Recology
WASTE ZERO

July 25, 2014

Via Email and Hard Copy

Ms. Wendy Wyels
Supervisor, Compliance and Enforcement Division
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

RE: Tentative Cease & Desist Order Issued on July 11, 2014
Recology Hay Road Landfill, Solano County

Dear Ms. Wyels:

In your letter of July 11th transmitting the above-referenced Tentative Cease and Desist Order (the "Tentative Order"), you asked for an informal written notification conveying Recology's general comments on the terms and provisions of the Tentative Order. Our preliminary comments are provided below and in the attached document.

To assist both parties in identifying potential areas of agreement and other areas where additional discussions could be required to ascertain if a contested hearing before the Board will be necessary, we thought it productive to provide our preliminary comments in redline format addressing the specific terms and provisions of the Tentative Order, along with explanatory notes for the comments.

As stated in our July 11th letter, Recology's approach is to:

- Take immediate action to address the Regional Board's most substantive concerns;
- Seek to resolve the issues in dispute administratively rather than by enforcement;
- Update the Hay Road facilties' Waste Discharge Requirements to reflect the current and planned configuration of this regional integrated waste management facility;
- If enforcement is necessary, explore the option of replacing the Tentative Order with an agreed-upon Time Schedule Order; and
- Resolve any open issues prior to the full Regional Board meeting, currently set for October 9-10, 2014.

Towards these ends, and after your team has had a chance to review our preliminary comments, we would like to have a meeting aimed at resolving any outstanding issues.

Recology's goal is to move away from an enforcement-oriented dialogue with the Regional Board - a process which is both time consuming and costly for all parties - and return to the cooperative and collaborative relationship that has been the hallmark of our working relationship over the past decades.

Please note that our comments are only preliminary at this early stage of the proceeding on the Tentative Order. We reserve the right to supplement and revise our comments on the terms and provisions of the Tentative Order based on a further review of the issues and on our discussions with Regional Board staff. If this matter results in a contested hearing, we reserve all of our rights to make a full and formal submission in accordance with the applicable hearing schedule and procedures.

Thank you for your consideration and we look forward to hearing from you.

Sincerely,

Drew Lehman, Director
Environment and Planning

cc: All w/ attachment:
A. Altevogt, P. Creedon, and M. Okamoto, State Water Board
P. Yamamoto, Recology and M. Bruner, Perkins Coie

ATTACHMENT A
Recology's Preliminary Comments (July 25, 2014)
On Tentative Cease & Desist Order Issued on July 11, 2014
Recology Hay Road Landfill, Solano County

The text of the Tentative Cease & Desist Order (Tentative Order) issued on July 11, 2014 by staff of the Central Valley Regional Water Quality Control Board for the Recology Hay Road landfill has been redlined below to provide feedback on, and to propose specific text changes to, the findings and provisions of the Tentative Order. We have added explanatory notes to the proposed revisions as needed to make the intent of the redline clear to the reader.

The first part of these preliminary comments addresses the Findings (#1-#40, at pages 1-10) of the Tentative Order. The second part of these preliminary comments addresses the operational Provisions (#1-#15, at pages 10-13) of the Tentative Order.

Part 1: Comments on the Findings in the Tentative Order

1. Recology Hay Road (hereafter referred to as Discharger) owns and operates an active landfill and composting operation regulated by the Water Board under the name of "Recology Hay Road ~~Landfill~~" (facility). According to the WDRs, the facility consists of two Class III landfills (LF-1 and LF-2), one Class II landfill (LF-3), a Class II sewage sludge waste pile (WP-9.1), a Class II sewage sludge land treatment unit (LTU), green-waste and food-waste composting areas, ~~and~~ two lined compost leachate ponds, and one unlined holding pond, as shown on Attachment A. The Discharger performs active composting on a 22-acre all-weather pad and stores finished compost product on a 32-acre area, all within the landfill footprint.

[Explanatory Note for Finding #1: This finding should be revised to reflect more accurately the specific features of the Recology Hay Road site and the facility's name as specified in the Change of Name Order issued by the Regional Board on January 29, 2010 (Order R5-2010-0021).]

2. The Hay Road Landfill is located on a 640-acre site, of which 256 acres are permitted for landfill disposal and composting operations~~,~~. The 640-acre site also includes ~~160 acres are~~ a borrow pit area, and ~~224 acres~~ a habitat preserve. The Landfill is located about eight miles east of Vacaville on Hay Road in Solano County on Assessor's Parcel Numbers 42-020-02, 42-020-06, and 42-020-28.

[Explanatory Note for Finding #2: The borrow pit is not of a fixed size and the specific boundaries of the habitat preserve are not formally delineated.]

3. Waste Discharge Requirements (WDRs) Order R5-2008-0188 was adopted by the Central Valley Water Board on 5 December 2008, and regulates the operation, closure, and post-closure maintenance of the facility. The facility operations must comply with Title 27 of the California Code of Regulations.

4. The facility is also regulated under the State Water Resources Control Board's Water Quality Order No. 97-03-DWQ, the *Statewide Industrial Storm Water General Permit* (General Permit) and under the Central Valley Water Board's NPDES Limited Threat General Order R5-2013-0073 for dewatering of a borrow pit. As described in Finding #65 of the WDRs, d~~D~~ewatering is required both to lower the groundwater under Waste Management Unit (WMU) DM-1 ~~the landfill~~ "because the natural water table would be less than five feet below the base of the unit during the wet season," and to allow the Discharger access to excavate soil to be used in landfill operations.

[Explanatory Note for Finding #4: See the specific language in Finding #65 of the WDRs Order R5-2008-0188.]

COMPOSTING OPERATIONS AND COMPOST LEACHATE

5. The WDRs regulate the Discharger's green-waste and food-waste composting operations, which include pre-sorting of incoming material, active composting, curing, and storage of finished product. The WDRs state that the Discharger accepts food-waste and green-waste at a 54-acre area located east of disposal module (DM) DM-1, which is composed of 22-acres of an impervious (concrete, asphalt, or similar) working surface for active composting. The WDRs state that the remaining unlined 32-acres is used for finished-product storage.

Food Waste Composting Methods ~~Violations~~

6. Discharge Specification B.27 of the WDRs states that "*Feedstock for windrow composting shall be limited to green waste and agricultural waste as defined in Title 14. Food waste feedstock shall be limited to in-vessel composting as defined in Title 14, and may be combined with green waste for in-vessel composting.*" Title 14, California Code of Regulations, section 17852 subdivision (a)(41) defines "within vessel composting" as "*... a process in which compostable material is enclosed in a drum, silo, bin, tunnel, reactor or other container for purposes of producing compost . . .*"

[Explanatory Note for Finding #6: There has been a series of in-vessel systems used at its compost operation (AgBag, Compostex, and ECS) and Recology now uses an aerated static pile system - Recology acknowledges that the WDRs for the site have not kept pace with these changes. CalRecycle, the Local Enforcement Agency, and the Air District all have been fully informed of and have approved these changes. While the site WDRs have not been amended in parallel with the permits issued by these regulatory agencies, the Regional Board inspectors have been on-site over the years and have observed each successive change; as a result, we believe it is a misnomer to cite this as a "violation" of the WDRs.]

