CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

Item No. 6
Response to Comments on
Tentative Order for Waste Discharge Requirements
Vista Corporation, Clover Flat Resource Recovery Park
Clover Flat Landfill, Calistoga, Napa County

This document provides responses to comments received on the tentative order (TO) to adopt Waste Discharge Requirements (WDRs) for the Clover Flat Landfill, which was published for public comment on March 13, 2020. Comments were received from the following:

1. The Institute for Conservation, Advocacy, Research, and Education (ICARE)

General Response: Water Board (WB or Board) staff appreciate receiving thoughtful comments and the opportunity to address concerns with respect to the TO for the Clover Flat Landfill (landfill or site). WB staff share these concerns, which is why we are updating these WDRs with new requirements to prevent future water quality impacts to groundwater and the adjacent unnamed creek. The two emergency Cleanup and Abatement Orders (CAOs) issued in 2019 were designed to immediately cease discharges of leachate to the creek, cease mixing of stormwater with leachate, and cease sediment discharges to the creek. These two CAOs are still in effect and Board staff are monitoring landfill compliance under the CAOs. The results of work performed by the Discharger between April and October of 2019 under the CAOs were designed to eliminate immediate threats to human health and the environment. The WDRs in part augment the requirements of the CAOs and require permanent solutions to prevent discharges of leachate, and sediment from happening in the future.

Several comments received by ICARE are related to surface water discharges, which are regulated by the WB under a NPDES permit for the landfill and are not the regulatory focus of the WDRs contained in the TO. Additionally, the WDRs do not apply to offsite Napa River water quality and onsite creek restoration efforts, these efforts are being addressed by the WB's Watershed Management Division. We have attempted to answers these, and other questions related to County and California Department of Fish and Wildlife (CDFW) permits as best we can, with input from the other agencies involved in this case.

ICARE Comments

One set of written comments was submitted on April 9, 2020, which are outlined and addressed below.

Several of the comments are very lengthy, so WB staff have summarized comments made but copied and pasted language where possible to avoid misrepresentation.

1. **Comment**: According to the Order, no sewage sludge is accepted at the landfill. Please note the Discharger has accepted the City of Calistoga's Dunaweal Wastewater Treatment Plant (WWTP) sewage sludge since 1990. ICARE requests details about whether or not the WWTP accepted sewage sludge in exchange for treating landfill leachate, and if contaminants of

concern present in sewage sludge (such as metals) had the potential to travel into soil, surface water, and groundwater.

Response: We contacted the Discharger and their consultant Golder to get clarification on this, here is their response: "At one point last year someone from our team reached out to the City of Calistoga via phone regarding taking leachate. It is in the 1990 JTD [Joint Technical Document] that Calistoga WWTP is identified as a potential location for leachate but we have never used it as an outlet. We have taken their sludge in the past and it has to meet the required test for acceptance."

Board staff have revised Finding #25 in the Order with the following language for clarity: "Dewatered sewage or water treatment sludge may be accepted at this facility under the following conditions: any module the sludge is placed into must be equipped with a leachate collection and removal system, and the sludge must be at least 20% solid (by weight) and not contain more than 50% liquid (by weight) so the moisture holding capacity of the waste mass is not exceeded. Specific analyses for metals must be performed according to Title 22 requirements before being accepted at the landfill for disposal and meet waste acceptance criteria for the landfill."

2. **Comment**: The Order describes surface water occurring at the landfill in the form of improved springs which had previously been collected in a piping system or converted into a well for storage and use by the Discharger. ICARE requests the springs' history, flow pattern, and any permits obtained to collect, store, and convert the springs to wells.

   Response: According to the Discharger the two unknown springs are in Module 4. Those springs drain to the small detention basin just below where the spring water surfaces (see Figure 3 in the Order), and the water from that basin is treated as stormwater and released to the creek. "The former manager/company president had ordered two water supply wells drilled where the Fire Tank is located (approximately 400 feet to the north and west) for non-potable water usage." Napa County issued permits for those wells, and the permits are available for public review through the County. "The two wells … did not produce much water; therefore, we have not used either well." The Discharger also clarified that one of the two wells will be properly destroyed, through a well destruction permit with the County.

