

DRAFT

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(PURSUANT TO NAC 445A.236)

PERMIT NEV80024 RENEWAL

Permittee Name: ConAgra Foods Incorporated d.b.a. Gilroy Foods
Post Office Box 769
Fernley, Nevada 89408

Permit Number: NEV80024

Facility/Discharge

Location: ConAgra Food Ingredients, Gilroy/Geothermal Plant
Exit 65 (Nightingale Interchange), Interstate Highway 80
Fernley, Churchill County, Nevada 89408

Latitude: 39° 47' 28" N.

Longitude: 119° 01' 15" W.

General Description of Facility and Discharge:

ConAgra Foods Incorporated, d.b.a. Gilroy Foods, started operating in 1978. Gilroy Foods dries and processes onions using natural geothermal resources from May 10 to December 10 of each year. From December 11 to May 9 (non-processing period) of each year the facility has a reduced flow in order to keep the building and its equipment from freezing. The facility was designed and constructed as a dehydration plant to harvest geothermal resources approximately 17 miles east of Fernley, Nevada, at Exit 65 (Nightingale Interchange, Bradys Hot Springs) off of Interstate Highway 80. Surrounding areas are generally undeveloped property, with the exception of Brady Power Partners power plant. The Brady Power Plant, through contractual agreement, supplies Gilroy Foods with water from geothermal wells and diverts the water to the dehydration facility through a dedicated pipeline. Gilroy Foods uses the heat from geothermal water to dehydrate prepared onions. After heat transfer, geothermal water is either conveyed through a cooling tower for use as onion wash water, or diverted into a pond to cool prior to release into an un-named ditch that discharges to an alkali flat. Geothermal water used to wash onions is filtered through a 0.054-inch mesh "hydrosieve" screen and then used for spray irrigation on adjacent property (Outfall 001). Geothermal water discharged to the alkali flat for evaporation/percolation (Outfall 002) is non-contact water, reflecting the unaltered, chemical characteristics of the geothermal resource. Vegetable matter collected in the "hydrosieve" screen is transported with other waste vegetable solids to a landfill on private property, located in an isolated area approximately 5 miles from the facility.

Receiving Water Characteristics:

Gilroy Foods is located on a known geothermal resource area associated with the Bradys Hot Springs. Depth to groundwater in this area is estimated to be approximately 500 feet below grade surface,

approximately 3,700 feet above mean sea level. Regional groundwater flow is reported to be to the southwest. Groundwater quality is brackish and of non-potable quality with a pH of 8.1 (2005 average) and with the following constituent concentrations: chloride (1,310 milligrams per liter (mg/L)) and total dissolved solids (TDS, 2,700 mg/L). Gilroy Foods operates two (2) dehydrators, currently, with an average annual flow in 2005 of 1.485 MGD during the processing months, i.e., May – December, and 0.149 MGD during non-processing months. Both Outfall 001 and 002 are considered evaporation/percolation discharges to groundwater.

Flow:

Gilroy Foods has requested a 30-average flow of 2.128 MGD and a daily maximum of 2.160 MGD for both Outfall 001 and Outfall 002 combined.

Proposed Effluent Limitations:

The discharge samples taken to verify compliance with Effluent Limitations shall be collected at:

Outfall 001: Prior to discharge to the irrigation system; and

Outfall 002: Prior to discharge to the ditch (pond outflow).

The discharge shall be limited and monitored by the Permittee as specified below:

EFFLUENT MONITORING

PARAMETER	OUTFALL 001			
	Discharge Limitation		Measurement Frequency	Sample Type
	30-Average	Daily Maximum		
Flow during processing operation (mgd)	2.128	2.160	Continuous	Flow Meter
Flow during facility shut down (mgd)	Monitor & Report		Weekly	Discrete
CBOD ₅ (mg/L)	2,000		Monthly	Discrete
Total Suspended Solids (TSS, mg/L)	Monitor & Report		Monthly	Discrete
pH (standard units)	6.0 to 9.0		Monthly	Discrete

PARAMETER	OUTFALL 002		
	Discharge Limitation	Measurement Frequency	Sample Type
Flow during processing operation (mgd)	Monitor & Report	Weekly	Discrete (Totalizer)
Flow during facility shut down (mgd)	0.288 (200 gpm)	Weekly	Discrete (totalizer)
CBOD ₅ (mg/L)	30 ¹	Monthly	Discrete
Total Extractable Petroleum Hydrocarbons (TEPH , mg/L)	Monitor & Report	Quarterly	Discrete
Temperature (°C)	Monitor & Report	Monthly	Discrete
pH (standard units)	6.0 to 9.0	Monthly	Discrete

mgd: Million gallons per day
 gpm: Gallons per minute
 mg/L: Milligrams per liter
 °C: Degrees Celsius
 CBOD: 5-day carbonaceous biochemical oxygen demand

¹ If wash water is commingled with geothermal water designated for discharge to the alkali flat, BOD₅ limitations at Outfall 002 are applicable. If wash water is not commingled with geothermal water prior to discharge to the alkali flat, sampling for this parameter is not required.

