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BY Joselyn Rodriguez

**City of Modesto
Community and Economic
Development Department/Planning Division**
1010 Tenth Street, Third Floor
Modesto, CA 95354

NOTICE OF EXEMPTION

Environmental Assessment No. EA/UTL **2021-01**

Project Title: Jennings Road Wastewater Treatment Pond Solids Removal and Land Application

Project Location: The project is located in Stanislaus County, within the City of Modesto, at the Jennings Road Wastewater Treatment Plant (7001 Jennings Road)

Project Description: Maintenance of wastewater settling / treatment ponds to remove accumulated solids, dry them, and land apply the dried solids to the Modesto Ranch (see attached detailed description)


Public Agency Approving Project: City of Modesto

Applicant: City of Modesto Utilities Department

Section of CEQA Under Which Project is Exempt: CEQA Guidelines Section 15301(b)

Reasons Why Projects are Exempt: The project is exempt from CEQA because its scope of work consists of maintenance of existing publicly-owned sewerage treatment facilities.

Contact Person: Brad Wall, MPA 209.577.5273


Signature

Date: January 11, 2021

Title: Principal Planner

Date removed from posting 03/15/2021

TREATMENT POND SOLIDS REMOVAL AND LAND APPLICATION

As detailed in the ROWD Update, the City currently anaerobically digests and dries the primary solids at the Sutter Plant and trucks the digested and dried, Class B biosolids to the Modesto Ranch for land application. This practice generates about 2,500 dry tons of biosolids that are land applied each year.

In addition to the primary solids, solids generated by the Fixed Film Reactors are discharged to the treatment ponds, where they are treated and stored. The City also directs Waste Activated Sludge (WAS) from the Biological Nutrient Removal (BNR)/Tertiary facilities to the facultative ponds for treatment and storage. In the next year, the City plans to initiate a removal program for the solids that have accumulated in the treatment ponds. Although the removal of biosolids from the treatment ponds is described in Section 2.6.1 of the ROWD Update, the ROWD Update does not describe the proposed operations in detail, nor does it explicitly state that the City plans to land apply the removed solids. The proposed operations are thus detailed below, and the City requests that these practices be identified and allowed through the new land discharge permit.

The City will remove the solids either through dredging of the ponds or through dewatering the ponds and excavation of the solids. Depending on how dry the solids are when removed from the ponds, additional drying may be needed prior to land application. The additional processing (i.e. drying) of the dredged biosolids would occur on the area adjacent to the ponds that was previously used for the City's compost operations. The general site vicinity and outline of the approximately 24-acre portion of the former compost area would be used for this purpose are shown on Figure 1. The biosolids processing area will be surrounded by a containment berm that is at least 3 feet high to prevent runoff from the area. The City will also control potential runoff of biosolids from the processing area by keeping the area free of biosolids between October 31 and March 31.

It is currently anticipated that between 2,500 and 8,500 dry tons of biosolids will be removed from the ponds each year and land applied. The actual amount of biosolids removed and land applied each year will depend on the available land application area's nitrogen loading capacity, the time required to process (dry) the biosolids before they can be land applied, and the availability of City funds to cover the contractor's cost for removal.

The City's goal is to remove the solids as a first step prior to implementing the proposed Can Seg Process Water treatment upgrades described in 2.6.3 of the ROWD Update. The City currently estimates that the total mass of biosolids that require removal is between 75,000 and 150,000 dry tons. Thus, the removal and land application of accumulated solids will take several years. Ultimately, it is expected that ongoing removal of solids will be needed to control solids accumulation until the WAS is redirected to planned solids treatment facilities, as described in Section 2.6.2 and/or 2.6.5 of the ROWD Update. It must be noted, however, that these new processes would also produce Class B biosolids that would be applied to the Modesto Ranch. Thus, the proposed land application practices are expected to continue into the foreseeable future.

The City will monitor groundwater downgradient of the proposed biosolids processing area. Currently there are four monitoring wells located near the previous compost facility (MW-7, MW-9, MW-10, and MW 11D). As discussed later in this TM and further detailed in Jennings Plant Monitoring Well Network Recommendations TM included as Attachment A, the City plans to destroy three of these monitoring wells because they are not considered representative compliance monitoring wells for the Jennings Plant. However, MW-9 will be replaced and moved to a location that better represents the groundwater downgradient of the proposed biosolids processing area. The proposed monitoring well location is shown on Figure 1. The need for additional monitoring wells associated with the processing area will be evaluated as part of the Phase 2 monitoring well improvements discussed in the later in this TM (and detailed in Attachment A).