3. **Comment**: The Order describes site run-off as having been modified by the Discharger and collected in ditches and rerouted around an active filling area before diversion to the ephemeral creek along the eastern boundary. Was the California Department of Fish and Wildlife (CDFW) notified to determine in Lake and Stream Bed Alteration Agreements were required for this activity, and the date of issuance if so.

   Response: After getting clarification from ICARE that they were referring to the upper soil borrow/stockpile area, and not the active waste filling area, we received the following answer from CDFW: "CDFW was not notified of these activities and is working with Clover Flat Landfill to prepare a restoration and monitoring plan, which will require that the Clover Flat Landfill enter into a Streambed Alteration Agreement with CDFW."

4. **Comment**: The Order describes the site run-off (above) but does not specify if the rerouting has been temporarily or permanently curtailed. Clarify and specify the provisions to prevent

site run-off from entering the creek, and provide Golder's report on "Hydraulic Evaluation and Surface Water Management System Design Report" for public access.

Response: Landfills typically route any stormwater entering the property around and away from the active waste filling areas (where waste is exposed) to prevent contact with waste, and into a nearby surface water body since it is supposed to be unimpacted water. Prohibition A.20 of the Revised TO prohibits stormwater discharges that come into contact with waste unless specifically authorized under an NPDES permit. Also, Prohibitions A.7 and A.8 of the Revised TO prohibit the discharge into waters of the State of sediment and other materials that could degrade water quality. Because recent conditions at the landfill have been out of compliance with these prohibitions, Provision 2 of the TO requires the Discharger to design and implement "an improved stormwater management system that conveys stormwater around waste disposal area and prevents stormwater from mixing with leachate." Additional corrective actions the landfill must take to comply with the Emergency CAOs will also reduce the likelihood of impacted stormwater entering the creeks.

Golder provided the following excerpt from their Report, which has since uploaded it to GeoTracker for public review: "WDR finding 21 references the surface water management system infrastructure that collects surface water runoff and conveys it away from the active landfill areas. This practice of diverting surface water away from the landfill reduces the potential for surface water runoff to come into contact with waste. For this reason, the diversion of surface water runoff away from the landfill areas is a generally accepted standard of practice in the solid waste management industry."

5. **Comment**: The Order describes a creek flowing offsite onto neighboring properties before draining into the Napa River over a mile downstream. Provide the list of riparian properties adjacent to this creek. Has each property owner been notified of this Order?

   Response: These WDRs pertain only to the landfill property to ensure the waste is properly contained, and potential releases of contaminants from the landfill are not occurring. The WDRs do not address the downstream riparian properties adjacent to the creek; however, some of the requirements in the Board's 2019 Amended Emergency Cleanup and Abatement Order (CAO) address restoration of riparian habitat onsite. The CAO requires sediment removal downstream (which was already performed), and restoration/mitigation of both reaches of the creek, but primarily creek 2 which was the most impacted by riparian habitat removal and sediment. The CAO is available to review in GeoTracker.

   The TO was not individually mailed to offsite property owners. We provided notice of the TO to all interested persons and it was posted on our website.

6. **Comment**: The Order describes acidification of the unnamed creek due to land disturbance. Determine the potential for adverse impacts to downstream fisheries and aquatic life by creek acidification at the maximum and current levels caused by the Discharger. Determine the same at and below the confluence with the main stem of the Napa River and provide data to support findings. As of this date are erosion control measures working to prevent further erosion given the winter storms?

