

**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET**

(pursuant to NAC 445A.236)

Permittee Name: Bill Artamenko
Yaweh Farms
1491 Lower Honcut Road
Oroville, California 95966

Permit Number: NEV2006508

Facility Location: 1.2 miles west of I-80 at Exit 93
Tomi (Ragged Top) Road, I-80 Exit 93
Toulon, Pershing County, Nevada 89419

Latitude: 40° 04' 00.0" N
Longitude: 118° 40' 32.6" W
Township 25N, Range 29E, Section 1

General: The Permittee proposes to construct and operate a dewatering facility to process a maximum 30-day average of 50,000 gallons per day of domestic septage supplied by Inviro-Tec of Lincoln, California at Yaweh Farms. Yaweh Farms is located 1.5 miles west of Toulon, along Tomi (Ragged Top) Road, Pershing County, Nevada. The proposed location of the facility is 900 feet south of Tomi Road. The Permittee owns the entire Section 1 of Township 25 N, Range 29 E.

Yaweh Farms is owned by Mr. Bill Artamenko and currently holds two Nevada Division of Environmental Protection (NDEP) groundwater discharge permits, NEV2006508 and NEV2004522. NEV2006508 is Yaweh Farm's second discharge permit and sanctions an on-site septage dewatering system producing biosolids for worm food. Prior to discharge, Yaweh Farms must construct an onsite facility for the treatment and storage of septage effluent. The Permittee is still pursuing a plan for construction of these facilities, but has yet to submit and receive approval for the construction plans.

The domestic septage will be dewatered in screen boxes by gravity using a polymer to aid in solids separation. Although the final disposition of the dewatered septage is not restricted by this permit, a maximum of 11,000 wet metric tons per year of dewatered septage may be transferred to the Yaweh Farms Vermiculture Facility, NEV2004522. Dewatered septage may also be transferred to other permitted facilities. The majority of the process filtrate is expected to be transferred to the vermiculture facility for use as make-up water. Excess filtrate may be evaporated or transferred to other permitted facilities.

Domestic septage tankers are proposed to be offloaded into screen boxes with a half-inch bar screen for debris removal. The screen box will be in a roll-off configuration with a hinged bar screen. When filled, the unit will be trucked to a landfill for debris disposal. Screened septage will be pumped to one of two 20,000-gallon steel holding tanks for storage. The tanker off-loading area, screen box, and holding tanks will be located on the smaller of two concrete pads with continuous curbing. Screened septage will then be pumped from the holding tanks to one of two dewatering boxes/filtration chambers. Liquid polymer will be metered into the flow to enhance separation. A lime solution will be injected into the flow downstream of the polymer addition; both injections will occur prior to discharge to one of two steel filtration chambers. As the septage enters a filtration chamber, the liquid portion will flow through a screen with the solids retained. The filtrate will drain from the filtration chambers to the 20,000-gallon steel filtrate storage tank via 3-inch hoses. When sufficient domestic septage has been processed to fill the filtration chamber, the dewatered domestic septage will be dumped onto the concrete pad. The filtration chambers will be pressure washed with all liquids and solids from the cleaning operation draining to a concrete sump and pumped to the storage tanks for subsequent dewatering.

The dewatered domestic septage will be placed in a covered roll-off box and allowed to drain to the concrete sump. This material is proposed to be stored in a roll-off box at a pH of 12 standard units (SU) for 72 hours with an elevated temperature greater than 52°C for 12 hours. The dewatered domestic septage will then be dumped on the concrete pad and loaded into trucks for transport to other permitted facilities. The building for the polymer and lime preparation, the two filtration chambers, the dumping/loading areas, the sump, and the roll-off box storage areas will be located on the larger concrete pad, which also has continuous curbing.

