CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R5-2015-0502

RECOLOGY, INC. DBA RECOLOGY YUBA SUTTER
RECOLOGY YUBA SUTTER LANDFILL
YUBA COUNTY

PROSECUTION TEAM'S LEGAL AND TECHNICAL ANALYSIS SUPPORTING ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R5-2015-0502

Table of Contents

I. Introduction 1

II. Site Background 1

III. Prior Enforcement Orders of the Central Valley Water Board 2

IV. Events Leading Up to, and Including, the 3 December 2014 Storm Event 3

V. Events Subsequent to the 3 December 2014 Storm Event, Including the 11 December 2014 Storm Event. 6

VI. The Proposed Administrative Civil Liability for the Violation of Ordered Paragraph 9 in the Amended CAO is Appropriate. 8

a) The Number of Days of Violation is Calculated Appropriately Beginning on 1 October 2014. 8

b) The Underlying Facts Justifying the Issuance of the CAO also Justify a Moderate Potential for Harm Determination. 9

c) Culpability Factor is Appropriately Determined as 1.3. 10

VII. Conclusion 11

I. Introduction

The Central Valley Water Board Prosecution Team recommends the Central Valley Water Board assess an administrative civil liability in the amount of four hundred forty thousand four hundred forty dollars ($440,440) against Recology, Inc. dba Recology Yuba Sutter (hereinafter Discharger) for failing to comply with Amended Cleanup and Abatement Order (Amended CAO) R5-2013-0704-01. Specifically, the Prosecution Team alleges that, despite repeated concerns expressed by Board staff, the Discharger failed to install an operational compost leachate collection system by 1 October 2014 that complied with the agreed upon standard (as memorialized in the Amended CAO) to contain all leachate[1] generated from rainfall events up to and including a 25-year, 24-hour storm event of 3.16 inches. The Prosecution Team asserts that the proposed administrative civil liability is appropriate for the reasons explained in Administrative Civil Liability Complaint (Complaint) R5-2015-0502, Attachment A to the Complaint, and for the reasons discussed herein.

II. Site Background

The Discharger owns and operates a closed Class III landfill (Facility) located 3001 N. Levee Road, Marysville in Yuba County. On 14 May 2003, the Central Valley Water Board issued Waste Discharge Requirements (WDRs) Order R5-2003-0093 which prescribes requirements for post-closure maintenance, corrective action, and monitoring and reporting for the waste management units (LF-1, LF-2, and LF-3) still remaining at the Facility. While the Discharger no longer operates the Facility as an active landfill, the Discharger conducts several operations on top of the closure cover of waste management unit LF-1, including storage and processing of green waste and green waste composting. The compost operation covers approximately 16 acres of LF-1 and is permitted by Yuba County to maintain a maximum capacity of 40,000 tons of material on-site at any time and to accept no more than 400 tons per day of green waste.

The composting operations occurring on top of the landfill closure cover are not directly regulated by the existing WDRs, however, the composting activities of the Discharger have the potential to affect water quality and are, at times, the cause of the Discharger's noncompliance with certain WDR Facility Specifications. Given the composting activities' potential to affect water quality, Board staff regularly includes the facility's composting operations as part of their site inspections. One of the reasons for issuing the CAO and Amended CAO was to obtain technical information specific to the compost area in order for permitting staff to prepare a comprehensive updated WDRs that would directly regulate both the closed landfill and the compost area. The updated WDRs are currently scheduled for consideration at the June 2015 Board meeting.

[1] "Leachate" refers to a mixture of leachate from the compost piles and green waste area and stormwater that comes into contact with the compost area operations.

