

Las Gallinas Valley Sanitary District

Scope of Work for Reclamation Pasture Irrigation Operations & Maintenance and Related Activity

FY 2024-25

I. Scope of Work for Reclamation Area and Pasture Irrigation Operations & Maintenance

Background

The district operates the Reclamation Area in accordance with the San Francisco Bay Regional Water Quality Control Board Order No. 92-064. The Reclamation Area is located on 385 acres of diked baylands located to the northeast of the treatment plant (see attached Figure 1 and Figure 2). The Area includes a 20-acre Wildlife Pond (a.k.a. Marsh Pond), two 20-acre Effluent Storage Ponds, 200 acres of irrigated pasture, 3 ½ miles of public trails, and the District's solar photovoltaic array.

In addition to its normal wastewater treatment process, the district also operates a Recycled Water Facility, producing recycled water for delivery to the North Marin Water District (NMWD) and Marin Municipal Water District (MMWD). During the period from June 1st-October 31 (referred to as the "Reclamation Season"), all treated wastewater not utilized by the NMWD and MMWD recycled water systems is sent to the Reclamation Area Effluent Storage Ponds. Although water quality requirements of Order R2-1992-064 are less stringent, the treated wastewater effluent delivered to the Storage Ponds typically meets requirements for "disinfected secondary 23" as defined by California Code of Regulations, Title 22, Section 60301.220, and is suitable for animal feed production. Water from the Storage Ponds is applied to the pastures starting as early after June 1 as conditions permit.

The estimated quantity of water requiring disposal on the pasture is approximately 100 million gallons. The actual volume could vary from 70 – 120 million gallons depending on weather conditions. The district's Reclamation Pump Station is located north of the Sludge Storage Pond #1 as indicated in Figure 1. The Reclamation Pump Station has three pumps available for pasture irrigation, although typically only a single pump is used at a given time. The pump station is operated manually by the Contractor. An underground pipeline runs from the pump station to the pasture irrigation system.

Operation and Maintenance – Base Requirements

The Contractor shall be responsible for operation of the Reclamation Pump Station, and for preparation, operation and maintenance of the pasture and its irrigation system, and of related facilities as detailed below, in a manner that maximizes disposal volume. Operations and maintenance activities shall, at a minimum, include the following. Estimated hours are indicated for information purposes only. Actual time requirements may be different.

- Irrigation of approximately 100 million gallons of stored water from District's three effluent ponds.
- Chisel ripping pastures 1 through 5 to 12" depth prior to commencement of irrigation.

- Disking Pastures 1 through 5 (Four Times)
- Mowing levee roads around irrigation pastures and storage ponds, as needed, up to 3 times.
- High weed mowing in fields 1 through 5 prior to tillage of fields.
- O&M of the pivot irrigation systems and of the available fixed irrigation equipment in areas of pasture not covered by pivots. Operation shall comply with the restrictions of Order R2-1992-064.
- Maintenance of all above ground piping and appurtenances
- Collection of one set of four soil samples for analysis by outside laboratory. Cost of analysis to be paid by the District.
- Bulldoze and disk cattails, removed from main runoff ditch (approximately 1500 feet of length) in prior year, in NW portion of pivot fields #4/#5. (See Yellow Triangle on Site Overview Fig. 2).
- Clear vegetation from ditch in main field drainage canal from St. Vincent Pump Station to Tee intersection of LGVSD and St. Vincent's lands. Approximately 2400 ft. (See Red Line on LGVSD Reclamation Area Pastures Fig. 2)
- Clear vegetation from small ditch running through irrigation pivot fields #1, #2, & #3 from main drainage canal from St. Vincent Pump Station to Tee intersection of LGVSD and St. Vincent's lands. Approximately 4200 ft. (See Red Line on LGVSD Reclamation Area Pastures Fig. 2)
- Clear vegetation from ditch from main canal near St. Vincent Pump Station East of Field #6 and extends through the Northern portion of the Dedicated Land Disposal (DLD) Site, ending at the LGVSD Solar Fields. Approximately 1150 ft. (See Red Line on LGVSD Reclamation Area Pastures Fig. 2)

The Contractor may use the pasture for production of an animal feed crop , however, maximizing effluent disposal shall have priority over crop production.

The District shall be responsible for maintenance of the Reclamation Pump Station and of underground piping and other underground assets.

Some roadways around the adjacent irrigation pasture fields are used by the public. The Contractor shall take appropriate measures to ensure public safety and to minimize generation of dust from Contractor activities.

Figure 1. LGVSD Treatment Plant Map



Figure 2. LGVSD Reclamation Area Pastures



Attachment A

Reclaimed Water Use Restrictions (from Order R2-1992-064)

1. Reclaimed water shall not be applied to the disposal area during the wet weather season (November 15 through April 15) unless the following conditions are satisfied:

Use of reclaimed water for application to the land may be allowed during the period from November 15 through April 15, providing that there has been little or no rainfall during the weeks prior to discharge, and providing that the Executive Officer has approved the management plan as required in Provision 10.

Reclaimed water may be applied during the remainder of the year, except when the ground is saturated or during periods when rainfall or runoff from adjacent land can occur.

2. No waste shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray or resurfacing after percolation.
3. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.
4. Use of reclaimed water on areas not shown on the map which is attached to this order (Attachment A) is prohibited without written authorization from the Executive Officer.
5. Waste shall not be applied within 25 feet of any ephemeral stream or within 100 feet of any other stream, pond (excluding wastewater storage pond), well, or housing.
6. Persons shall be effectively excluded from the areas where reclaimed water is applied.
7. The use of reclaimed water under provisions of this order shall be limited to irrigation of fodder, fiber, and seed crops or discharge to the wildlife pond.
8. The discharge of water other than domestic wastewater is prohibited.
9. The treatment, storage, disposal or waste shall not create a nuisance, as defined in Section 13050(m) of the California Water Code.