There is also a potable water well located near the planned biosolids processing area. The “potable water system well” is identified as Item 37 on Figure 13 of the ROWD Update. This well, along with additional non-potable wells, were also discussed further in the *Title 22 Engineering Report* (Title 22 Report) that was prepared concurrent with the ROWD Update. Figure 4-2 from the Title 22 Report, which shows the location of all wells located within ¼ mile of the ranch boundary is included as Attachment B to this TM².

As documented in the Title 22 Report, the construction details of the potable well are as follows:

- 6-inch diameter PVC casing from 0 to 130 feet below ground surface
- Annular seal of bentonite (clay) from 50 to 130 feet below ground surface

The potable well is currently used to provide water for non-potable uses, such as plant water and dust control. However, the City is considering making treatment improvements to this well to allow for its use as a potable water supply. The proposed biosolids processing area will be at least 150 feet of the potable water well. In addition, the vertical seal of the well, as described above, is considered to be adequate to protect the well for use as a potable water supply. The replacement monitoring well MW-9 will also allow for routine monitoring groundwater to identify any potential water quality impacts downgradient of the biosolids processing area prior to those becoming a concern for the potable water well.

Finally, it is expected that the new land discharge permit will provide the flexibility for meeting the federal Class B requirements for pathogen control and vector attraction by using any of the options allowed under USEPA guidelines. Nevertheless, the City currently plans to meet these federal requirements as follows:

- Monitor the dried biosolids for fecal coliform prior to land application to meet the “Class B” pathogen requirements (Alternative 1), with the expectation that the digested and dried biosolids will readily comply with the pathogen requirements.

² The Jennings Plant site contains several non-potable water supply wells (including irrigation wells), shown on Figure 4-2, based on City and State records. Construction details of these wells are not known, and exact locations for some of the wells identified from State records have not been definitively determined. However, it is understood that none of these wells are currently used for potable water.

- Incorporate dried biosolids into the applied soil within 6 hours of application (Option 10).

MONITORING WELL NETWORK IMPROVEMENTS

As required by the City's current Monitoring and Reporting Program, the City collects quarterly groundwater data from 21 monitoring wells located on and around the Modesto Ranch. Section 6.9 of the ROWD Update describes potential changes to the City's monitoring well network to provide a broader characterization of background groundwater quality and spatial delineation of elevated concentrations of certain pollutants of concern that have been detected. It is anticipated that the City will need to work with Regional Board staff after the permit is adopted to further develop and implement these potential changes.

Since preparing the ROWD Update, the City has also identified changes needed to the monitoring well network to improve operational efficiency, reduce redundancy, and eliminate wells that do not provide representative background or compliance groundwater monitoring data. These changes are further detailed in the Jennings Plant Monitoring Well Network Recommendations included as Attachment A.

As described in the attached TM, the City is proposing to implement the monitoring well network improvements in two phases. Phase 1 will involve modifying the monitoring well network to address the operational improvements discussed in the attached TM. Phase 2 will involve constructing new background and/or compliance wells to improve the City's ability to assess potential impacts associated with the Jennings Plant and Modesto Ranch operations. It is also expected that some of the wells destroyed under the Phase 1 program will be replaced with new wells identified to be needed under the Phase 2 efforts.


The City plans for the Phase 1 efforts to proceed as quickly as possible, and requests that the new land discharge permit only require monitoring from the nine wells that are identified in the attached TM as remaining following the completion of the Phase 1 monitoring well improvements project, as follows:

- | | |
|---------|----------|
| 1. MW-2 | 6. MW-12 |
| 2. MW-3 | 7. MW-13 |
| 3. MW-5 | 8. MW-14 |
| 4. MW-6 | 9. MW15 |
| 5. MW-9 | |

It is expected that the Phase 2 improvements will occur under a permit-driven schedule for assessing groundwater compliance and completing the required antidegradation assessment. Thus, for the Phase 2 improvements, it is expected that the permit will include an allowance for approval of monitoring well network changes during the permit term.



Symbology

 Proposed Processing Area (21 Acres)

 Relocated Monitoring Well

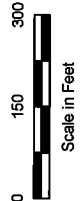
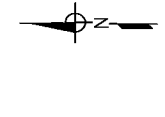


Figure 1
Site Map
Solids Processing Area
City of Modesto
Wastewater Treatment Plant