III. Prior Enforcement Orders of the Central Valley Water Board

As mentioned above, the Discharger's active composting operations on top of the closed landfill are not directly regulated by the current WDRs which focus on post-closure maintenance and corrective action measures to remediate releases from closed waste management units. However, the Discharger's composting activities on top of the cover have led to noncompliance with WDR specifications and have contributed to conditions of pollution in areas underlying the Facility. Board staff previously noted the rutted and uneven condition of the compost area's ground surface which prevents positive drainage off the cover of LF-1 and results in ponding and infiltration of liquid into the waste mass, which is a violation of Facility Specification B.12 of the WDRs. Additionally, staff issued a 14 April 2011 Notice of Violation based on continued volatile organic compound detections in groundwater monitoring wells and determined that a release had occurred from LF-1 occurred which is adversely affecting the underlying groundwater. (CAO Finding 15; 14 April 2011 Notice of Violation.) In response, the Discharger stated in a *Corrective Action Effectiveness Report*, "the data indicate that infiltration into the landfill during wetter years could be the cause of increased leachate or increased landfill gas influence on groundwater." (CAO Finding 16.) It is commonly understood that liquids, (including, in this case, stormwater and compost leachate) which infiltrate into to the waste mass below a landfill's closure cover contributes to the generation of landfill gas, which in turn migrates downward, and impacts groundwater quality.

Furthermore, on 30 November 2012, Board staff conducted a site inspection which included an inspection of the active composting area. (6 March 2013 Inspection Report.) Staff observed leachate ponding at the toe of a composting pile in the active compost area over LF-1. (Photo 15; 6 March 2013 Inspection Report.) Staff collected a sample (S-1) from this location at the toe of the composting pile and the results were included as Attachment 4 to the 6 March 2013 Inspection Report. Sampling results indicate that Basin Plan objectives or water quality criteria and/or USEPA industrial stormwater benchmarks were exceeded for a number of constituents analyzed in the sample. (6 March 2013 Inspection Report, Attachment 4 Laboratory Results.) The analytical results indicate that leachate generated from the compost operation has the potential to harm groundwater or surface water quality.

On 29 August 2013, the Assistant Executive Officer of the Central Valley Water Board issued Cleanup and Abatement Order (CAO) R5-2013-0701 to address, in part, the issues discussed above. Since the WDRs do not directly regulate composting activities, the CAO also functioned as an interim mechanism to address water quality issues caused by such activities. The CAO represents a negotiated order as the Parties met on several occasions prior to CAO issuance to discuss the findings, requirements, and deadlines for deliverables. The discussions included the possibility of either a surface impoundment or above-ground tank compost leachate collection system for LF-1.

Ordered Paragraph 5 of the CAO required the Discharger to modify or install a low permeability compost pad to a) prevent ponding on top of LF-1, promote positive drainage, and prevent the percolation of liquids into the underlying waste mass, and therefore, b) prevent landfill gas generation and groundwater contamination.

Ordered Paragraph 9 of the CAO required the Discharger to implement measures for the proper control, drainage, and collection of leachate to prevent unpermitted discharges of waste from the facility and ponding on top of LF-1. The CAO required the Discharger to prepare a *Compost Area Leachate Collection Work Plan* (Work Plan) describing how leachate generated at the compost area would be managed. As a component of the Work Plan, the CAO required the Discharger to describe how its contact storm would be collected, conveyed, and stored in a containment system that met the minimum capacity specifications of Table 4.1 of Title 27 (a 1,000-year, 24-hour storm event). The CAO also required that the Work Plan include a water balance to justify the size of the containment system installed. Finally, the Work Plan needed to provide a construction schedule to ensure that the conveyance and containment systems were installed and operational by 1 October 2014. The Discharger did not petition the issuance of the CAO pursuant to Water Code section 13320. It should be noted that the CAO was issued prior to the 2013-2014 rainy season but intentionally required the installation of the compost leachate collection system prior to the 2014-2015 rainy season. Board staff intended to grant the Discharger one wet season to install a temporary system, to observe run-off patterns from the low-permeability compost pad, and to fully plan its final leachate collection system to comply with the 1 October 2014 deadline.

After the issuance of the CAO, the Parties frequently interacted and discussed the leachate collection system requirements in Ordered Paragraph 9 to ensure that the Discharger complied with the CAO in a manner that would support its compost operations at the facility. Following a meeting on 19 August 2014, the Parties agreed that the CAO's requirement to contain a 1,000-year, 24-hour storm event, while consistent with Title 27 requirements, was not consistent with the State Water Board's draft General Order for Composting Operations (draft General Order), and that it was appropriate to amend the CAO to mirror the draft General Order's requirements. Therefore, the Parties agreed that the Discharger would install a collection, storage, and transfer system designed to accommodate run-off from the compost area for all storms up to and including the 25-year, 24-hour storm event[2] and this agreement was subsequently memorialized in the Amended CAO on 13 January 2015. The effective date of the Amended CAO as agreed upon and stipulated to by the Parties, is 28 August 2014 (i.e, the date of subsequent electronic confirmation for all regulatory and enforcement purposes)(8 January 2015 email from Recology's counsel).