7. Finding 88 of the WDRs states "*Leachate from the in-vessel composting is collected and returned to within the system.*" Title 27 Section 20164 defines leachate as "*any liquid formed by the drainage of liquids from waste or by the percolation or flow of liquid through waste. It includes any constituents extracted from the waste and dissolved or suspended in the fluid.*"

8. As Regional Board staff have observed, the [1]~~The~~ Discharger ceased using in-vessel composting~~ prior toApril 2010, in violation of the WDRs~~. Presently, food waste composting is performed in the active composting area using the "Aerated Static Pile" composting process pursuant to Title 14, California Code of Regulations, section 17852 subdivision (a)(3), which means a composting process that uses an air distribution system to either blow or draw air through the pile. ~~windrows which are open to the elements.~~ The Discharger maintains that the previously used AgBag, Compostex, and covered ECS systems constitute "in-vessel" systems that each system change was an improved methodology to suppress odors and allow more controlled moisture conditioning of the feedstock. Each successive composting method, including the current high-air flow volume uncovered system, also has served to reduce the amount of compost leachate that is generated due to increased loses by evaporation. ~~The current system does not satisfy the within-vessel containment requirements of Title 14 or the WDRs nor does it keep leachate within the vessel system, as required by the WDRs.~~ This Order provides the Discharger a time schedule to either return to in-vessel composting as provided for in ~~required by~~ the WDRs or to submit a Report of Waste Discharge (RWD) showing that non in-vessel composting is protective of water quality. If the Water Board adopts new WDRs that authorize non in-vessel composting prior to the time schedule in this Order, then the Discharger will not need to return to in-vessel composting.

[Explanatory Note for Finding 8: See Item #9 in the Technical Appendix to Recology's submittal of June 5, 2014 on this matter. Recology maintains that the previously used AgBag, Compostex and covered ECS system constitute "in-vessel" system and that each system change was an improved methodology to suppress odors and allow more controlled moisture conditioning of the feedstock. Further, the definition of "within vessel composting" in CCR Title 14 explains that this process occurs "under uniform conditions of temperature and moisture where ***air-borne emissions are controlled***." This text shows that the primary purpose of the within vessel process is to control air-borne emissions, not to minimize the generation of leachate. The transition to the current aerated static pile system was implemented as an improved methodology to suppress odors. As explained in the June 5 Technical Appendix on this matter, the transition to the current ASP system also has served to reduce the amount of compost leachate that is generated due to increased losses by evaporation. The record should also reflect that Regional Board staff have known for years via their routine site inspections about each of the transitions from AgBag to Compostex, to the covered ECS compost systems, to the current hi-air volume aerated static pile system, which uses a biocover in lieu of a synthetic cover.]

Leachate Pond Issues ~~Violations~~

9. WDRs Prohibition A.19 states "*The discharge of solid or liquid waste or leachate to surface waters, surface water drainage courses, or groundwater is prohibited.*"

10. Finding 88 of the WDRs states that leachate from the 22-acre active composting area flows to the 60-mil HDPE lined "low-flow" pond where it is stored and then recirculated on the compost. The Finding also states that during "significant precipitation events" runoff from the active composting area flows to "a lined high-flow pond so that it does

[1] ~~7 April 2010 Water Board staff inspection.~~

not mix with leachate in the low-flow pond." According to the 2006 design report for the high-flow pond, this ~~The high-flow~~ pond has capacity for the average annual rainfall, plus a 100-year, 24-hour storm event.~~is designed to hold stormwater from a 100-year, 24-hour storm; excess stormwater is allowed to overflow into the A-1 Channel and from there to surface water, as allowed by the industrial stormwater permit.~~

[Explanatory Note for Finding #10: This finding should be revised to reflect the prior 2006 design report for the high-flow pond. In addition, the discussion of overflow is unnecessary, since this issue is discussed in the next finding.]

11. The process water applied to the active food waste stockpiles, and the rain falling onto the stockpiles, forms a leachate which is high in nitrate, TDS, and biological oxygen demand. The leachate drains out of the eastern stockpiles and flows east across the all-weather surface to a concrete-lined ditch, sump with pump, and into the low-flow pond. In contrast to the process described in the findings in ~~Contrary to~~ the 2008 WDRs, aerobically treated compost leachate in the low-flow pond ~~overflows~~ is pumped to the high-flow pond. The Discharger maintains that it has depicted this practice in submittals to Regional Board staff in 2010 and 2011. The Discharger maintains that the high-flow pond has been sized for zero discharge, and that there have been no discharges from ponds to surface water. Under emergency overflow conditions, ~~T~~the high-flow pond would discharge to a series of bioswales and a sedimentation basin prior to off-site discharge and eventually ~~then overflows~~ to the A-1 Channel, although there is no evidence that this has occurred. ~~The Discharger states that there have been no discharges from the ponds to surface water, but the WDRs do not require freeboard measurements or other documentation to confirm that discharges to surface waters have not occurred. In addition, the Discharger has changed the configuration of the ponds from that described in the WDRs. Therefore, there is the potential for a discharge or threatened discharge of leachate to surface waters, in violation of Prohibition A.19 of the WDRs. This Order allows the Discharger a time schedule to re-configure the ponds to comply with the WDRs.~~

[Explanatory Note for Finding #11: See Item #12 in the Technical Appendix to Recology's June 5, 2014 submittal on this matter, which explained the treatment and beneficial reuse pond system at the site. Regional Board staff have long known about the current configuration of the ponds. In addition, the high-flow pond is monitored under the facility's Storm Water Pollution Prevention Plan (SWPPP) and any discharges would have to be recorded and sampled accordingly. The historical SWPPP record verifies the absence of any discharges from the high-flow pond since its construction in 2006. Also, we suggest consolidating a description of order's requirements into one finding (see #12 below).]

12. This Order requires that the Discharger prepare a water balance for the two authorized ponds to demonstrate the capacity of the pond system and to submit an RWD to revise the WDRs to accurately reflect how the pond system is designed and operated.~~show whether or not the low-flow pond has the capacity to store all leachate without overflowing, and whether the high-flow pond has the capacity to store all stormwater~~

~~generated from the compost area for a 25 year return total annual precipitation event[2]. If the water balance shows inadequate capacity, then this Order requires the Discharger to propose adequately sized ponds.~~

[Explanatory Note to Finding #12: We believe that the current pond configuration – where the lined high-flow pond has been determined to have the capacity to handle the average annual rainfall, plus a 100-year, 24-hour storm event – is appropriately sized and adequately designed to protect water quality. There has been no overflow/discharge from the system and no overflow/discharge is threatened to occur.