Response: Prohibitions 7 and 22.a(3) prohibit adverse impacts to water quality, including pH outside its natural range, in waters of the State outside the landfill boundary. Since the acidification issue was observed in the creek in the Spring of 2019, several rounds of creek samples have been collected by both the Discharger and CDFW, and the low pH conditions observed in the unnamed creek adjacent to the landfill did not extend downstream beyond the property. This analytical data will be incorporated in a report and uploaded to GeoTracker for review by the public. Provision 4 of the TO requires the Discharger to update the landfill's Self-Monitoring Program (SMP) to provide additional pH monitoring in the creeks: "The updated SMP shall contain a monitoring plan for surface water in creeks 1 and 2, detailing the sampling plan to ensure pH levels are monitored until background conditions are attained." In addition to the pH monitoring, Water Board staff have conducted joint creek inspections with CDFW staff to evaluate impacts to aquatic life. CDFW is still determining impacts to aquatic species in the creeks and downstream.

Regarding the erosion control measures, landfill staff did the following prior to October 15, 2019:

- applied hydroseed and Earth Guard to stockpiles and side slopes,
- added silt fencing and textile on east berms to prevent erosion,
- installed base rock on eastern access road and benches on Module 1,
- applied rock to access roads along working face,
- maintained central-wet-weather location through wet weather season,
- rocked leachate storage tanks access road for trucks to haul in for offsite disposal and minimize track-out,
- sweeper truck daily maintained access roads, and
- maintained sediment pond 1 and 2 to control water coming into Module 4 and 5.

During two Board staff wet-weather inspections in January and March, 2020, the sediment mitigation measures implemented at the site were observed to be holding up quite well after the winter storms and no new erosion was noted. However, this is based on short-term measures taken in response to the CAO. If needed, the CAO will address additional measures for long-term erosion control.

7. **Comment**: Are there specific restoration plans for the unnamed creek included in the Order's provisions in order to mitigate harm to the public trust? If CFL has initiated or completed restoration of the creek, please provide the link.

   Response: A report prepared by SolEcology has been uploaded to GeoTracker; this report describes plans to return impacted areas of the creek to pre-disturbance conditions and compensate for temporal losses associated with impacts to the creek. Restoration of the creek is required pursuant to the amended CAO (see CAO mentioned in #5 above).

8. **Comment**: As part of the interim Self-Monitoring Program, a one-time sampling to evaluate contaminants of emerging concern (CEC) is required. ICARE questions whether this is adequate due to acceptance of St. Helena and Calistoga sewage sludge. Can CECs be monitored more frequently in the permanent Work Plan?

Response: The one-time CEC monitoring requirement is to assess whether these constituents are present, and at what levels. Most active landfills have a variety of chemicals present in leachate, as a result of the various waste types accepted. However, with appropriate landfill liner design and leachate collection systems, these CECs should not be present in groundwater. The first step is to sample and see if CECs are present and at what concentration, then we will compare the results to any existing screening levels (note: screening levels for the majority of CECs have not been developed yet). It is not appropriate to add any additional CEC monitoring requirements until we have reviewed the results of the one-time monitoring event.

9. **Comment**: The Order requires grading or development greater than an acre, and outside the landfill footprint, notify the Board, submit appropriate plans, and implement best management practices (BMPs). Based on the County of Napa's code enforcement citation for grading activities upslope of the landfill, ICARE questions whether one acre is too large and if the requirement can include a smaller area.

   Response: The State Water Resources Control Board's Construction Stormwater General Permit stipulates that grading of areas less than an acre are generally not required to be covered under the permit. However, this Order does require permit coverage and BMPs for grading or development outside the landfill footprint, even if less than one acre, due to the landfill's activities already representing a collective disturbance of more than an acre of land (see Provision 8 in the Order). Any work outside of the existing permitted landfill footprint would be subject to relevant County permits, and the Board would be copied on any documentation or permits relevant to the Board's oversight regarding potential impacts to water quality. Of course, any size grading activities which cause impacts to waters of the State is prohibited by Prohibitions #6 through #8 of the Revised TO.

10. **Comment**: As the Order provides for prior notification to the Board of any on-site grading activities beyond a specific size, can the requirements include other specific land use activities which will require advanced notification?

    Response: Under the Clean Water Act, the Board is required to regulate stormwater discharges associated with land disturbances of one acre or more, which is why the Board requires notification for grading activities on land that is one acre or greater. The Water Board is not a land use agency and its requirements must be related to those activities that may affect water quality. Accordingly, the Board may not require notice of general land use activities without a water quality nexus. The County can and will specify necessary permits based on the type of work the Discharger proposes.