IV. Events Leading Up to, and Including, the 3 December 2014 Storm Event

Ordered Paragraph 9 of the Amended CAO required the submission of the *Compost Area Collection Work Plan* by 1 February 2014. The Discharger submitted a work plan, however, it lacked necessary information in that it only presented options, did not specify the type of containment system that would be installed, and did not meet the intent of the CAO. Subsequently, Board staff sent a 14 May 2014 Notice of Violation stating "the submitted plan does not contain the information required by the CAO." (14 May 2014 Notice of Violation.) The Notice of Violation also directed the Discharger to submit weekly progress reports containing the

[2] Defined as 3.16 inches of rainfall in a 24-hour period.

specific actions that the Discharger has undertaken to comply with Ordered Paragraph 9 of the CAO.

The Discharger submitted an *Amended Compost Area Leachate Collection Work Plan for Feather River Organics* on 30 July 2014. This document states that the leachate collection system would consist of six 21,000 Baker Tanks to contain 118,000 gallons of run-off. The calculated volume of leachate generated from 3.16 inches of rainfall, as determined by the Discharger's consultant, was 183,000 gallons and the Discharger proposed to dispose of the remaining 65,000 gallons to the City of Marysville's sanitary sewer system. However, as staff later determined during conversations with the City of Marysville representative, the Discharger did not have a permit to discharge into the City's sanitary sewer system.

Board staff reviewed the 30 July 2014 water balance, and in particular, the run-off calculations. (24 February 2015 Staff Memorandum: Review of Recology's 30 July 2014 Amended Compost Area Leachate Collection Work Plan.) Staff determined that the volume of run-off calculated was severely underestimated by the Discharger.

In the 19 August 2014 meeting, the Parties discussed the Discharger's proposed compost leachate collection system and the stormwater run-off calculations used to justify the proposed capacity of that collection system as described above. Board staff raised concerns regarding the underestimated stormwater run-off volumes calculated in the collection system analysis. Concerns raised at this meeting were similar to those previously conveyed during a 6 August 2014 telephone call between the Discharger, its consultants, and Board staff. At the close of the meeting on 19 August 2014, the Discharger conveyed to Board staff that it would install a collection, storage and transfer system designed to accommodate run-off from the compost operations footprint for the 25-year, 24-hour storm event by 1 October 2014. (27 August 2014 letter *Confirmation of Understanding Regarding Continued Operations of Feather River Organics Compost Operation, Recology Yuba Sutter, Marysville.*) Furthermore, the Discharger indicated that it would seriously consider the Board's stated concern over the stormwater run-off model and on-site storage capacity and evaluate the benefit of adding additional storage tanks for a measure of conservatism. (*Id.*) Staff responded via email on 28 August 2014, expanding upon the Discharger's summary of agreements made during the 19 August 2014 meeting. In particular, staff stated that the system must be designed to collect "all rainfall, up to and including, a 25-yr, 24-hr storm event" and that if the Discharger's system cannot collect this amount, then "the Prosecution Team will recommend additional enforcement."

On 4 September 2014, Board staff conducted a site inspection of the compost area and leachate collection system. Staff met with the Discharger's representatives and their primary consultant, Golder Associates. The group reviewed a current site map showing placement of the six storage tanks, sumps, and drainage controls. During the site inspection, the Discharger informed staff for the first time that it planned to place an additional six Baker Tanks on-site for a total of twelve 21,000 Baker Tanks (252,000 gallons) prior to 1 October 2014. It is unclear whether the Discharger added these tanks solely in response to Board staff concerns raised on 6 August and again on 19 August 2014. It is further unclear what informed the Discharger's

decision, such as a technical analysis, to add more storage tanks to the collection system. The Discharger had previously indicated that the original six tanks would be sufficient based on its consultant's calculations and as of the 4 September 2014 inspection, no new water balance had been conducted demonstrating or confirming how many additional tanks would more effectively collect, convey, store, and dispose of leachate. Though the 4 September 2014 site inspection indicated that improvements to the compost area and compost leachate collection system were underway, the site inspection also indicated that additional work was required prior to the wet season to comply with the requirements in Ordered Paragraph 9. (30 September 2014 Site Inspection Report.)