We do not agree that the 25-year return event is an appropriate standard to apply to composting operations. Regional Board staff state that the State Water Resources Control Board has proposed this standard in its draft General Order for composting operations. However, the General Order is still under development; no draft of the General Order has been proposed for comment or consideration, let alone formally adopted. The 25-year return event standard simply is referenced in a summary four-page chart on the State Board's website, without any explanation or analysis. The prior draft version of the General Order (dated August 6, 2012) that previously was issued for public review and comment contained a standard based on the 25-year, 24-hour event.

In any case, whatever the new standards ultimately become, the issue is undergoing an intensive and thorough environmental impact and regulatory review at the State level and will be subject to another round of public review and comment before final consideration and adoption. It is inappropriate to impose a moving target, which has not yet been established, on longstanding composting operations, through an individual enforcement order for a single discharger. Moreover, even if a 25-year return event standard were to adopted at some point in the future by the State Board, it is important to note that the May 2014 four-page summary chart on the State Board's website indicates that dischargers would be allowed a period of up to six years to come into compliance with the new standards.]

Green Waste Pond ~~Unauthorized Leachate Pond Violations~~

13. Leachate and stormwater generated on the western section of the compost area currently flows south through ~~dirt~~ unlined ditches to an unlined stormwater pond known as the "green waste runoff pond[3]". The pond overflows to an unlined drainage course, which eventually discharges to the A-1 Channel and surface waters. The Discharger states that the depth of the green waste runoff pond is 18.2 feet MSL[4]. The closest groundwater monitoring wells are 4B and G-2, which had a groundwater elevation of 19.10 and 19.12 feet on 22 March 2011, respectively[5]. These elevations indicate that, at times, groundwater can potentially rise~~s~~ into the bottom of the green waste runoff pond. The unlined ditches, unlined pond, and off-site discharge of leachate are not described, nor

~~2 This size storm event is proposed by the State Water Resources Control Board in its draft General WDRs for composting.~~

3 The name "green waste runoff pond" is found on the Recology's 2011 Exhibit A to the Solano County Use Permit U-11-09. Recology also refers to this pond as the "western compost area pond".

4 5 June 2014, Recology response to Draft CAO.

5 Recology first semiannual 2011 monitoring report, Table 2.

permitted, by the WDRs. Use of this pond to store leachate or stormwater generated from the compost area is a violation of the WDRs. In correspondence dated March 14, 2014, and in its submittal in this matter dated June 5, 2014, the Discharger has committed to construct improvements to rectify this issue by re-routing the water in the western area compost pond to a lined ditch that will discharge to a sump at the southwest corner of the compost facility. The runoff water in the sump will be pumped to the lined low-flow pond during non-storm and low runoff storm events, and to the high-flow pond during high runoff storm events. These improvements are scheduled for completion by the end of September 2014.

[Explanatory Note for Finding #13: The finding should be revised to reflect the full factual record that Recology already has committed in writing on several occasions to implement site improvements to address this issue.]

14. Because the green waste runoff pond is not described in the WDRs, Monitoring and Reporting Program (MRP) R5-2008-0188 does not require the Discharger to analyze its contents. However, it is assumed that the green waste runoff pond would contain high-strength ~~designated~~ waste, similar in content to the high-flow pond[6]. The use of this pond for storage of leachate and stormwater may have ~~has likely~~ caused or contributed to groundwater pollution in the eastern portion of the landfill. This Order requires that the Discharger document that it has constructed the improvements it has committed to implement and that runoff from the compost pad is no longer discharged to the green waste runoff pond or to unlined ditches. As noted above, t~~T~~he Discharger has stated that it will construct these facility improvements by September 2014.

[Explanatory Note for Finding #14: We do not agree with the use of the term "designated waste." This designation was not used in the prior draft Cleanup & Abatement Order in this matter prepared by Regional Board staff, nor has compost runoff water been defined as designated waste in the regulatory arena governing composting operations. In addition, the statement that the runoff pond "has likely caused or contributed to groundwater pollution" is speculative as there is no evidence to confirm this. We also suggest revisions to the last sentence in Footnote 6 to accurately reflect the circumstances.]

~~Designated Waste~~

~~15. Historical analysis of the high-flow pond contents shows elevated concentrations of inorganic constituents, as shown below. According to the WDRs, the high-flow pond is only to contain stormwater runoff from the active composting area, not leachate, which is why it is allowed to overflow to surface waters. However, the data below show that designated waste is contained in the high-flow pond, and that it is not appropriate to allow this waste to overflow and discharge to surface waters.~~

[6] The Discharger has submitted analytical data for a sample collected from the green waste pond on 28 February 2014 and reports that the pond contained nitrate-N at 1.5 mg/L, TKN at 22 mg/L, and ammonia-N at 2.5 mg/L. ~~Results for t~~The remainder of the constituents listed in Table 1, below, were not analyzed~~reported~~.

~~High-Flow Pond Waste Constituent~~	~~Concentration (Nov 2013)~~	~~Water Quality Goals~~
~~Specific Conductance~~	~~9,395 umhos/cm~~	~~900 umhos/cm (CA secondary MCL)~~
~~Total Dissolved Solids~~	~~6,900 mg/L~~	~~500 mg/L (CA secondary MCL)~~
~~Chloride~~	~~1,600 mg/L~~	~~250 mg/L (CA secondary MCL)~~
~~Total Kjeldahl Nitrogen~~	~~320 mg/L~~	~~NA~~
~~Sulfate~~	~~320 mg/L~~	~~250 mg/L (CA secondary MCL)~~
~~Lead~~	~~0.15mg/L~~	~~0.015 mg/L (USEPA Primary MCL)~~
~~Phosphorous~~	~~150 mg/L~~	~~NA~~
~~Nitrate as N~~	~~14 mg/L~~	~~10 mg/L (CA secondary MCL)~~
~~Ammonia as N~~	~~11 mg/L~~	~~30 mg/L (USEPA Health Advisory)~~
~~Nitrite as N~~	~~0.66 mg/L~~	~~1 mg/L (USEPA Primary MCL)~~

~~16. The MRP does not require sampling of the low-flow pond, nor does it require freeboard measurements for either pond. A Revised MRP has recently been issued for this facility and it contains these requirements.~~

[Explanatory Note for Findings 15 and 16: In addition to the objection to the use of the term "designated waste," these findings do not appear to be relevant or necessary with respect to the substance and the requirements of the Tentative Order. As to the issue of a discharge to surface water from the high-flow pond, this issue has already been addressed in prior findings of the Tentative Order, and as Recology has explained, no such discharge has occurred or is threatened to occur. As to the statement that a Revised MRP recently has been issued, to date no such MRP revision has been issued.]