11. **Comment**: Following notification of grading or other work planned by the Discharger, can you clarify the basis by which the Board's decision will be made? If the Board is not notified, what will the specific enforcement actions will be taken for noncompliance? To date no fines have been issued by the Board to CFL, under what conditions will the Board issue substantive fines?

    Response: Grading permits are issued by the County, and any violations of the grading permit (or lack thereof) will similarly be issued by the County. Any actions performed by the Discharger pertaining to water quality are required by one of our two existing Cleanup and

Abatement Orders, issued in 2019, this Tentative Order, and the General Permit for Discharges of Stormwater Associated with Construction Activity (State Board Order No. 2009-0009-DWQ, as amended, Construction Stormwater General Permit). Any work being performed outside the purview of these three Orders would likely be overseen by the Local Enforcement Agency or the County. Any enforcement actions this Board would take for noncompliance must go through a process beginning with a written notice of violation, after which the matter may be referred to the Board's Enforcement Section. This referral could result in the issuance of a complaint for administrative civil liabilities and the eventual imposition of monetary fines. The Board Enforcement Section may also consider other appropriate enforcement, such as a cease and desist order or referral to the Attorney General's Office for judicial enforcement. Enforcement actions would be publicly noticed to interested persons. The violations noted in 2019 have been referred to, and are being evaluated by, the Board's Enforcement Section.

12. Comment: ICARE questions the number of limited groundwater monitoring wells on the site, can the Order require additional wells be added to the sensitive alluvium layer to gauge the extent of the contaminant plume(s)?

Response: Water Board staff agree and share your concerns that the existing monitoring well network is inadequate given that some wells can no longer be sampled. Provision #1 in the Tentative Order addresses this concern. The TO requires the Discharger to evaluate the current groundwater monitoring well network and determine if the well network provides sufficient, representative monitoring capacity, and require that any wells currently inoperable be rehabilitated or reinstalled. Our review of this evaluation would provide the basis for determining the need for and location of additional wells,

13. Comment: What is the means by which the public can obtain easy access to water quality monitoring reports submitted to the Board on the Discharger's behalf?

Response: Per Provision #23 of the TO, all reports including water quality monitoring reports for the landfill submitted to our Board must be done so through our GeoTracker website, which is publicly accessible.

14. Comment: The Order provides construction specifications for future landfill modules. Given this construction, what is the capacity of capturing and containing leachate within the liner during a 100-year storm event? What are the plans for excessive leachate control onsite and transport offsite in larger than 100-year storm events?

Response: Title 27 requires a leachate collection and removal system to accommodate <u>twice</u> the anticipated daily peak leachate generation rate. These Title 27 leachate collection requirements are built into the design of new disposal cells (or modules). Specifications 3 and 5 of the TO direct the Discharger to incorporate this capacity into each module. Findings 32 through 37 describe the leachate collection system configuration in its current, inadequate state; Provision 2 requires the Discharger to design and build an improved leachate system with adequate capacity: "…the Discharger shall submit a work plan, which considers the designs for 1) an improved leachate management and storage system that provides adequate capture and leachate storage capacity and eliminates discharges, and 2) an improved

stormwater management system that conveys stormwater around waste disposal area and prevents stormwater from mixing with leachate."

The Discharger's consultant has calculated the peak daily rate derived from the 100-year, 24-hour design storm event using the USEPA's Hydrologic Evaluation of Landfill Performance (HELP) model. Consequently, there is a safety factor of 2 built into designed leachate collection and removal systems permitted in California. CFL maintains a series of on-site storage tanks and provides for off-site transportation and disposal at permitted facilities. These features are the key elements of a comprehensive leachate management plan for the collection, storage and off-site disposal of leachate in accordance with State and local jurisdictional requirements.

15. **Comment**: Can the Board provide metrics and modeling which predicts CFLs leachate capture and storage of a 100-year storm event, in light of changes in climatic conditions?