The liquid portion of the domestic septage will be pumped to one of the two 60-mil high-density polyethylene (HDPE) lined treatment ponds with a total capacity of one million gallons. The Permittee has elected to construct single-lined ponds with up and down gradient monitoring wells rather than double-lined ponds with a leak detection and recovery system. The filtrate will be continuously circulated from the pond to the aeration channel to reduce the potential for odors and the pH will be adjusted to approximately 8.5 Standard Units. This water will be used to clean the filtration chambers, the roll-off boxes, and the concrete slab and be transferred to other permitted facilities.

Receiving Water Characteristics: The groundwater at the facility is reported to be at a depth in excess of 10 feet below ground surface. There are no wells within a one-mile radius of the facility. The nearest well, 25/30-8c1, is approximately 1.8 miles east of the facility. This well was drilled to 210 feet in 1936 and had a static water level of 14.7 feet in 1946. The next closest well to the proposed site, 26/30-27a1, is located approximately 5 miles to the north-northeast. This 8-inch well was drilled in the alluvial deposits to a depth of 34 feet with a reported static water level of 7 feet in 1954.

A 1965 Water Resource Appraisal of Lovelock Valley reported that the Well 26/30-27a1 water had a specific conductance of 5,150 micromhos with alkali and salinity hazards defined as high and an elevated boron concentration. The Appraisal determined that this water was unsuitable for irrigation. Other more distant Lower Lovelock wells in the fine grained lacustrine strata also have sodium chloride type water with 1965 TDS concentrations in the 1,600 mg/L to 1,800 mg/L range.

The Permittee has not constructed the **two** groundwater monitoring wells that are required by the permit.

Flow: The Permittee is authorized to transport a maximum 30-day average of 50,000 gallons per day of domestic septage to the dewatering facility. The dewatered septage, a maximum of 11,000 wet metric tons per year, is expected to have a solids content of 40-50% and will be transferred to permitted facilities. The filtrate may also be transferred to permitted facilities.

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

Well Head and Drinking Water Supply Protection: The facility is not located within the 6000' Drinking Water Protection Area of any public water supply well. The facility is not within an established Wellhead Protection Area.

Proposed Effluent Limitations: During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to:

- Dewater domestic septage provided by Inviro-Tec of Lincoln, CA;
- Aerate the filtrate in lined ponds for odor control; and
- Transfer the dewatered domestic septage and dewatering filtrate to other permitted facilities.

Samples taken in compliance with the monitoring requirements specified below shall be collected at the following locations:

- a. Domestic septage delivered to the facility;
- b. Screened domestic septage stored in the two holding tanks;
- c. Dewatered domestic septage stored at the facility;
- d. Dewatering filtrate stored in the two ponds;
- e. Dewatered domestic septage transferred to NEV2004522;
- f. Dewatered domestic septage transferred to other permitted facilities, include mass and recipient permit number;
- g. Dewatering filtrate transferred to NEV2004522; and
- h. Dewatering filtrate transferred to other permitted facilities, include volume and recipient permit number.

The dewatered domestic septage shall be limited and monitored by the Permittee as specified below:

TABLE 1: SEPTAGE MONITORING

CHARACTERISTICS	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS		
		Sample Location	Measurement Frequency	Sample Type
Domestic Septage Received (gpd), 30-day average	50,000	a.	Daily	Calculate
Screened Domestic Septage (gallons)	40,000	b.	Quarterly	Calculate
Dewatered Domestic Septage (wet metric tons)	150 (cubic yards)	c.	Quarterly	Calculate
	11,000 ¹	e.		
	Monitor and Report	f.		
Dewatering Filtrate (gallons)	1,000,000	d.	Quarterly	Calculate
	Monitor and Report	g.		
	Monitor and Report	h.		
Total Nitrogen as N (mg/L)	Monitor and Report	d.	Quarterly	Discrete
Total Dissolved Solids (mg/L)	Monitor and Report	d.	Quarterly	Discrete
pH (SU)	Monitor and Report	d.	Quarterly	Discrete
Chlorides (mg/L)	Monitor and Report	d.	Quarterly	Discrete
Fecal Coliform (MPN/100 ml)	Monitor and Report	d.	Quarterly	Discrete