Leachate used for Dust Control ~~Violation~~

17. Recology informed the Regional Board staff in 2010 and 2011 that it used compost pond water for dust control over lined portions of the landfill. This was reported in the Discharger's 16 September 2010 Liner Repair Plan and ~~As reported~~ in the Discharger's 26 January 2011 Report of Remedial Actions High-Flow and Low-Flow Ponds, which stated that during the summer of 2010, "*Water was removed from the pond and used for dust control over lined portions of the landfill. Draining the pond required removal of approximately 10 million gallons of liquid through evaporation and dust control.*"

[Explanatory Note for Finding #17: This finding should be revised to reflect the full factual record reflecting the reporting by Recology to Regional Board staff of the use of leachate for dust control purposes and staff's knowledge of that documented use for at least four years.]

18. ~~The use of compost pond leachate for dust control on the landfill units is a violation of~~ Discharge Specification B.13 of the WDRs ~~which~~ states "*Leachate or landfill gas condensate from a lined landfill module shall be discharged either to a publicly owned treatment works under permit, or to the composite-lined landfill unit from which it was generated....*" This section does not mention the use of treated compost water for dust control. ~~In addition, the use of compost leachate as dust control is a violation of section 20375(d) of Title 27, which states "There shall be no discharge from a surface impoundment except as authorized by WDRs". The application of compost pond~~

~~leachate as dust control is not authorized by the WDRs and therefore this action is a violation of the WDRs.~~ This Order provides the Discharger a timeline to either (a) cease the use of treated compost leachate for dust control purposes; or (b) submit an RWD to revise the WDRs to explicitly describe how treated compost leachate will be used for dust control purposes in a manner that is protective of water quality. ~~comply with Discharge Specification B.13.~~

[Explanatory Note for Finding #18: Discharge Specification B.13 is a ***restriction*** on how leachate from a ***landfill unit*** may be applied. The fact that this restriction does not mention treated ***compost*** leachate fails to support the claim that use of treated compost leachate for dust control is a violation of the restriction in the Discharge Specification, or of the WDRs more generally. In addition, the cited provision of Title 27 (section 20375) applies to Class II surface impoundments, and does not apply to composting operations. In any event, the use of treated compost water for dust control over lined waste modules is protective of water quality as the modules are designed to collect and remove liquids that percolate through the refuse.

Furthermore, the application of dust control water is performed in a manner as to not generate appreciable runoff. Since dust control water is applied to dry materials that can generate dust, most of the water that is applied is rapidly absorbed by the surface materials. Given these factors, Recology should be allowed to continue to beneficially re-use treated compost water for dust control, a practice that Regional Board staff have known about for years. Formal approval of this water conservation practice will be requested for Regional Board adoption through updated and revised WDRs.]

~~SEPARATION BETWEEN WASTE AND GROUNDWATER~~
~~(ENGINEERED ALTERNATIVE)~~

~~19. Section 20240 subdivision (c) of Title 27 requires a minimum of five feet of separation between waste and the highest anticipated elevation of underlying groundwater, unless a discharger can show that an engineered alternative provides equivalent or better protection. For the Hay Road Landfill, the Discharger proposed an engineered alternative of either a 1-foot or ½-foot gravel layer to serve as a capillary break and underdrain. Construction Specification D.2 of the WDRs allows this engineered alternative for the separation distance between "*wastes or leachate and the highest anticipated elevation of groundwater*" and states that the following minimum separations must be met:~~

~~Construction Specification D.2~~

~~**Module**~~	~~**Engineered Alternative Required Separation Between Wastes or Leachate and the Highest Anticipated Elevation of Groundwater**~~
~~DM-1 (see WDR Finding 65)~~	~~5 feet~~
~~DM-2.1~~	~~3 feet~~
~~DM-2.2 through DM-16~~	~~2.5 feet~~
~~Sludge storage (WP-9.1)~~	~~2.5 feet~~
~~Land treatment unit (LTU)~~	~~5 feet~~

~~20. Prohibition A.4 of the WDRs prohibits a discharge of waste constituents to the unsaturated zone. The engineered alternative to the prescriptive five feet of separation between waste and groundwater is intended to ensure that the Prohibition is met. The WDRs require that the Discharger report the separation distance between the disposal module leachate collection and removal system (LCRS) sumps (i.e., the bottom of the waste) and groundwater. Groundwater is typically highest in the spring. The separation reported for the spring monitoring events from 2011 through 2013 is summarized below:~~

~~Separation Data for Spring-time Monitoring, 2011 to 2013~~

~~Module~~	~~Required Separation~~	~~March 2011~~	~~May 2011~~	~~Jan 2012~~	~~May 2012~~	~~Feb 2013~~	~~Apr 2013~~
~~DM-1~~	~~5 feet~~	~~*0*~~	~~*3*~~	~~7~~	~~6~~	~~6~~	~~6~~
~~DM-2.1~~	~~3 feet~~	~~8~~	~~8~~	~~12~~	~~10~~	~~10~~	~~12~~
~~DM-2.2 through DM-16~~	~~2.5 feet~~	~~3-17~~	~~3-17~~	~~4-26~~	~~3-26~~	~~3-23~~	~~4-26~~
~~Sludge storage (WP-9.1 A, B)~~	~~2.5 feet~~	~~4, 5~~	~~6, 7~~	~~7, 8~~	~~6, 7~~	~~6, 7~~	~~6, 8~~
~~Land treatment unit (LTU)~~	~~5 feet~~	~~Not reported~~	~~Not reported~~	~~Not reported~~	~~Not reported~~	~~Not reported~~	~~Not reported~~

~~21. As shown above, the Discharger was in violation of Construction Specification D.2 at DM-1 for the March and May 2011 monitoring events[7]. It is unknown if there were other violations as, in general, the monitoring reports do not clearly show whether the Discharger is complying with Construction Specification D.2 and therefore with Prohibition A.4. For example, the Discharger rounds the groundwater elevation to the nearest foot, groundwater data is interpolated from site-wide gradient maps, some of the monitoring wells that appear to be used for compliance are on the other side of the slurry wall from the pan lysimeters, and the Discharger does not monitor for groundwater elevation at the LTU. In addition, references for the source of the sump elevations (i.e., as-built drawings with final survey data) and the elevations of the lowest point in the modules (i.e., the pan lysimeters) are not provided in the Discharger's monitoring reports. Although the Discharger has stated that it believes its monitoring and reporting practices to be appropriate, Water Board staff finds that it is not possible to determine whether the Discharger is in compliance with the required separation to groundwater.~~

~~22. In order to fully evaluate compliance with Construction Specification D.2, and to determine whether or not there is a threatened discharge in violation of Prohibition A.4, this Order provides a time schedule (a) for the Discharger to install monitoring devices specifically designed to determine compliance with Construction Specification D.2, (b) for the Discharger to demonstrate compliance with Construction Specification D.2 by using the closest well or piezometer to the LCRS, (c) by reporting the elevations in units of ±0.1 foot, (d) for the Discharger to propose a method to immediately lower the groundwater in the event that a violation of Construction Specification D.2 is reported,~~

[7] ~~The Discharger asserts that the lack of separation was due to intermittent borrow pit dewatering.~~

~~and (e) for the Discharger to submit as-built drawing records which document the surveyed elevation of the bottom of each disposal module's sump.~~

[Explanatory Note for Findings 19-22: The findings and provisions of the Tentative Order related to the separation between waste and groundwater should be deleted in their entirety. There is no current or threatened violation and the matter is not appropriate for inclusion in the Tentative Order.

