo 3

Bucket of sanitizer next to ice cream machines
Taken by Anna Yen on May 22, 2008

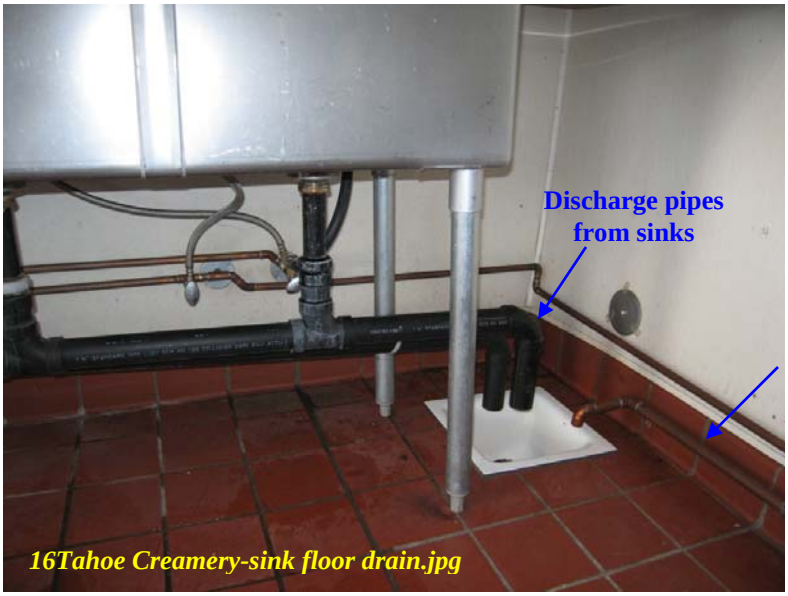

Photo 4

Floor drain in corner of room
Taken by Anna Yen on May 22, 2008

Photo 5

High-pressure wash hose
Taken by Anna Yen on May 22, 2008

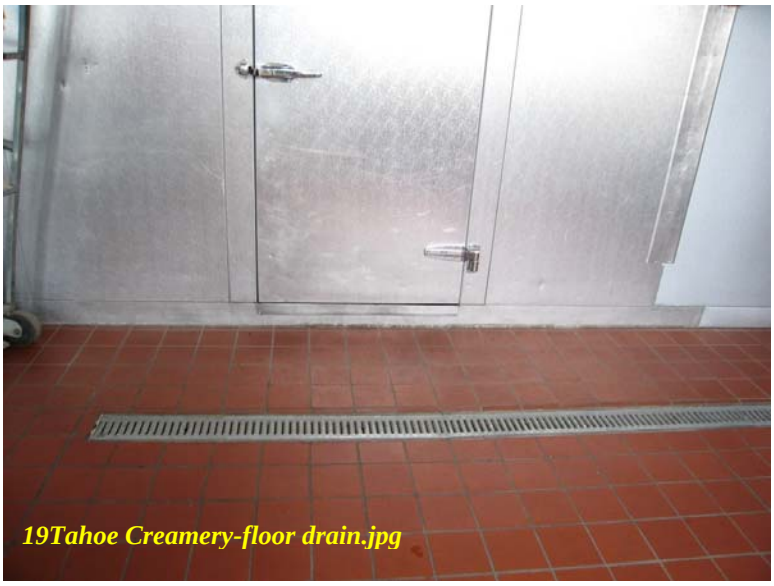

Photo 6

Trench drain in front of freezer
Taken by Anna Yen on May 22, 2008