The total on-site storage capacity for the compost leachate collection system at the start of the rainy season was 252,000 gallons representing the twelve 21,000 gallon Baker Tanks. In its 29 October 2014 Quarterly Progress Report, the Discharger referenced the 30 July 2014 *Amended Compost Area Leachate Collection Work Plan* relating to the capacity upgrades to handle the 25-year, 24-hour storm event and confirmed that "[t]he required system was installed and operationally complete by October 1, 2014."

On 3 December 2014, staff conducted a wet weather site inspection to evaluate performance of the leachate collection system during a moderate storm. During the 24-hour period from 4:00 am on 3 December to 4:00 am on 4 December, approximately 1.83 inches of precipitation fell on the site, as measured at the Yuba County Airport weather station. This amount of rainfall is significantly less than the 25-year, 24-hour storm event of 3.16 inches. One of the major issues staff observed during this inspection was the collection system's inability to contain and store all leachate generated from the compost area. Staff noted that the storage system had become overwhelmed by the volume of leachate generated by the storm and several storage tanks were overtopping. (18 December 2014 Inspection Report; Photos 7-9.) Leachate overtopping the storage tanks drained back to the lower berm in the northwestern compost area at a significant rate causing ponding over LF-1. (*Id.*; Photos 10-12.) Piping between the storage tanks ("transfer piping") was later noted by the Discharger as a potential cause of the overflowing storage tanks since inflow to the tanks could not be transferred to other tanks at an equal rate. (8 December 2014 *Preliminary Assessment of the Compost Stormwater Management System at the Feather River Organics Facility.*)

In addition to the system's inability to contain run-off generated during this storm event, staff observed two other incidents demonstrating the inadequacy of the collection system's performance. Leachate was flowing into the two northern sumps, but the pumps installed to pump the leachate from the sump to the storage tanks were overwhelmed by the volume of run-off from the compost area resulting in an unauthorized off-site discharge of leachate to the "Hog Farm" area. (*Id.*; Photos 13-16.) Staff noted similar collection system performance issues at the southwest sump which also became overwhelmed by the leachate run-off from the compost processing area indicating that it was either undersized, that the sump pump installed to pump and transport collected leachate to storage was undersized, or that both the sump and pump were undersized. (*Id.*; Photos 19-21.) Despite adding six additional Baker Tanks, more than the July water balance indicated was necessary, the Discharger was not able to contain run-off

generated from 1.83 inches of rainfall, which is less than the 3.16 inches required by the Amended CAO. The Prosecution Team further asserts that even if the Discharger managed to have an infinite number of Baker Tanks on-site for storing leachate, the unauthorized off-site discharge to the "Hog Farm" area and ponding on top of LF-1 would have likely still occurred due to undersized sumps, pumps, and transfer piping. According to the Discharger, during the 24-hour period between 3-4 December 2014, the Discharger disposed of approximately 160,000 gallons of leachate to the sanitary sewer system, more than the 65,000 gallons originally contemplated in the 30 July 2014 water balance. (5 December 2014 email from Recology staff to Dave Lamon, City of Marysville.) Despite disposing an increased volume to the City of Marysville's sanitary sewer system, the collection system was still overrun with leachate during this storm event.