1. Annual Total; report daily dewatered septage delivered to the facility on a quarterly basis.

gpd: gallons per day
 SU: standard units

mg/L: milligrams per liter
 MPN/100 ml: most probable number per 100 milliliters

The Permittee shall monitor all new and existing groundwater monitoring wells for the following parameters:

TABLE 2: GROUNDWATER MONITORING

PARAMETER	LIMITATION	FREQUENCY	SAMPLE TYPE
Depth to Groundwater (feet)	Monitor & Report	Quarterly	Field Measurement
Groundwater Elevation (feet)	Monitor & Report	Quarterly	Calculate
pH (SU)	Monitor & Report	Quarterly	Discrete

PARAMETER	LIMITATION	FREQUENCY	SAMPLE TYPE
Chlorides (mg/L)	Monitor & Report	Quarterly	Discrete
Total Nitrogen as N (mg/L)	10	Quarterly	Discrete
Total Dissolved Solids (mg/L)	Monitor & Report	Quarterly	Discrete

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance, including in said implementation and compliance, any additions or modifications which 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 permit conditions and limitations.
- b. At least forty-five (45) days prior to the proposed construction start date, the Permittee shall submit facility design drawings and specifications for review and approval. The drawings and specifications shall be stamped and signed by a Professional Engineer licensed in Nevada.
- c. Within ten (10) days of the start of construction, the Permittee shall notify the Division of the start of construction.
- d. At least thirty (30) days prior to the transport of any domestic septage to the facility, the Permittee shall submit an Operations and Maintenance Manual for the dewatering process for review and approval by the Division.
- e. Within ten (10) days of the first delivery of domestic septage to the facility, the Permittee shall notify the Division of the initial delivery of septage.
- f. Within twenty-one (21) days of the completion of construction, the Permittee shall submit to the Division a stamped statement from a Nevada licensed Professional Engineer that the facility was constructed in accordance with the approved design.

Rationale for Permit Requirements: Once designed, and when constructed, operated, and maintained properly, filtrate in the lined ponds either evaporates or is used for other Division approved activities, with no discharge to groundwater. Permit requirements are necessary to determine when design capacity is being approached, to protect waters of the State from degradation, and to prevent the dewatering facility from becoming a public nuisance. Permit conditions and monitoring will also prevent any spills or leaks from degrading the groundwater of the State.

The Division's rationale for the proposed monitoring conditions is as follows:

Domestic Septage Received (Flow): The volume of domestic septage delivered to the facility will be monitored and limited to ensure that the design capacity of the dewatering system is not exceeded.

Screened Domestic Septage: The volume of screened domestic septage stored on-site will be monitored to ensure that the storage capacity of the two holding tanks is not exceeded.

Dewatered Domestic Septage: To avoid having large amounts of dewatered septage accumulate at the facility, a limit of 150 cubic yards of this material stored at the facility at any time is established by the permit. The vermiculture facility, NEV2004522, is permitted to receive up to 11,000 wet tons of dewatered septage per year.

Dewatering Filtrate: The dewatering filtrate stored in the two ponds will be limited to the storage capacity of the pond system, 1,000,000 gallons.

Total Nitrogen as Nitrogen, Total Dissolved Solids, pH and Chlorides: The concentration of these parameters in the dewatering filtrate ponds will be monitored to determine the potential environmental impact of a release of this fluid.

Fecal Coliform: The fecal coliform density in the stored filtrate will be monitored due to the potential for human contact, especially during transfer to other permitted facilities. Transfer to facilities other than NEV2004522 may require the establishment of permit limitations.

Groundwater Monitoring: Groundwater monitoring is required to verify that groundwater of the State is not degraded by the permitted activity.

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 renew a permit authorizing the facility to discharge to the groundwaters 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 also 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. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **5:00 PM, June 18, 2012.**

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.

Prepared by: Jason Ferrin
April 2012

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