

**DRAFT**

**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

**FACT SHEET**

(pursuant to NAC 445A.236)

**Applicant:** Orient Farms, LLC  
P. O. Box 40  
Empire, Nevada 89405

**Permit:** NEV2000517

**Location:** County Road 34  
25 Miles North of Gerlach, Nevada  
Gerlach, Washoe County, Nevada 89412

**Location of Intersection, County Road 34 and Orient Farms Road:**

Latitude: 40° 55' 30" N

Longitude: 119° 17' 30" W

**Location of Biosolids Composting Facilities and Application Fields:**

Township 35N, Range 23E, Sections 1, 2, 6, 7, 11-13, 18, 23-26

Township 35N, Range 24E, Sections 6-8, 18, 19, 30

Township 36N, Range 23E, Section 36

**Well Head and Drinking Water Supply Protection:**

The Orient Farms Facility is located outside the 6000' Drinking Water Protection Areas (DWPAs) of any public water supply well. The facility is outside any established Well Head Protection Zone.

**General:**

The Applicant proposes to:

- Land apply dewatered domestic septage and grease trap material from Inviro-Tec, Steve's Septic Service, and/or Westwood Sanitation to a nutrient deficient site on Orient Farms, north of Gerlach, NV (site 001),
- Compost to exceptional quality compost dewatered domestic septage and grease trap material from Inviro-Tec on Orient Farms north of Gerlach, NV (site 002); and
- Compost to Class B compost dewatered domestic septage and grease trap material from Inviro-Tec on Orient Farms north of Gerlach, NV (site 002).

The septage/grease trap material and Class B composted biosolids will be applied for beneficial use to approximately 8,000 acres of nutrient deficient irrigated agricultural land at the Orient Farms location. The Facility is located approximately 25 miles north of Gerlach, Nevada, on County Road 34. The facility straddles the Washoe County/Pershing County boundary, and is immediately south of the Humboldt County boundary. Composting is performed on a 13 acre parcel on the extreme east side of the parcel, within Pershing County. The site is flood irrigated.

Under this permit, Orient Farms is allowed to accept septage and grease trap material from only those licensed septage haulers listed above. 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 septage applied must be screened by the septage hauler to remove solids over ½-inch in size before the septage is delivered on-site. The directly land applied septage and the Class B composted dewatered 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 dewatered domestic septage and Class B composted dewatered septage will be based on the nitrogen needs of the crop to be planted. Crops must be planted and harvested to uptake applied nitrogen before additional dewatered/composted domestic septage may be applied. Grazing does not meet this requirement. The material will be applied at a ratio of 1 part grease trap material to at least 3 parts septage.

**Receiving Water Characteristics:**

The groundwater is reported to be at a depth of approximately 200 feet below ground surface, and is considered good quality. Application of dewatered septage and composted dewatered septage at agronomic rates does not constitute a threat to groundwater. Groundwater quality monitoring is not required for domestic septage beneficial use sites.

**Applied Material Characteristics:**

Only dewatered and/or composted domestic septage and grease trap material may be land applied under this permit. 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.

**Application Rate:**

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. Refer to the following equation for bulk domestic septage

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

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.

If the domestic septage has been dewatered to 20% solids, the equation used to determine the adjusted annual application rate of dewatered septage (AAR') shall be:

$$AAR' = \frac{N}{3.13}$$

Where:       AAR' = Annual application rate in wet tons 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.

**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 secured 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.
- 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 1/2-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.

**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. Within sixty (60) days of the permit effective date, the Permittee shall submit an updated 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 **Reno Gazette Journal** and the **Lovelock Review/Miner** 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 June 1, 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 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 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.  
                          April, 2009