V. Events Subsequent to the 3 December 2014 Storm Event, Including the 11 December 2014 Storm Event.

Following the 3 December 2014 storm event, the Discharger made a number of improvements to the collection system to address some of the issues staff observed during the 3 December 2014 site inspection. (8 December 2014 *Preliminary Assessment of the Compost Stormwater Management System at the Feather River Organics Facility.*) The Discharger's consultant recommended improvements in three areas; 1) prevent clogging with fines and sediments, 2) improve pumping capacity, and 3) increase storage. (*Id.* at 2.) With respect to its third recommendation, it stated, "Recology is mobilizing a total of 28 tanks on-site as a conservative measure until additional system analyses are completed." (*Id.*) Similar to previous collection system adjustments, the Discharger decided to increase its storage capacity to 588,000 gallons (28, 21,000 tanks) but as indicated by the Discharger's consultant, this decision appeared to be an untested measure of conservatism rather than a deliberate decision in response to an analysis justifying additional storage tanks.

On 9 December 2014, the Assistant Executive Officer issued an Investigative Order requiring the Discharger to submit technical reports in response to the 3 December storm event. The Investigative Order required, among other things, a reevaluation of the run-off coefficients used in the water balance analysis leading into the rainy season, a recalibration of the water balance based on rainfall data to date, and as a component of a revised water balance analysis, a disposal plan for leachate collected in the storage tanks so the upgraded system maintains its capacity to contain leachate generated in a storm event up to and including a 25-year, 24-hour storm event or smaller storm events occurring over multiple days. This Investigative Order sought critical information to understand the system's shortcomings observed on 3 December 2014 and to confirm whether the capacity upgrades to the collection system would in fact lead to compliance with the Amended CAO. Furthermore, given Board staff's initial concerns over the underestimated run-off calculation of 30 July 2014, this Investigative Order sought to compel the production of the more representative technical analysis with respect to the hydrology calculations supporting the water balance. At this point in time, the Discharger was implementing a reactive process with each storage capacity upgrade without a reexamination of the run-off calculations and/or verification through a revised water balance analysis whether the

additional tanks were justified and whether they would lead to compliance with the Amended CAO. Without this revised water balance and revised run-off calculation employing more representative data and addressing both volume to be contained and volume to be removed, neither the Discharger nor Board staff would be able to determine whether collection system upgrades complied with Paragraph 9 of the Amended CAO.

Staff conducted another wet weather site inspection on 11 December 2014 to evaluate the collection system's performance since the previous rain event and subsequent system upgrades. From approximately 4:00 am 11 December through the conclusion of the staff's inspection at 2:00 pm that same day, approximately 1.67 inches had fallen. A total of 32 Baker Tanks were placed at the site. However, upon arriving at the facility, staff observed the Discharger's employees and/or contractors still working to connect the storage tanks together via transfer piping, indicating that not all of the additional tanks were ready for active collection and storage. (15 December 2014 Inspection Report.) Staff observed that increased collection capacity at southwest sump had been achieved with straw bales and sandbags. (*Id.*; Photo 1.) However, this is considered a temporary measure and was not contemplated as part of the design of the collection system.

Since the 3 December 2014 unauthorized discharge, the Discharger had constructed a temporary visqueen pond as a "protective measure" to capture any leachate overflow from the northern sumps to the "Hog Farm" area. (8 December 2014 letter, *Feather River Organics, Marysville CA Central Valley Regional Water Quality Control Board December 3, 2014 Inspection*, p. 2.) The use of this visqueen pond of unknown capacity was not contemplated as part of the design of the compost leachate collection system. Though implemented as a temporary precaution, its temporary nature does not negate its status as an unpermitted pond. During the 11 December 2014 rain event, the northern sumps became similarly overwhelmed and staff determined that these sumps lacked the pumping capability to move the volume of leachate generated during this storm event to the storage tanks as designed. Due to this lack of pumping capacity, another unauthorized discharge of approximately 15,000 gallons occurred to the temporary pond in the "Hog Farm" area. Staff observed a large volume of leachate run-off collected in the visqueen pond during the 11 December 2014 site inspection. (15 December 2014 Inspection Report, Photo 5-6.) Though the Discharger eventually pumped this volume back to the storage tanks by the end of the day, the lack of capacity at the northern sumps ultimately caused the compost leachate collection system to fail to contain leachate generated from 1.67 inches of rainfall, a rain event approximately half of the 3.16 inches required to be contained by the Amended CAO. As a further demonstration of the lack of capacity in the compost leachate collection system, during this rainfall event the Discharger disposed of approximately 400,000 gallons of leachate to the City of Marysville's sanitary sewer system, which is significantly more than the 65,000 gallons originally contemplated by the 30 July 2014 water balance. (30 December 2014 Record of Communication to case file.)

