



State of Ohio Environmental Protection Agency

Northeast District Office

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

January 20, 2010

RE: HEINI'S  
BUNKER HILL CHEESE  
3IH00072\*DD  
HOLMES COUNTY

Mr. Bob Troyer  
Plant Manager  
Heini's Cheese  
6005 CR 77  
Millersburg, Ohio 44654

Dear Mr. Troyer:

On January 13, 2010 this writer along with Megan Talcott, DSW, NEDO inspected your treatment system for the purpose of determining compliance with the above referenced NPDES permit. You accompanied us during the inspection. Since our last inspection in 2007, the facility wastewater generated and treatment has remained relatively unchanged. The following is our understanding of your facility. If any of the below is inaccurate please correct the record.

Non-Cheese production related wastewater

- Food service sink with garbage grinder.
- 3 boilers with boiler blowdown.
- Sanitary wastewater from public restroom and approximately 25 employees.

Cheese production related wastewater

- Emptied milk cans are pre-rinsed with water, cleaned with Na Dichloroisocyanurate Dihydrate (soap), rinsed again with water, and sterilized with steam.
- Milk is stored in a silo. When the silo is cleaned it is cleaned with caustic and chlorine solution, rinsed with a non-phosphate cleaner, and rinsed with water.
- Milk centrifuges are manually cleaned with alkaline chlorinated soap. Cheese vats are similarly cleaned.
- Cheese molds are cleaned with an alkaline chlorinated soap through a COP type washer.
- Milk-receiving lines, milk-receiving day tanks, curd and whey transfer lines and whey tanks are cleaned with an alkaline chlorinated soap by CIP method.
- Pasteurizer cleaned with caustic wash followed by an acid rinse (sulfuric acid).
- Floors are cleaned with an alkaline chlorinated soap.
- Outside surfaces of equipment is cleaned with Potassium Hydroxide/Sodium Hypo chloride (alkaline detergent) as a foam.

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- Water used in production for the purpose of floor and vat rinse between batches of cheese.

#### Miscellaneous Items

- Whey is concentrated to reduce using a reverse osmosis unit to reduce liquid prior to trucking. The "cow water" is sent to the treatment plant.
- Sludge holding capacity is 150,000 gallons.
- Water Management is responsible for sampling and analytical work.

Treatment consists of influent screening, extended aeration in two plants operated in series. Clarified water enters the second aeration plant where a small amount of sludge from the first plant is added. Clarified water from the second plant enters the first polishing pond. The effluent from the second plant is identified as outfall 601 in your NPDES permit. It contains monitoring for Flow, BOD5, pH, and Total Suspended Solids. There are loading limits for BOD5 (1.54 kg/d avg/ 3.8 kg/d max) and TSS (2.31 kg/d avg/ 5.78 kg/d max) and pH limits of 6.0 to 9.0 SU. These limits were based upon compliance with federal guideline limits as outlined in 40 cfr 405 Subpart F (Natural and Processed Cheese).

Attached you will find a copy of NPDES permit 3IH00072\*CD where these limits first appeared in your permit. This permit version also contained a schedule of compliance in Part I, C (4) which stipulated that a continuous flow meter be installed to measure flow at outfall 601. The reason for the flow meter was to accurately calculate flow which is used to determine the loading (kg/d) for BOD5 and TSS on the day outfall 601 is sampled. Please verify whether or not this flow meter was installed. Bryan Schmucker, DSW, NEDO who was your contact at the time believes a flow meter was installed.

Water overflows to the second and final polishing pond. A portion of the water in the second polishing pond is sent back to the first pond for additional treatment. Effluent from the second pond overflows to the meter house. There it enters a concrete stilling basin. An ultrasonic flow meter measures the height of the water before it passes over a V-notched weir. This is the point where samples are taken to determine compliance for outfall 001. Your operator indicated that the ultrasonic flow meter was not in working order. A 5 gallon bucket is currently being used to estimate flow. The flow meter should be repaired and put back into service as soon as possible as your flow measurements are supposed to be reported as 24 hour totals not estimates.

At the time of the inspection the package plants appeared to be in good working order. Flow at outfall 001 was clear but with a slightly green color.

A review of your compliance history for the time period of May 2007 through December 2009 revealed the following violations of your NPDES permit:

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### Numeric Violations

Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
001	pH	1D Conc	9.0	9.3	6/2/2008
001	Total Suspended Solids	1D Conc	60	110.	9/1/2009
001	Total Suspended Solids	30D Conc	45	70.5	9/1/2009
001	Total Suspended Solids	1D Conc	60	96.	8/17/2009
001	Total Suspended Solids	30D Conc	45	68.	8/1/2009

### Frequency Violations

Station	Parameter	Sample Frequency	Expected	Reported	Violation Date
001	Total Suspended Solids	1/2Weeks	1	0	05/15/2007
001	Biochemical Oxygen Dem	1/2Weeks	1	0	05/15/2007
001	Flow Rate	1/2Weeks	1	0	05/15/2007
001	Dissolved Oxygen	1/2Weeks	1	0	05/15/2007

The Total Suspended Solids violations were reportedly the result of excessive algae growth. A blue colorant was used to shade the algae and inhibit growth, but does not appear to have been entirely effective.

If you should have any questions concerning the above feel free to contact this writer at (330) 963-1136.

Sincerely,



Philip P. Rhodes, P.E.  
Environmental Specialist II  
Division of Surface Water

PPR/mt

File: Industrial Permit/Compliance