Rationale for Permit Requirements and Limitations:

- Effluent monitoring is required to for the management of effluent and effluent discharge areas, to detect unauthorized discharges, and to verify that the degradation of environmental resources do not occur.
- **Flow:** Flow rate is limited by the plant capacity of the dehydrating processes and building and equipment protection. Erosion control issues shall be addressed through Best Management Practices (BMPs). Discharge flow during periods of facility shut down is permitted in order to allow the facility to use geothermal water for equipment maintenance during the cold winter months
- **CBOD₅:** CBOD₅ concentrations from washed onions, spray irrigated onto a remote, arid site, with geothermal groundwater at 500 feet below grade surface is not expected to be a condition that would compromise groundwater quality. The limitation of 2,000 mg/L at Outfall 001 has been established because Gilroy Foods has demonstrated that they can maintain a CBOD₅ concentration less than the 2,000 mg/L (average for 2005: 983 mg/L, maximum 1,600 mg/L).

If infrastructure or system capacity constraints require wash water to be commingled with

geothermal water designated for discharge to the alkali flat, CBOD₅ concentrations must be monitored at Outfall 002 and are limited to a 30 mg/L concentration. If wash water is not commingled with geothermal water prior to discharge to the alkali flat, sampling for this parameter is not required.

- **Total Suspended Solids (TSS):** This limitation is applied to Outfall 001 – spray irrigation, and not to Outfall 002. The TSS of geothermal water for discharge to the alkali flat will be unaltered from natural conditions, and the discharge of water containing TSS to an alkali flat is not considered a condition that will degrade the geothermal area.
- **Total Extractable Petroleum Hydrocarbons (TEPH):** This monitoring requirement will remain in effect for the duration of the permit. TEPH have been detected at a concentration of approximately 0.60 mg/L in three sampling periods in the past two years, the most recent being May 2005.
- **Temperature:** Elevated temperatures associated with wash water are anticipated to decline as a function of the washing process and the spray irrigation, and therefore, monitoring temperature at Outfall 001 is not considered necessary. Outfall 002, however, requires a temperature to be routinely monitored and reported to track the degree of cooling experienced by geothermal water prior to surface release and general environmental exposure.
- **pH:** A limitation for pH has been included to confirm that the pH of the geothermal resource remains relatively neutral.

Project Specific Conditions:

- A Best Management Practices (BMP) Plan is required to ensure good housekeeping practices for general operation, and to ensure that appropriate erosion control measures are identified and/or implemented to minimize unnecessary erosion in the discharge ditch and the alkali flat due to the flow rates experienced during operation. The BMP plan may be incorporated as a section of an Operations and Maintenance (O&M) Manual.
- Mortality and morbidity surveys will be conducted every two (2) weeks to identify and quantify wildlife that may sustain non-mortal or mortal injury as a result of discharge. The number and species of impacted wildlife will be reported quarterly on Discharge Monitoring Reports.

Procedures for Public Comment: Notice of the Division's intent to issue (renew) the permit authorizing Gilroy Foods to discharge to groundwaters of the State of Nevada, subject to the terms and conditions contained within the permit, is being sent to the **Fernley Leader** and the **Reno Gazette-Journal** for publication. Anyone wishing to comment on the proposed permit can do so in writing until **May 5, 2006**, which is a period of at least 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 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.

Schedule of Compliance and Special Conditions: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications the Administrator may make in approving the schedule of compliance. The Permittee shall implement and/or execute the following scheduled compliance requirements:

- a. Upon the effective date of this permit, the Permittee shall achieve compliance with the effluent limitations.
- b. Within 45 days of the effective date of the permit (May 22, 2006), the Permittee shall submit an **updated O&M Manual** to the Division for review and approval.
- c. Within 45 days of the effective date of the permit (May 22, 2006), the Permittee shall submit an updated Best Management Practices (BMP) Plan for Division approval. The BMP Plan shall, at a minimum, incorporate “good housekeeping” procedures and measures to abate erosion to the discharge ditch and the alkali flat as a result of discharge flow rates.

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

Prepared by: James T. Hogan
March 2006
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