VI. The Proposed Administrative Civil Liability for the Violation of Ordered Paragraph 9 in the Amended CAO is Appropriate.

As a result of the events described above, the Assistant Executive Officer of the Central Valley Water Board issued this Complaint alleging that the Discharger failed to comply with the 1 October 2014 requirement in the Amended CAO to have an installed and operational compost leachate collection in place that would contain all leachate generated from rainfall events up to and including a 25-year, 24-hour storm event of 3.16 inches. The Discharger's failure to comply with Ordered Paragraph 9 in the Amended CAO by the required deadline constitutes a non-discharge violation.

This requirement in Ordered Paragraph 9 of the CAO, and subsequent Amended CAO, represents the Board's expectation that the collection system ultimately installed by 1 October 2014 would be designed to the required standard and that each aspect of the system would be operational; meaning the system would properly pump, convey, contain, and dispose of leachate generated during rainfall events up to an including a 25-year, 24-hour storm event. As a result of this failure, at least two unauthorized releases of leachate have occurred demonstrating the collection system's inability to contain leachate as required by the Amended CAO. Though unauthorized "discharges" to the "Hog Farm" area occurred as a result of the failure to comply with the Amended CAO, the Prosecution Team is not assessing a separate penalty for the discharge itself pursuant to either Water Code sections 13350 or 13385 since the discharges did not reach waters of the State or United States, respectively.

In addition to the two instances of unauthorized discharges which illustrate the Discharger's failure to comply, one of the major hindrances to the Discharger's compliance with Ordered Paragraph 9 of the Amended CAO was its lack of a revised water balance analysis addressing both containment and disposal of leachate generated during from rainfall events up to and including a 25-year, 24-hour storm event. As explained in Attachment A to the Complaint, the water balance should include calculations justifying the volume of leachate generated during storm events, the volume of storage capacity that is required, and the volume of leachate disposed of between storms. The net difference between these values helps determine the size of the tank system required to meet the storm standard in the Amended CAO.

In accordance with the State Water Resources Control Board's Water Quality Enforcement Policy (Enforcement Policy) and Water Code section 13327, the Prosecution Team evaluated the factors in a ten-step methodology described in Attachment A to the Complaint. Rather than reiterating the analysis for each of the factors in Attachment A, the Prosecution Team is highlighting some of the critical factors contributing to its proposed liability amount.

a) The Number of Days of Violation is Calculated Appropriately Beginning on 1 October 2014.

The Prosecution Team alleges that the Discharger violated Ordered Paragraph 9 of the Amended CAO for a total of 112 days beginning 1 October 2014 (the deadline for compliance) and continuing through 20 January 2015 (the date the Complaint was issued), since at the time of Complaint issuance on 20 January, the Discharger continued to violate the Amended CAO

because it had yet to submit a complete revised water balance analysis for its upgraded collection system.

Cleanup and abatement orders are a type of injunctive relief in that the Board, through the order, directs or orders a certain type of action to "clean up the waste or abate the effects of the waste, or in the case of threatened pollution or nuisance, take other necessary remedial action." (Wat. Code § 13304, subd. (a).) These orders serve a prophylactic purpose to prevent further conditions of pollution or nuisance from occurring by ordering the implementation of some type of remedial action by date certain. To this point, the deadlines adopted in a cleanup and abatement order represent the Board's expected date certain for compliance with the corresponding directive to prevent further threats to water quality. The deadline for compliance with Ordered Paragraph 9 in the CAO and Amended CAO also represents the start of the rainy season making the Discharger's implementation of a fully operational compost leachate collection system by this date even more critical. Based on this understanding, Board staff did not contemplate that compliance with this Amended CAO would be achieved through an iterative process whereby the Discharger's system is tested and upgraded through trial and error after it was installed on 1 October 2014. Rather, Board staff expected the Discharger to not only install a compost leachate collection system by 1 October 2014 but ensure that the system ultimately installed was capable of containing run-off generated from storm events up to and including a 25-year, 24-hour storm as of that date, regardless of whether rain actually began on 1 October 2014.

