

PERMIT by RULE TECHNICAL REVIEW

Company: Stanford Disposal, a Division of Stanford Vacuum Services, Inc., Victoria, Texas

Registration Number: X **Record Number:** 75837 **Account ID Number:** VC-0130-S

Contact Name: Mr. Al Hays, P.E., Ph.D., Environmental Engineer and Agent

Contact Name: Mr. Fred Allen Stanford, Owner/Operator (361) 572-8070

Telephone Number: (830) 639-4420 for Mr. Hays **Fax Number:** (830) 639-4052

Description/Name of Facilities and Processes Claimed: This registration request is concerning the proposed operation of a domestic sludge de-watering facility located at 5524 Farm to Market Road 236, near the City of Victoria (located 3.5-miles outside of the Victoria Extra-Territorial Jurisdiction), in Victoria County, Texas. The construction of this facility will start on January 1, 2001 and daily operations will begin June 1, 2001. Daily operations at this facility will involve the de-watering of septic tank sludges, waste sludges from sewage plants, and grit-trap and grease-trap wastes. In addition, there is a future possibility of accepting "portable" toilet wastes. ***There will be no industrial wastes accepted into this facility's operations. In addition, under no circumstances will there ever be any on-site disposal (using land surface treatment) of wastes at this physical site.***

The sludges and wastes are collected and transported into this facility by vacuum tank truck and pumped immediately into three atmospheric vented (no controls) storage tanks. While in the storage tanks, the sludges and wastes are periodically aerated to prevent odors (the air blower is working an interval schedule of being on 15 minutes and off 30 minutes). The blower air will reduce BOD of the effluent parts per million (ppm) from approximately 800 to 1,000 down to 200 to 600 ppm or lower depending on the original sludges in storage. The de-watering is accomplished in a 7,500 gallon "filter box," where the "free" water is released from the wastes through the chemical action of special polymers being added. Up to four (4) filter boxes are anticipated to be installed as needs dictate (four filter boxes operating on one concrete pad with adequate sumps to contain the wastewater produced). The free water escapes from the filter box through vertical hollow side-panels which contain a synthetic filter material. The free water falls onto a concrete pad and flows by gravity into a concrete sump. It is estimated that this facility's eventual 4 filter boxes could produce up to 60,000 gallons of filtrate water per day. The filtrate water is periodically pumped from the sump into three atmospheric vented (no controls) storage tanks. Tank trucks transport the filtrate wastewater to a nearby sewage plant for final disposal (filtrate wastewater has no greater than 200 to 800 ppm BOD). The sludge solids left behind are turned into cake after draining sufficiently. The following day the "dry" sludge cake is tank truck transported in the same filter box to a Class I Landfill for permanent disposal. The dry sludge cake is simply dropped into the landfill when the hydraulic truck is tilted.

This facility is located on a 94-acre ranch site which is used entirely for cattle grazing, except for one small rent house which is located near the front of the property, located off Farm to Market Road 236. Only about 1-2 acres of space will be required out of the total site area. The site vegetation consists of native grasses, small wild shrubs, and mesquite tree. There are no drainage problems associated with this physical site. The soil structure consists of successive alternating layers of sand and clay. The topography slopes gently towards the rear of the property at the average slope of 0.50 percent. There is one high place on this site at the middle to rear of the property which is used for this facility. There are no tanks, ponds, or streams flowing through this property. There property is not in the 100-year flood plain. **No treated effluent will ever be used for irrigation of grass crops. No sludges or wastewater will ever be released into the physical environment. If any spill occurs outside any diked areas, it will be cleaned up immediately and disposed of off-site.**

It is Stanford Disposal, a Division of Stanford Vacuum Services, Inc., stand that this process is being utilized throughout the United States without causing any environmental concern, including concerns for air and water pollution, noise, and disease. As the local population continues to increase there is an ever increasing demand for sewage sludge removal and disposal. It has ben stated that the TNRCC has permitted (under past standard exemption concurrence) numerous other de-watering filter box project. Mr. Al Hays, Consulting Environmental Engineer to Stanford Disposal, states that there will be neither volatile organic compounds nor noticeable odors from this project. He believes this is correct in that: 1) other existing facilities are operating successfully without known VOC emissions and that domestic sludges are not known for being direct sources of VOCs (i.e. neither gasoline or other refinery products nor industrial wastes are not found in these domestic sludges). Generally, the wastes are non-hazardous in nature. A solid waste processing permit application requires that TCLP tests be run and submitted on all sources of raw sludges; 2) this project will operate similarly to other existing facilities which have had no citizen's complaints. These other de-watering filter box facilities are operating without special air pollution abatement equipment.

This site consists of a three (3) atmospheric vented (non-controlled) incoming raw-sludge waste storage tanks outfitted with a first blower system, one 7,500 gallon filter box (possible four in the future), a special polymer storage tank and mixing system, and three (3) filtrate wastewater atmospheric vented (non-controlled) storage tanks

outfitted with a second blower system. The first and second blower system basically keeps the sludge fresh (or aerobic) and provides air space mixing.

Stanford Disposal, a division of Stanford Vacuum Services, Inc.
Domestic Sludge De-Watering Facility - Victoria County
Page -3- Technical Review

Stanford Disposal, a division of Stanford Vacuum Services, Inc. proposes our concurrence, under Section 106.532, for the overall operation of this site.

Sources/Emissions/Control Summary: The routine emission estimates associated with the overall operation of this facility are estimated to be well within permit by rule limitations.

Emission Estimates are Based Upon: None Given

Emission Reductions Due to the NSR: NONE

PSD or Nonattainment Netting Required: N/A **Submitted:** N/A

NSPS: N/A _____ **NESHAPS:** N/A

Site Review Required: *Not Required* _____ **Performed by/date:** N/A

Public Notice Required: NO _____ **Approved:** N/A

Meets all general and specific criteria: YES (X-2 E-Mailed to Houston and Austin 2-21-01)

Reviewed By: Robert Walts _____ **Team Leader:**

Date: _____ February 21, 2001 _ **Date:**