    Response: See the response immediately above. The system is designed to accommodate two times the amount that a 100 year, 24-hour storm event could produce, and any leachate that cannot be safely stored onsite will be hauled to an appropriate leachate disposal facility. Waste manifests are required to be kept at the facility to keep track of how much leachate is being disposed offsite. Additionally, the landfill's monitoring reports document the amount of leachate generated and where it was disposed.

16. **Comment**: Given that not all modules have landfill liners, can the Board provide the plan to capture, contain, and store the unlined modules' leachate, given more frequent and longer duration of storm events due to climatic conditions?

    Response: Module 1A is the only unlined cell, and it has been closed for many years; however, it does have a leachate barrier system at the toe where leachate is intercepted and pumped up to the holding tanks, as described in Finding #32 in the Tentative Order. Also see the answer to #15 above regarding containment of excess leachate due to climatic conditions.

17. **Comment**: Can you describe whether Module 5A has a liner and if the module has been modeled for leachate escape into the surface or groundwater?

    Response: Module 5A has a composite base liner and leachate collection and removal system designed to accommodate twice the anticipated daily peak leachate generation rate. On-site storage tanks and arrangements for off-site transportation and disposal of leachate at permitted facilities are in place and in operation if needed.

18. **Comment**: Do all six active modules have liners, and if not, how has the Board determined whether or not leachate is escaping from them?

    Response: Module 1A is the only unlined cell within the landfill. Module 1A was closed in accordance with regulatory requirements; the remaining modules presented on Figure 4 in the Order have liners and leachate collection systems designed to accommodate twice the anticipated daily peak leachate generation rate.

19. **Comment**: ICARE asks whether the Board is completely confident with the Order's plans for capturing, containing, and transporting leachate in order to prevent future discharges to the waters of the State? Has the Board calculated a margin of error, if so what is the margin? If not, determine the margin of error for leachate escaping the site.

    Response: The Board is confident that the requirements of CCR title 27, the Specifications, Prohibitions, and Provisions of the Order adequately lay out the framework with which the Discharger must comply, and that the TO adequately protects waters of the State. We have not completed any mathematical calculations to determine a margin of error.

20. **Comment**: Can the Order requirement "the Endangerment of Health or the Environment" prohibit the Discharger from accepting, handling, obtaining, or utilizing and/all containers which may have radioactive materials including used frac tanks for any/all purposes or any/all properties own and/or operated by the Vista Corporation and Clover Flat Landfill, Inc.? If not, why?

    Response: All Class III landfills, including Clover Flat, are prohibited from accepting radioactive materials in any form for disposal. The Discharger stated that "three used tanks were purchased from a tank broker in the Midwest. The tanks arrived at CFL and staff was not aware of the radioactive sludge matter at the bottom of the tanks at the time they were received. We have explained the occurrence and events that followed in a response letter to ICARE earlier this year. We later identified that one tank had only trace elements. That tank was properly disposed of locally in Santa Rosa. The other tanks that had the leachate mixed radioactive material were transported to Yuma Arizona for proper disposal.

    - Grey Tank # 2 delivered to CFL on 3-29-19 added leachate to it on 4-2-2019. Landfill staff filled this tank 50% full (Yuma Az) Hauled by PegEx 3-27-2020, 9,200 gallons.

    - Grey Tank #1 delivered to CFL on 4-1-2019 added leachate to it on 4-3-2019. Landfill staff filled this tank 100%. Due to acceptance levels we were able to dispose of this tank locally (Santa Rosa for disposal). Hauled by Kleen Solutions 3-2-2020- 5,900 gallons, and 3-3-2020- 15,500 gallons.

    - Grey Tank #3 delivered to CFL on 4-1-2019 added leachate to it on 4-4-2019. Landfill staff filled this tank 100%. (Yuma Az) PegEx arrived on 4-3-2020 and collected 9,000 gallons and again on 4-8-2020 for 9,000 gallons.

    The remainder of 1,000 gallons will be removed, and both Grey tanks #2 and #3 are scheduled to be certified clean on 4-28-2020".