As we explained in our June 5 Technical Appendix in this matter (see, e.g., Items #51-53), Recology strongly disagrees that it is not possible to determine compliance with the groundwater separation specification (Construction Specification D.2) using the existing groundwater monitoring network and methodology. Hydrogeologic interpretations using industry-standard methods are employed to determine the groundwater elevations and to calculate groundwater separation beneath the respective waste modules. Further, as previously explained in the June 5 Technical Appendix, the existing slurry wall does not appreciably influence groundwater elevations on either side of the wall, thereby negating any potential affects this feature might have on data interpolation.

The hydrogeologic analysis conducted for the site provides all the pertinent information needed to ascertain compliance with the applicable specification, including sump elevation, groundwater elevation beneath the sump, and the corresponding groundwater separation for each waste module, except the LTU, which will be incorporated in future reports in response to questions raised by Regional Board staff. The technical approach that is used is scientifically appropriate and allows for reasonable interpretation of the groundwater separation characteristics. As demonstrated in the table included in Finding 20 of the current version of the Tentative Order, which was generated using data from Golder's semi-annual reporting, the hydrogeologic analysis shows the separations and whether compliance with the requirements has been achieved (except for the LTU as explained above, which will be included in future reporting).

With respect to the previous non-compliance for DM-1 in March and May of 2011, as explained in our June 5 Technical Appendix in this matter, this was a temporary condition that occurred at a time when Recology was unable to discharge extracted borrow pit water on a regular basis. This problem, which occurred more than three years ago, has been rectified and compliance is now being achieved, as demonstrated by the recent reporting. There is no current or threatened violation of the WDRs and this issue should not be included in the Tentative Order.

With respect to the claim in Finding 21 that the reference sources are not provided, this is not an appropriate matter for an enforcement order. If Regional Board staff would like to know the source of the information for the sump elevations and for the lowest point in the modules, this information simply can be requested by letter and will be provided, without the need for a formal Cease & Desist Order before the Board. In fact, this information was provided in the as-built certification reports submitted to Regional Board staff following construction of the respective waste modules.

Thus, it is our opinion that expanding the monitoring network to further evaluate groundwater separation is not necessary as the existing groundwater monitoring well network is sufficient to determine the groundwater elevation beneath each leachate sump with reasonable accuracy. The current method already uses the closest groundwater monitoring well or piezometer to determine the groundwater elevation beneath each leachate sump, in addition to standard hydrogeologic practice of constructing a groundwater surface contour map that depicts the groundwater elevations throughout the site. As presented in the table included under Finding 21 of the current version of the Tentative Order, data since 2012 shows adequate separation; for the majority of landfill modules, the separation is many feet more than the applicable requirement. As a result, the requirement for additional, costly monitoring – which would be designed to determine compliance with a requirement where the data already shows compliance and there is no evidence of a current or threatened violation – is redundant, unnecessary, overly burdensome and not a basis for a Cease & Desist Order.]

RUNOFF AND DRAINAGE CONTROLS

23. Section 20365 of Title 27 defines the performance standard for landfill runoff and drainage controls, and states: "*Units and their respective containment structures shall be designed and constructed to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping under the precipitation conditions specified in Table 4.1 (of this article).* Prohibitions A.4 and A.5 of the WDRs prohibit the discharge of waste constituents to the unsaturated zone or to groundwater and prohibit the discharge of waste outside of a unit or portions of a unit.

24. Inadequate drainage may lead to slope failure and/or the creation of leachate, and result in a threatened discharge of waste or waste constituents, in violation of Prohibitions A.4 and A.5. The WDRs include Facility Specification C.10 which provides a performance measure for drainage controls, and states: "*Precipitation and drainage control systems shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface runoff under 1,000-year, 24-hour precipitation conditions.*"

25. During a 31 January 2014 site inspection, Water Board staff observed that the storm water down drains and ditches appeared to be undersized and/or inadequately graded to allow stormwater runoff to move off the landfill as quickly as possible.

26. Inadequate drainage may result in oversaturation of the slopes potentially resulting in a slope failure. Inadequate drainage may also allow stormwater to percolate into the waste mass which contributes to the creation of leachate and landfill gas. ~~The Discharger has reported that following periods of heavy rainfall[8,9], liquids have been detected in the pan lysimeters at DM-2.2, DM-4, DM-5.1, and DM-11. The Discharger also states that liquid found in pan lysimeters is due to stormwater infiltration, but does not believe its cause to be the result of inadequate sizing of the drainage control systems.~~ This Order requires the Discharger to re-evaluate its drainage control systems <u>associated with the Class II landfill disposal modules</u> to ensure that they comply with Specification C.10 of the WDRs.

~~[8] Investigations for Pan Lysimeters PL-2.2A, PL-5.1A, and PL-5.1B, Hay Road Landfill, Inc., July 2005.~~
~~[9] WDRs R5-2008-0188, Finding 42.~~

[Explanatory Note for Finding #26: The third and fourth sentences in this finding should be deleted. The collection of liquids in the pan lysimeters is a separate issue from the sizing of the drainage control systems, which is the subject of this finding. In addition, Recology already has committed to Regional Board staff to evaluate on-site drainage control systems and to implement any necessary improvements, so a dispute in the Tentative Order on this point is unnecessary.]

INTERIOR LANDFILL SLOPE STABILITY

~~27. As required by Title 27, the Discharger prepared a slope stability analysis which is included in the 2007 Post Closure and Post Closure Maintenance Plan (PCPCMP). This plan was approved in the WDRs, and Findings 98 and 101 state that that the final cover's side slopes will have a maximum slope of 4H:1V (horizontal-to-vertical). A slope steeper than 4H:1V could result in an unstable condition and movement of the wastes and/or cover. This could result in a discharge of waste in violation of WDR Prohibitions A.4 and A.5.~~

28. Figure 1 of the Discharger's 2013 Winterization Plan indicates that the uppermost slopes and/or stockpiles at DM-1, DM-2.2, and DM-11 are in the range of approximately 2.5H:1V. ~~, which is steeper than the 4H:1V slope approved by the WDRs. These interior slopes may not meet the stability requirements of~~ Facility Specifications C.2 of the WDRs~~, which~~ states: "Waste filling at landfill modules shall be conducted in accordance with a fill plan demonstrating that all temporary refuse fill slopes will be stable under both static and dynamic conditions for the design event for the unit." ~~The 2007 PCPCMP does not address the appropriate slope for interim, interior areas of the landfill. Therefore, t~~This Order requires the Discharger to submit an analysis of the appropriate slope for "temporary refuse fill slopes" that have not been previously evaluated and demonstrated to meet stability requirements under Facility Specification C.2, ~~using the performance criteria of Title 27,~~ and if necessary, make facility modifications to comply with this Specification.

