

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee: Carico Farms Inc.
P. O. Box 18160
Reno, Nevada 89511

Permit: NEV2004504

Location: 7405 South Meridian Road
Lovelock, Pershing County, Nevada 89419
Latitude: 40° 04' 11.21" N
Longitude: 118° 29' 15.43" W
Township 25 N, Range 31 E, Section 3 MDB&M

Corrective Actions Sites:

There are no Bureau of Corrective Actions (BCA) remediation sites located within a one-mile radius of the permitted facility.

Well Head and Drinking Water Supply Protection:

The facility is not within a currently established Wellhead Protection Areas (WHPA), nor within a currently established Drinking Water Protection Areas (DWPAs):

General:

The Permittee proposes to land apply domestic septage and grease trap material provided by Waters Septic Tank Service d.b.a. Waters Vacuum Truck Service. The septage/grease trap material will be applied for beneficial use to six-hundred-forty (640) acres of nutrient deficient agricultural land at the Lovelock Ranch Organic Resource Reuse Project, south of Lovelock, Pershing County, Nevada. The Permittee has been issued a Special Use Permit for the facility by Pershing County. The Permittee also operates a separate portion of the ranch as a beneficial use site for treated grease trap material under Permit NEV2008511.

Waters Vacuum Truck Service is a licensed septage hauler and is required to maintain this license to transport domestic septage and grease trap material to the facility. Should the Permittee seek to apply septage and/or grease trap material provided by another licensed hauler, the Division may require major modifications to the permit.

The site is flood irrigated. The septage applied must be screened to remove solids over ¾-inch in size before the septage can be land applied. The septage must be incorporated into the soil within 6 hours of being land applied. A crop must be planted to uptake the nitrogen that is contained in the septage within one year of application. The application rate of domestic septage will be based on the nitrogen needs of the crop to be planted. To reapply domestic septage and grease trap material to cropland, the crop must be harvested. Grazing does not meet this requirement.

The facility includes four 10,000-gallon holding tanks at the beneficial use site, to store the septage and grease trap material during inclement weather and when the incorporation equipment is not operational. The tanks are equipped with level indicators. The tanks are equipped with one-inch ball valves on the tank inlets to facilitate mixing and sample collection. Prior to entering the tanks, the domestic septage and grease trap material is first screened through a ½-

inch opening rotary screen, meeting the State requirement of screening at ¾ inch or smaller. Oversize material is removed to a covered and lined dumpster for holding until disposal at an approved landfill. The dumpster will be dosed with lime for odor and vector attraction reduction as necessary.

The material is applied at a ratio of 1 part grease trap material to at least 3 parts septage. Material must be incorporated into the soil within six (6) hours of application.

Receiving Water Characteristics:

The groundwater is reported to be at a depth of 10 to 12 feet below ground surface in the Permittee's on-site water level monitoring well. Profile II analytical analysis of the monitor well water sample indicate poor quality, with exceedances of Profile II maximum concentration levels (MCL) for Aluminum, Chloride, Fluoride, Iron, Manganese, Sulfate, and Total Dissolved Solids (TDS).

Groundwater quality monitoring is not required for domestic septage beneficial use sites.

Applied Material Characteristics:

Only domestic septage and grease trap material may be land applied. Domestic septage is defined as either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater.

Flow:

The application rate, in gallons of domestic septage and grease trap material per acre per year, shall be based on the nitrogen needs of the crop to be grown. Permits for the land application of domestic septage generally do not include flow limitations. However, the Permittee has requested an allowed maximum application rate of 100,000 gallons of septage per acre per year. Referring to the following equation

$$AAR = \frac{N}{0.0026}$$

Where:

AAR = Annual application rate in gallons per acre per 365 day period.

N = Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

Therefore, at an application rate of 100,000 gallons per acre per year, in order to meet State and Federal requirements, the Permittee is required to grow and harvest a crop that has an annual nitrogen requirement of **AT LEAST 260 pounds per acre.**

Proposed Septage Use Requirements:

- Septage use must meet all of the requirements of 40CFR section 503, Standards for the Use or Disposal of Sewage Sludge.
- Domestic septage shall not be applied to land if the depth to groundwater is less than 3 feet.
- Domestic septage shall not be applied to land within 100 feet of any public roadway or within 600 feet of any residence.
- Domestic septage shall not be applied to land within 200 feet of monitoring wells.
- Domestic septage shall not be applied within 200 feet of a drinking water well not defined as a public water system.
- Domestic septage shall not be applied within 50 feet of an irrigation well that has been sealed per Nevada Administrative Code (NAC) 534.380.
- Domestic septage shall not be applied within 200 feet of an irrigation well that is not sealed or cannot be documented as sealed per NAC 534.380
- Domestic septage shall not be applied within 1,000 feet of a public water system well.
- Domestic septage shall not be applied within 50 feet of any irrigation or drainage ditch, swale, intermittent stream, creek, river, wetland, lake, or other surface water.
- All land application sites shall be fenced and posted with warning signs stating “DOMESTIC SEPTAGE APPLIED, NO TRESSPASSING”, or similar.
- Equipment to incorporate the domestic septage into the soil shall be on the site and in operating condition before septage is land applied.
- Land applied material shall be incorporated into the soil within 6 hours of placement on the soil. No significant amount (less than 5% of the surface area) of septage shall be visible on the surface 6 hours after the application of septage.
- Food crops shall not be grown on land that has had domestic septage applied within the past five (5) years.
- The domestic septage shall be land applied at a uniform rate by means of a spray bar, splash plate, or similar method approved by the Division.
- The domestic septage shall be screened through a $\frac{3}{4}$ - inch or finer screen to remove solids from the septage prior to land application. Solid material removed from the septage shall be disposed in an approved landfill.

- Grease trap material shall be mixed with domestic septage at a rate of one part grease trap material to at least three parts domestic septage, by volume, before it is land applied.
- All tanks used for storage at the beneficial use site shall be permanently labeled to identify the contents of the tank, the Permittee, the Permittee's phone number, and the Permittee's address.
- All tanks storing domestic septage shall be inspected daily for leakage. Documentation of the inspections shall be maintained in a bound logbook at the facility. Leaking tanks shall be immediately evacuated and not returned to service until all leaks have been repaired.

Schedule of Compliance:

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 that 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 reuse limitations.
- b. The Permittee shall submit reports illustrating compliance or noncompliance with specified compliance dates within 14 days of any respective, scheduled compliance date.
- c. **By MMM DD, 2009** (within sixty (60) days of the permit effective date), the Permittee shall submit any updates to the Operations and Maintenance (O&M) Manual covering the use of the domestic septage to the Division for review and approval.
- d. At least forty-eight (48) hours prior to transporting any storage tank to the beneficial use site, the Permittee shall notify the Division.
- e. At least forty-eight (48) hours prior to removing any storage tank from the beneficial use site, the Permittee shall notify the Division.

Rationale for Permit Requirements:

Permit requirements are necessary to protect the public health and prevent the land application site from becoming a public nuisance or a source of groundwater pollution.

Proposed Determination:

The Division has made the tentative determination to issue the proposed permit for a five (5) year period.

Procedures for Public Comment:

The notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being

sent to the **Lovelock Review/Miner** 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 30 days following the date of the public notice. In order to be considered, written comments must be hand-delivered, sent via mail (postmarked), emailed or faxed no later than **5:00 P.M. on December 21, 2009**. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the Permittee, 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 determined to be appropriate. All public hearings must be conducted to accordance with NAC 445.150.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445.274.

Prepared by: Janine O. Hartley, P.E.
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