21. **Comment**: Can the Discharger be required to test and monitor onsite soils and property for detectable radiation in any/all areas where radioactive materials may have been located? If not, why?

    Response: We do not feel that step is necessary given that there was no leaking from the frac tanks mentioned above, which contained low levels of radioactive elements mixed primarily with leachate-contaminated stormwater. In addition, the tanks were stored in the active filling area which is underlain by a liner and leachate collection system. Any potential leak (of which

there were none observed on our bi-weekly inspections the majority of 2019) would have been captured, further diluted by stormwater and leachate generated in the storage tanks, and hauled offsite for disposal. The offsite leachate disposal facility also requires analytical data prior to acceptance, and would not accept any leachate contaminated with radioactive elements if any were detected.

22. **Comment**: Napa County's permitting history records document numerous modifications of Use Permits and Solid Waste Facility Permits (SWFP) issued to the Discharger. In light of pending renewals and modifications planned, can you explain the affect each will have on this Order, and what the public can expect to be the extents of the Board's involvement, if any? Does the Board coordinate the WDR requirements with the County Use permit and SWFP?

    Response: There are no pending permit modifications at this time, so the Board cannot speculate on what requirements would be included. However, the requirements imposed by the County would not relate to issues around water quality, as that is this Board's jurisdiction. The County does copy the Board on pending permits they issue as a courtesy to us but does not typically seek our input on matters they regulate; however, the Board works closely with the County and we often perform joint inspections at the landfill, where we make sure we are comparing observations and maintaining a coordinated and consistent position when corresponding with the Discharger.

23. **Comment**: Can the Order require that the County of Napa and LEA receive approval by the Board on any/all modifications before local permitting, especially those which have the potential to cause or create adverse impacts to the waters of the State, including groundwater? Can the Board restrict module expansion to protect the Public Trust resources?

    Response: See the comment above. The County does not regulate water quality, beyond referring to the Board and our Waste Discharge Requirements, in any of their permits.

24. **Comment**: Please respond with whether the Board will be notified upon each renewal or modifications to the Discharger's land use, especially those having the potential to cause harm to waters of the state including groundwater, and the specific party or agency that will maintain responsibility for any/all notifications to the Board.

    Response: We have reached out to the County on this issue and heard from Jason Hade, who said, "Yes, although the County of Napa has ultimate land use decision making authority over the Use Permit Major Modification currently under review, it was referred to the RWQCB on October 2, 2019 as part of the initial referral process. We will also refer the CEQA document to the RWQCB via the State Clearinghouse upon completion."

25. **Comment**: Can the Board recommend a competitive fare and transparent bidding process for this community-based need for recycling and refuse disposal? ICARE requests that each and every entity regulating CFL recommend or suggest that the contracts that run this business operation become a competitive bidding. If not, why?

    Response: The Board does not have any jurisdiction or expertise to recommend competitive fares or bidding processes. According to the Discharger "Clover Flat Resource Recovery Park has an agreement with the Upper Valley Waste Management Authority (UVWMA) for the

processing and disposal of UVWMA controlled materials. The landfill does not go out to bid, the UVWMA can decide where their waste should go."

26. Comment: ICARE appeals the Board for assurances that the public will be notified of any/all failures to comply with this Order and request that the specific process to do so is clarified in the Order.

Response: We understand the ICARE's concerns and are committed to ensuring public transparency and input. Any failure by the CFL to comply with this Order will be documented in a formal letter or, if appropriate, a notice of violation. All formal correspondence between the Board and CFL will be uploaded to GeoTracker for the public to access.

INTERNAL COMMENTS RECEIVED

Staff initiated minor changes to the TO to correct and clarify some of the Findings in the TO and their association with the Landfill's two CAOs and stormwater permits. The following changes/updates were made: Findings #25 and #49 were updated for clarity, Prohibitions #6 through #10 were added to prohibit the discharge of sediment to the creek because the sulfur-rich sediments present at the site are believed to be the source of acidic conditions in the creeks, and Provision #8 was updated for consistency with Finding #49.