[Explanatory Note for Findings #27-28: Finding #27 should be deleted, since it deals with ***final***, not ***temporary***, slopes. Finding 98 of the WDRs explains that the "***final cover side slopes*** will have a maximum slope of 4:1 (horizontal-to-vertical)" (emphasis added); there is no reference to temporary slopes. Similarly, Finding 101 of the WDRs specifies that the "***final cover grades***" will "maintain a maximum side-slope inclination of 4H:1V" (emphasis added) and does not apply to temporary slopes. Likewise, Finding 108 of the WDRs refers to the 4H:1V slope for the "***final cover*** component stability analyses" (emphasis added) and does not mention temporary slopes. As explained in Finding 98 of the WDRs, Recology submitted a Post Closure and Post Closure Maintenance Plan (PCPCMP) in 2007 – this plan specifically addresses the conditions occurring after closure of the landfill and therefore does not include temporary slopes before final closure.

With respect to temporary slopes, Facility Specification C.2 of the WDRs states that waste filling at landfill modules "shall be conducted in accordance with a fill plan demonstrating that all temporary refuse fill slopes will be stable under both static and dynamic conditions for the design event for the unit." Unlike the specification for final slopes (see Closure Specification

F.4), this Facility Specification does not require or refer to a 4H:1V slope for temporary slopes. Rather, this specification requires merely that the temporary slopes are stable as shown in a fill plan. In accordance with this specification for temporary slopes, prior to the construction each disposal module, a design report – including interim refuse fill plans with supporting slope stability calculations – is submitted to Regional Board staff.

The assertion in Finding 27 of the current version of the Tentative Order that a steeper slope than 4H:1V "could result in an unstable condition" is misleading. The 4H:1V requirement provides for an added factor of safety for stability for final slopes; this does not mean that the same slope is required or warranted to demonstrate the stability of temporary slopes. This is why the specification for final slopes (Closure Specification F.4) and the specification for temporary slopes (Facility Speciation C.2) are written differently.]

FLOOD PROTECTION

29. Finding 11 of the WDRs states that about one-half of the existing landfill and 80% of the expansion area are within the 100 year floodplain, which is estimated to be at an elevation of 25 feet MSL. Federal regulations, as incorporated by State Water Board Resolution 93-62, require that a discharger whose new or existing landfills are located within a 100 year floodplain must demonstrate that the landfill location will not "result in the washout of solid waste so as to pose a hazard to human health or the environment". The Discharger has stated that there is a 40 foot MSL exterior perimeter berm around most of the landfill, except for portions of module DM-1. This berm has a dual purpose and is intended both to prevent the washout of waste in a 100-year flood and to provide additional stability.

[Explanatory Note for Finding #29: See Item #76 in the Technical Appendix to Recology's June 5, 2014 submittal on this matter, which explains the dual purpose of the 40-foot height of the berm.]

30. The WDRs require that the facility be protected from a 100-year flood and also prohibit the discharge of waste outside a unit. Specifically,

> Construction Specification D.9 states: *The Discharger shall construct and maintain berms along the exterior of each landfill unit as necessary to prevent inundation and washout of wastes from a 100-year flood.*
>
> Facility Specification C.12 states: *The Discharger shall prevent floodwaters from a 100-year flood from contacting wastes in a disposal module. As the site is developed, a flood protection and slope stability levee (or berm) shall be constructed around the site to at least 40 feet above mean sea level to prevent flood waters from a 100-year flood from entering the site.*
>
> Prohibition A.5 states: "*The discharge of wastes outside of a Unit or portions of a Unit specifically designed for their containment is prohibited.*"

31. Inadequate flood protection creates a threatened discharge of waste during a flood event, in violation of WDR Prohibition A.5. The Discharger's 2013 topographic site plan (i.e., the Recology Hay Road 2013 Winterization Plan) indicates that some exterior berms along the north side of the facility may not meet the specification ~~flood protection requirements~~ in the WDRs of a berm height of at least 40 feet MSL around the site. In addition, the Discharger has stated that in addition to providing flood protection, the berm "provides additional stability against global failure of the waste mass (movement along the base liner system)." However, the Discharger has also stated[10] that the 100-year flood elevation is at about 25 feet, and therefore Facility Specification C.12 should be re-evaluated. Therefore, this Order requires that either the Discharger (a) submit a site drawing which indicates the location, distance, and height of all ~~flood-control~~ perimeter berms, and indicates whether the berms meet~~s~~ the requirements of the WDRs, or (b) submit a RWD requesting a change to Facility Specification C.12 and including an engineering evaluation of the height of the berms necessary to provide stability to prevent global failure of the waste mass.

[Explanatory Note for Finding 31: We believe that Facility Specification C.12 conflates the issues of flood control and waste mass slope stability. As Finding 11(3) of the WDRs states: "Most of the existing landfill and developed portions of the expansion area are equipped with a 40 foot MSL elevation exterior perimeter berm, except for the northern and western boundary of DM-1 which have an exterior perimeter berm of about 30 feet MSL. The elevation of the surrounding terrain ranges from about 2 to 30 feet MSL. The 100-year flood elevation is estimated to be 25 feet MSL. These WDRs contain a construction specification (D.9) requiring the Discharger to construct and maintain exterior perimeter berms around all landfill units as necessary to prevent inundation from a 100-year flood." As a result, this specification likely will require revision to distinguish between the flood control and stability purposes of the berms.]

REGULATORY CONSIDERATIONS

32. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. These requirements implement the Basin Plan.

33. The site is in the Putah plain, which is drained by natural and man-made watercourses. The nearest surface water is the Alamo Creek A-1 Channel, which is an agricultural drainage canal that flows along the north and east sides of the site. The A-1 Channel drains to Ulatis Creek about three miles southeast of the site, then to Cache Slough and the Sacramento-San Joaquin Delta. As described in the Basin Plan, the designated beneficial uses of the Sacramento-San Joaquin Delta are municipal and domestic supply; agricultural supply, industrial supply, industrial process supply, water contact recreation, non-contact water recreation, warm fresh water habitat, cold freshwater habitat, migration of aquatic organisms, spawning, reproduction, and/or early development, wildlife habitat, and navigation.

