

**Las Gallinas Valley Sanitary District**  
**Scope of Work for Sludge Removal and Disposal**

**Background**

Digested sludge from the District's anaerobic digesters and solids from the Marin Municipal Water District recycled water plant are pumped throughout the year to three double-lined sludge storage ponds located on District property immediately east of effluent storage pond #1. The sludge storage ponds have a total surface area of approximately two acres and a total storage capacity of approximately 3.2 million gallons. In the ponds, the solids thicken by gravity. Supernatant from the ponds overflows by gravity to wet well and is pumped back to the treatment plant's primary clarifier. During the summer, approximately one third of the contents are removed from the ponds and disposed of on the adjacent nine-acre sludge disposal field. Refer to Figure 1 for location of these facilities.

Use of the District's on-site sludge disposal field is regulated under the federal code of regulations, 40 CFR Part 503 subpart C (Surface Disposal). The District's treatment and disposal processes meet requirements for "Class B" biosolids.

**Solids Removal and Placement**

The Contractor shall remove a minimum of 1,000,000 gallons of sludge pond solids, starting from the pond containing the oldest material, and continuing to the next pond in sequence (Pond A → Pond B → Pond C) until the specified volume has been removed. For 2016, removal shall begin in Pond A.

Prior to removal, and during the removal process, the contents of the pond shall be mixed by pumped recirculation, propeller mixer or by other suitable means, so as to produce a more-or-less uniform solids consistency for disposal. Material shall be pumped from the ponds into a transport/injection truck, or directly to the injection equipment through portable pipelines.

Prior to solids placement, the contractor shall prepare the disposal field by mowing and disking to maximize the field's ability to accept the material. The solids shall be injected 6" – 8" below the ground surface using equipment specifically designed for subsurface injection, and applied at a rate that does not result in ponding. Experience has shown that a properly prepared field can accept approximately 125,000 gallons/day of wet solids if distributed over the entire area, and if followed by approximately one week of non-application to provide time for for absorption into the soil and drying. The contractor shall therefore plan to have equipment on-site for approximately two months.

The roadways around the effluent storage ponds adjacent to the sludge storage ponds are used by the public. The Contractor shall take appropriate measures to ensure public safety and to minimize generation of dust from Contractor activities.

**Monitoring**

The contractor shall collect a representative composite sample of the biosolids for each day that removal/disposal occurs. The composite sample shall consist of a 4-6 grab samples collected over the

course of the day, combined into a single sample. An accurate composite is necessary to properly characterize the total solids content of the material, since biosolids quantities must be reported to regulatory agencies on a dry weight basis. The composite sample be labelled by date and pond number and delivered to the District laboratory for analysis. District staff will be responsible for collecting composite samples for analysis of metals, to verify compliance with 40 CFR Part 503 pollutant concentration limits. If requested, the contractor shall coordinate with laboratory staff for the collection of those samples. The contractor shall measure the total volume of sludge transferred each day using a flowmeter specifically designed for measurement of sludge flow, or by other method approved in advance by the District. Records of daily volumes shall be provided to the District staff.

Figure 1. LGVSD Treatment Plant Map



**NOTICE INVITING SEALED BIDS  
FOR PROVIDING SERVICES FOR BIOSOLIDS REMOVAL AND  
SURFACE INJECTION (1,000,000 GALLONS MINIMUM) DURING  
FISCAL YEAR 2017-2018**

NOTICE IS HEREBY GIVEN that for and on behalf of the District Board, the General Manager of the Las Gallinas Valley Sanitary District, Marin County, California, will receive sealed bids up to, but not later than 10:45 AM on May 19, 2017, for providing services for biosolids removal and surface injection at the District's dedicated biosolids disposal site during the twelve month period July 1, 2017 to June 30, 2018. Bids must conform to specifications that can be obtained from the office of the Las Gallinas Valley Sanitary District, 300 Smith Ranch Road, San Rafael, CA 94903 (415) 472-1734.

Said sealed bids shall be delivered to the General Manager of the District on or before said date and time, at the District office, 300 Smith Ranch Road, San Rafael, CA 94903. Any bids received after the scheduled closing time for receipt of bids shall be returned unopened. Bids will be publicly opened and examined on said day and hour by the General Manager or his authorized representative and will be referred to and considered by the Las Gallinas Valley Sanitary District Board of Directors at their meeting to be held at 4:30 PM on May 25, 2017 at its regular meeting place.

Bids shall be submitted on the form provided by the District and attached hereto and shall be enclosed in a sealed envelope bearing the name of the bidder and marked "BID FOR PROVIDING SERVICES FOR BIOSOLIDS REMOVAL AND SURFACE INJECTION (1,000,000 gallons minimum)". If submitting sealed bids for more than one service contract, EACH service contract must be enclosed in a separately sealed and appropriately labeled envelope.

The District Board may, at its discretion, reject any and all bids or waive any irregularities or informalities in any bid or in the bidding.

DATED: April 27, 2017

Las Gallinas Valley Sanitary District

By \_\_\_\_\_  
Mark R. Williams  
General Manager

**LAS GALLINAS VALLEY SANITARY DISTRICT**

**B I D F O R M**

**FOR PROVIDING SERVICES FOR BIOSOLIDS REMOVAL AND SURFACE INJECTION (1,000,000 GALLONS MINIMUM) DURING FISCAL YEAR 2017-2018**

The undersigned, as bidder, declares that he/she has examined thoroughly the attached SPECIFICATIONS AND NOTICE INVITING SEALED BIDS, and that he/she hereby agrees, if this bid is accepted, to provide services for biosolids removal and surface injection to the Las Gallinas Valley Sanitary District in accordance with said Specifications and Notice for the following unit prices.

AGREEMENT PERIOD	DESCRIPTION	UNIT (GALLON)	PRICE PER GALLON	TOTAL
July 1, 2017 to June 30, 2018	Flow Monitored Biosolids Removal and Sub-Surface Injection for One Full Volume Lagoon. Initial Lagoon Depth Will be Recorded and a Daily Composite Sample Will be Drawn On Days of Removal/Application Process. Application of Biosolids Must be Uniformly Distributed to Dedicated Land Disposal Site.	1,000,000 gals		\$
	Additional Biosolids Removal and Injection if Required by District	500,000 gals		\$
<b>Total</b>				<b>\$</b>

Bidder agrees to abide by The Las Gallinas Valley Sanitary District’s Biosolids requirements and all California State and Federal laws, regulations, and restrictions related to Biosolids handling and disposal.

Bidder encloses a Payment Schedule (Exhibit C), a copy of its insurance certificate in accordance with District Insurance Requirements (Exhibit D), identification of the Service Provider Team (Exhibit E) and a signed acknowledgment of the Contractor/Service Provider Safe Work Requirements (Exhibit F) with bid.

DATED: \_\_\_\_\_

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_

Print Name and Title

NAME AND ADDRESS OF ORGANIZATION:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

**Accepted:**

Per Board Action on: \_\_\_\_\_

By:

\_\_\_\_\_  
Mark R. Williams, General Manager

\_\_\_\_\_  
Date