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SYNAGRO

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Central Valley Regional Water Quality Control Board
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Subject: Response to tentative Waste Discharge Requirements for the Silva Ranch Biosolids Land Application, Sacramento County

Synagreo West, LLC and Mr. Gary Silva Sr. (Silva) have the comments provided below on the tentative Waste Discharge Requirements (WDR) for Silva Ranch biosolids land application program. We respectfully request an in-person meeting with Central Valley Regional Water Quality Control Board staff to discuss our comments.

1. Synagro and Silva are greatly concerned about tentative WDR Finding No. 20 (page 4) and the Draft Monitoring and Reporting Program requirement (page 6) for "Surface Water Monitoring", and do not agree there should be a requirement for annual surface water monitoring for these reasons:

    I. There is no evidence—after almost 25 years of operations—of an effect on surface water quality in the three named creeks within Silva Ranch. The Tentative WDR makes no such finding. Existing discharge prohibitions and required buffer distances, prescribed in the existing (and proposed) WDR and Sacramento County Use Permit, have been clearly protective of surface water quality. The existing program has been protective. Including additional requirements does not improve any physical protections for the creeks in question, but rather adds resource requirements and costs, and creates unreasonable potential legal liability for Synagro and Silva.

    II. Uncontrolled runoff to drainage courses is prohibited according to A. Discharge Prohibitions No. 6 (page 13) and Discharge Specifications No. 18 (page 16). Furthermore, protective buffer distances are prescribed in No. 19 (page 17). Tentative WDR Section D. Land Application Area Specifications (page 18) requires restrictions on placement of biosolids: No. 6 (page 19) creates a significant buffer distance, in addition to the required at least 100-foot set back from surface waters, by implementing a restriction on application of biosolids within the 100-year flood plain. No. 7 reinforces that discharge from land application areas is prohibited, except as provided by Discharge Prohibition A. 6, as noted above. No. 8 requires that "All storm water runoff from the land application areas shall be captured and recycled for irrigation or allowed to percolate within the designated land application areas." Our understanding of these

requirements is that no uncontrolled runoff is allowed under Tentative WDR permit terms. There is no "controlled" runoff to the three named creeks.

III. "Discharge" which the Regional Board has defined to mean both biosolids and any runoff from biosolids is prohibited according to B. Discharge Specification No. 2 (page 14). Furthermore, B. Discharge Specification No. 5 (page 15) requires that all "application areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

IV. When proposed surface water monitoring is required to be performed as per the Tentative Monitoring and Reporting program, there are limited biosolids applications which occur to fields within Silva Ranch, and these fields are relatively distant from any of the three creeks. Furthermore, to attempt to try and discern an effect from biosolids application in any of the three creeks, which are distant from application areas when biosolids application would occur, and which is co-managed along with controlled and uncontrolled livestock grazing, both within Silva Ranch, and in nearby farms, is complicated and confounded in many respects. Causation will be impossible to determine, and puts results in unreasonable potential legal liability for Synagro and Silva.

V. As cited in Finding 47 (page 9) there are 22 existing storm water runoff retention ponds. Routine storm water monitoring is required, and Synagro has performed monitoring during the entire operating history of Silva Ranch. There is no evidence based on monitoring results that collected water from these ponds have caused or contributed to an impact on water quality. In fact, these 22 ponds supplement the conservative buffer distances which are required around water bodies or drainage courses and assist in protection of water quality; and they assist in overall water conservation by reducing irrigation demand.

VI. The Monitoring and Reporting Program proposes six monitoring locations to be sampled once annually during winter months when water is present in the three creeks, at upstream and downstream points from where biosolids are land applied. The logistics of such an effort, required property access, and implementation issues with this effort are significant. We estimate this effort will add at least $100,000 dollars of cost annually or more, with no clear benefit to water quality protection as described above given the existing discharge prohibitions and protective measures in place at Silva Ranch.

2. Synagro and Silva are concerned with tentative WDR Finding No. 9 (page 2), No. 12 (page 14), No. 14 (page 16), No. 1 (page 19) and inconsistency with respect to how solids and moisture content measurements of biosolids are reported and used throughout the draft WDR. Additionally:

   I. There is language from the STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER NO. 2004 - 0012 - DWQ relative to moisture content, the definition, use, and procedure for calculation. This is not percent solids as required by the Federal EPA 40 CFR Part 503 Rule, as moisture content relies on those measurements for calculation of it.

   II. Synagro and Silva request Discharge Prohibition A.12. page 14 be deleted from the tentative WDR. as this is not consistent with previously issued orders, and comes from STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER NO. 2004 - 0012 – DWQ to which Silva Ranch Class B Biosolids application is exempted for the reasons as stated in finding No. 23 (page 5). There is no documented

scientific basis for this prohibition and the tentative WDR already contains Discharge Specification B. 14. Page 16 with respect to the application of biosolids with a high solids content.

3. Synagro and Silva are unclear about tentative WDR Finding No. 16 (page 16) regarding "[submittal of] a *Conditional Biosolids Application Site Report*" for approval by the Executive Officer prior to biosolids application on ground surfaces greater than 10 percent, for these reasons:
    I. Soil depth sufficient to support the crop is unclear or undefined
    II. There is no evidence of this operation causing or exacerbating soil erosion; nor is it clear or defined to what degree the land application and incorporation of class B biosolids will cause exacerbated soil erosion. Additionally there are a number of studies and research which demonstrate the benefits of biosolids land application on soil conditions including but not limited to, controlling and limiting soil erosion by promoting microbial activity and providing stable organic materials to repair and rebuild top soil.
4. With respect to findings No. 21 (page 4), No. 22 (page 5), and prohibitions No. 16 (page 14); Synagro and Silva are unclear why previous violations involving other materials such as the beneficial recycling of green material needs to be included in an order specific to the land application and recycling of class B biosolids for crop production and agricultural grazing. Furthermore Synagro and Mr. Silva are concerned with prohibition No. 16 because:
    I. There is no evidence of any water quality contamination, degradation, or negative impacts of the use of this type of material in an agricultural operation; and is often the case a preferred material source for livestock bedding, improving soil structure, controlling runoff, composting, soil and solid waste cover to prevent erosion.
    II. Additionally, two different independent studies were conducted by subject matter experts that include soil scientist, agronomists, ecologists, and GIS specialists These studies at Silva Ranch demonstrated the benefits of this type of material, and furthermore concluded it is a nitrogen sink when combined with other high nitrogen sources such as manure and biosolids, allowing for improved soil conditions and higher contents of organic matter which mitigate the leaching of salts, nutrients, and heavy metals.
5. Synagro and Silva request Land Application Area Specification D.4.b. be reworded to state: "Public access to the application areas shall be restricted for at least 1 month after biosolids application." The Silva Ranch is not considered land with a high potential for public exposure which has a one year restriction under the 40 CFR Part 503 Rule.
6. Synagro and Silva request Biosolids Storage and Transportation Specification E.8. Page 20 be removed from the Tentative WDR as there are other ways to make sure stored biosolids are contained in their storage location as described in the Biosolids Management Plan submittal.

If you have any questions or require any additional information please let us know.

Sincerely,

Madison Holsinger

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Technical Services Manager

cc: Gary Silva

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