[10] 5 June 2014 Recology comments on draft CAO

34. The designated beneficial uses of the underlying groundwater, as specified in the Basin Plan, are domestic, agricultural, and industrial supply.

35. Water Code section 13300 states in relevant part,

Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board . . . , the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.

~~Water Code section 13301 states in relevant part,~~

~~When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action.~~

36. As a result of the events and activities described in this Order, the Central Valley Water Board finds that a discharge of waste is taking place or threatening to take place in violation of WDRs Order R5-2008-0188. This Order requires the Discharger to take appropriate remedial action and to comply in accordance with the time schedule set forth below.

37. Water Code section 13267 subdivision (b)(1) states, in relevant part:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region … shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

38. The technical reports required by this Order are necessary to ensure compliance with this Order and WDRs Order R5-2008-0188, and to ensure the protection of water quality. Recology Hay Road owns and operates the facility that discharges waste subject to this Order and WDRs Order R5-2008-0188.

39. The issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) pursuant to California Code of Regulations, title 14, sections 15061 subdivision (b)(3), 15306, 15307, 15308, and 15321subdivision (a)(2).

40. On XX October 2014, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider a ~~Cease and Desist Order under Water Code section 13301~~ Time Schedule Order under Water Code section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.

[Explanatory Note for Findings #35, #36, and #40: As we have noted previously, we believe the issues in the Tentative Order can be addressed administratively and cooperatively through the deliberative and well-established process of revising the WDRs, without the need for enforcement action. Our approach is to work with Regional Board staff to take action to address the staff's most substantive concerns.

As we have stated, Recology's goal is to move away from an adversarial enforcement process - a process which is both time consuming and costly for all parties - and return to the cooperative and collaborative approach that has been the hallmark of our working relationship over the past decades. If upon consideration, enforcement action is still deemed necessary, as we have indicated, we would like to explore with Regional Board staff, based on a resolution of the substantive issues that remain in dispute, the option of converting the Tentative Cease & Desist Order into an agreed-upon Time Schedule Order that Recology would submit for Board approval pursuant to Water Code section 13300.]

Part 2: Comments on the Order Provisions in the Tentative CDO

[Explanatory Note for all Provisions: In addition to the comments presented on the substance of the Provisions of the Tentative Order, Recology and its consultants believe that some of the deadlines included in the Tentative Order are not practicable to attain, particularly in light of the currently scheduled October 9-10 Board hearing date. We would like the opportunity to discuss with you revising the deadlines for a number of the technical reports that would be required, pegged to the date of final Board action, not the date the Tentative Order was issued by staff.]

Compost Area

1. By **1 November 2014**, the Discharger shall submit a Compost Area Stormwater Modification technical report documenting that it has made facility modifications such that (a) compost area stormwater and leachate are only discharged to lined ditches, the low-flow pond, and the high-flow pond, and (b) that compost area stormwater and leachate does not flow into the green waste pond. The report shall describe the modifications that have made and include diagrams and maps indicating flow directions.

2. **By ~~1 December 2014~~ [DATE TBD]**, the Discharger shall submit ~~either~~:

~~(a) a *Compost Ponds Re-Configuration* technical report documenting that it has made facility modification such that wastewater is stored in the low flow and high flow ponds as described in Finding 88 of the WDRs, or~~

~~(b)~~ a *Compost Ponds Water Balance* showing the capacity of the pond system (consisting of the low-flow pond and the high-flow pond) used to collect compost leachate and compost stormwater.~~whether or not the two ponds have the capacity to store all compost area leachate and stormwater generated during a 25 year return total annual precipitation event (i.e., 38.97 inches[11] as measured at Vacaville Station A00-9200-00).~~ Prior to completing the water balance, the Discharger shall contact Board staff to discuss the format and assumptions, which shall be shown in the final report. The water balance shall be calculated on a month-by-month basis, and shall include inflows, outflows, evaporation, and rainfall distributed appropriately over the months of the year. ~~The water balance shall clearly show all assumptions and shall state whether the two ponds have adequate capacity to store all flows generated during a 25 year return annual precipitation event. If they do not, then on the same date the Discharger shall also submit a *Plan for Removal and Disposal of Compost Leachate* that describes the steps that will be taken to ensure that the ponds do not overflow in a year with less than a 25 year return annual precipitation event.~~

3. **By [DATE TBD],** ~~If the Discharger does not submit the Compost Ponds Reconfiguration Report, then by 1 January 2015,~~ the Discharger shall submit a Report of Waste Discharge (RWD) requesting that the WDRs be revised to such that the two compost ponds may be operated in a manner other than as described in the WDRs. The RWD shall be submitted after consultation with Central Valley Water Board Permitting staff, in order to determine the supporting data which must be submitted. ~~In addition, until either the WDRs are revised or the ponds are reconfigured to comply with Finding 88 of the WDRs, the Discharger shall not allow water to overflow from either compost pond unless the yearly rainfall exceeds a 25 year return annual precipitation event.~~

[Explanatory Note for Provisions 2 & 3: These provisions should be revised to reflect the comments above regarding Findings #10-12. We do not believe that imposition of the 25-year annual return requirement is appropriate. The State Board has not yet proposed a draft General Order for composting operations for review and comment, let alone adopted a 25-year return requirement in a final General Order. Recology believes that the existing collections systems, which are sized to handle the annual average rainfall plus the 100-year storm event, are appropriately sized and are adequately protective of water quality. As we have indicated, there has been no discharge from the existing pond system, the amount of freeboard in both the ponds is closely monitored, and no discharge is allowed under current integrated water management and nuisance dust control practices.]

~~[11] For Station A00 920 0000 at ftp://ftp.water.ca.gov/users/dfmhydro/Rainfall%20Dept-Duration-Frequency/Rain%20D%20DDF%20Daily/~~

4. By **[DATE TBD]**~~15 December 2015~~, the Discharger shall submit a Food Waste Composting technical report documenting the facility modifications that have been made such that all food waste composting is conducted in an in-vessel manner, as required by Discharge Specification B.27 of the WDRs. Alternatively, after consultation with the Central Valley Water Board's Permitting Unit, the Discharger may submit a RWD requesting that the WDRs be revised in order to allow that food waste composting take place outside of vessels. The RWD must (a) show how non-vessel composting will be protective of water quality and prevent nuisance conditions,, and (b) be submitted by **[DATE TBD]**~~1 January 2015~~, in order to allow time for revised WDRs to be considered prior to this Order's ~~15 December 2015 date~~ **[DATE TBD]** to return to in-vessel composting. If the WDRs are not revised by **[DATE TBD],** ~~15 December 2015, then the Discharger must comply with Discharge Specification B.27.~~ the Executive Officer may extend the deadline above to return to in-vessel composting, if circumstances warrant.

[Explanatory Note for Provision 4: In addition to revising the applicable deadlines, the opportunity should be left open for an extension by the Executive Officer of the final deadline to return to in-vessel composting, if circumstances warrant such an extension.]

5. **By** **[DATE TBD]** ~~**15 December 2015**~~, the Discharger shall submit a Compost Leachate Dust Control technical report documenting that leachate from the compost ponds are no longer used for dust control on the landfill. Alternatively, after consultation with the Central Valley Water Board's Permitting Unit, the Discharger may submit a RWD requesting that ~~Discharge Specification B.13 of~~ the WDRs be revised in order to specifically allow the use of **treated** compost leachate as dust control. The RWD must (a) describe how the **treated** leachate will be applied in a manner that protects water quality and (b) be submitted by **[DATE TBD]** ~~**1 January 2015**~~, in order to allow time for revised WDRs to be considered prior to this Order's **[DATE TBD]** ~~15 December 2015~~ date to cease the use of compost leachate for dust control. If the WDRs are not revised by **[DATE TBD],** the Executive Officer may extend the deadline above to cease use of compost leachate for dust control, if circumstances warrant~~15 December 2015, then the Discharger must comply with Discharge Specification B.13.~~

Prior to **[DATE TBD]** ~~**15 December 2015**~~, if the Discharger uses compost leachate as dust control, it ~~shall do so in a manner described by Discharge Specification B.13, and~~ shall maintain a log of the use. The log shall include date, volume used as dust control, source of water (i.e., which pond), and location of use. The log shall be submitted with the semiannual monitoring reports.

[Explanatory Note for Provision 5: This second paragraph of this provision could be construed to prohibit using treated compost leachate for dust control prior to December 15, 2015; this conflicts with the first sentence of the Provision, which indicates that use of treated compost leachate for dust control must cease by December 15, 2015 (in the absence of revised WDRs). Also, in addition to revising the applicable deadlines, the opportunity should be left open for an extension by the Executive Officer of the final deadline to cease using compost leachate for dust control, if circumstances warrant such an extension.]

~~Engineered Alternative~~

~~6. **Beginning with the fourth quarter 2014**, the Discharger shall report compliance with Discharge Specification D.2 (separation between waste and groundwater) using the groundwater monitoring point closest to each LCRS sump and reporting data in units of 0.1 foot.~~

~~7. By **15 March 2015**, in order to demonstrate whether the facility is in compliance with the required separation between waste and underlying groundwater, the Discharger shall submit (a) as-built drawing records which document the surveyed elevation of the bottom of each disposal module's sump, and (b) a *Well Installation Workplan* that contains the items listed in the first section of Attachment A to this Order. The workplan shall propose the installation of a piezometer or monitoring well as close as possible to *each* LCRS sump, and screened from the bottom of the LCRS sump to at least 5' below the sump. If the Discharger believes that an existing monitoring well is close as possible to an LCRS sump, then prior to the date that this workplan is due, the Discharger may discuss the issue with staff. However, unless provided written approval from the Executive Officer otherwise, the workplan due on 15 March 2015 shall contain a proposal for installation of a piezometer or monitoring well as close as possible to *each* LCRS sump.~~

~~8. By **15 June 2015**, the Discharger shall submit a *Well Installation Report of Results* that contains the information listed in the second section of Attachment A to this Order. The report shall document the installation of piezometers or monitoring wells next to each LCRS sump.~~

~~9. By **15 June 2015**, the Discharger shall submit a *Groundwater Lowering Workplan* containing a proposed method to immediately lower the groundwater in the event that a violation of Construction Specification D.2 is reported. If facility modifications are needed to implement the workplan, then a proposed timeline shall be included.~~

[<u>Explanatory Note for Provisions 6-9</u>: As explained above, Recology does not believe these requirements are appropriate. There is no violation or threatened violation of the requirements pertaining to the separation between waste and groundwater. The issue of past non-compliance in 2011 was temporary and has been rectified, and the data and methodologies used are sufficient to show ongoing compliance with the WDRs. Also, as we have previously indicated in response to this issue as raised by Regional Board staff, future reporting will include the data for the LTU.]

Runoff and Drainage Controls

10. By **15 March 2015**, the Discharger shall submit a Runoff and Drainage Controls technical report which re-evaluates whether the current controls associated with the Class II landfill disposal modules comply with Specification C.10 of the WDRs. If they do not, then the report shall also include a workplan and proposed schedule to return to compliance.

[Explanatory Note for Provision 10: This finding should be revised to make clear that the re-evaluation of precipitation and drainage controls applies to the landfill, and not the composting facilities.]

Interior Landfill Slope Stability

11. By **[DATE TBD]** ~~**15 March 2015**~~, the Discharger shall submit an Interior Landfill Slope Stability technical report containing an evaluation of whether or not interior slopes that that have not been previously evaluated and demonstrated to meet stability requirements under Facility Specification C.2 ~~are steeper than 4H:1V~~ comply with the Specification. ~~criteria of Title 27 section 21750. The report shall contain a map showing the existing slope (H:V) for all interior landfill areas.~~ If the evaluation shows that the current interior slopes do not meet Facility Specification C.2, ~~the Title 27 criteria,~~ then the Discharger shall include a workplan and proposed timeline to correct the slopes.

[Explanatory Note for Provision 11: As explained above in the comments to Findings #27-28, the 4H:1V slope requirement applies to final slopes, not temporary slopes. Whereas the final slopes are subject to Closure Specification F.4, temporary slopes are subject to a different provision, Specification C.2, which does not include the 4H:1V requirement.]

Flood Protection

12. **By [DATE TBD]** ~~**1 January 2015**~~, the Discharger shall either submit (a) a Flood Protection technical report containing a site drawing which indicates the location, distance, and height of all flood-control berms, and description of whether the berms comply with WDR Specifications C.12 and D.9, and if not, a workplan and proposed timeline to return to compliance, or (b) a RWD requesting a change to Specifications C.12 and D.9, including an engineering evaluation of the height of the berms necessary to provide stability to prevent global failure of the waste mass.

Other Requirements

13. ~~**Effective immediately,**~~ With respect to future submissions by the Discharger, all data, technical reports and plans, and monitoring reports shall be uploaded to the State Water Resources Control Board's web-based Geotracker database system (http://geotracker.waterboards.ca.gov), in compliance with the requirements of Title 23 Section 3890 et seq. This includes uploading all reports, plans, and data required under this Order and under any Order or permit issued by the State Water Quality Control Board.

14. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California Registered Engineer or Professional Geologist and signed by the registered professional. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

15. As required by Provision G.6a and G.6e of WDRs Order R5-2008-0118, all reports and transmittal letters shall be signed by a principal executive officer of the corporation with at least the level of senior vice-president, and any person signing a document submitted to comply with this Order shall make the following certification:

> *I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*