It is important to note that the Prosecution Team does not believe that 3 December 2014 (the date of the system first failed) is an appropriate start date for the number of days of violation. This approach fails to give the requisite meaning to the Board established deadline in the Amended CAO and would effectively cause Ordered Paragraph 9 to be interpreted as "1 October 2014, or the actual date the system failed during a storm event, whichever is later." The Prosecution Team contends that this interpretation is inappropriate in light of the discussion above and would ultimately result in the Discharger gaining a windfall simply because it did not rain on 1 October 2014.

b) The Underlying Facts Justifying the Issuance of the CAO also Justify a Moderate Potential for Harm Determination.

Step 3 of the Enforcement Policy examines, among other things, the non-discharge violation's potential for harm to beneficial uses. The Prosecution Team determined that the Discharger's failure to comply with the Amended CAO presented a moderate threat to beneficial uses, meaning the characteristics of the violation present a substantial threat to beneficial uses, and/or circumstances of the violation indicate a substantial potential for harm.

It is important to understand the factual context surrounding the Discharger's composting operations to further understand why the violation at issue in the Complaint presents a substantial threat to beneficial uses. The Discharger's activities occurring on top of the closed landfill, i.e. the composting operations, are not directly regulated by the existing WDRs. However, because the composting activities contribute to the Discharger's noncompliance with

WDR Facility Specifications, staff regularly inspects the composting operations. Ponding of leachate on top of a landfill unit can percolate down into the waste management unit and contribute to landfill gas generation and groundwater degradation. Samples collected during a 30 November 2012 site inspection indicate that the leachate ponded on top of LF-1 at the toe of a compost pile is high strength waste that exceeds both Basin Plan water quality objectives and criteria and industrial stormwater benchmarks. (6 March 2013 Inspection Report, Attachment 4 Laboratory Results.) The findings of this inspection report combined with volatile organic compound detections in groundwater monitoring wells in LF-1 (14 April 2011 Notice of Violation) were the impetus for the corrective actions ordered in the CAO with respect to compost area improvements and leachate collection. Ordered Paragraph 9 of the CAO and Amended CAO aim to prevent leachate, similar to that collected during the 30 November 2012 inspection, from further contributing to conditions of pollution by ensuring that leachate is collected, contained, and disposed of appropriately.

Even though the unauthorized discharges to the "Hog Farm" area on 3 December and 11 December 2014 did not reach waters of the State or United States that does not necessarily denote an absence of harm or potential for harm to beneficial uses. Rather, the underlying cause of those unauthorized discharges – the failure of the collection system in violation of the Amended CAO – presents a substantial threat to beneficial uses because of the Discharger's failure to implement the corrective action necessary to prevent compost leachate from further contributing to water quality impacts.

c) Culpability Factor is Appropriately Determined as 1.3.

Step 4 of the Enforcement Policy examines the Discharger's degree of culpability regarding the violation. The Policy states, "[h]igher liabilities should result from intentional or negligent violations than for accidental, non-negligent violations." The inquiry to determine the Discharger's culpability for the violation examines what a reasonable and prudent person would have done or not done under similar circumstances.

As explained in previous sections and further in Attachment A to the Complaint, the Central Valley Water Board staff notified the Discharger that its stormwater run-off model supporting its proposed compost leachate collection system at the start of the rainy season grossly underestimated the amount of potential leachate run-off from the compost area. The model used by the Discharger uses Natural Resources Conservation Service (NRCS) Curve Numbers (CNs) as an input to approximate run-off. Lower CN values are used for surfaces with low run-off potential while high CN values are used for surfaces with high run-off potential. (24 February 2015 Technical Memorandum.) Upon reviewing the Discharger's 30 July 2014 analysis, Board staff had three particular areas of concern: 1) the CN value used for the impermeable area of the compost pad was too low; 2) the CN value used for the area covered with compost did not reflect realistic site characteristics; and 3) the use of the weighted CN method rather than the weighted Q (discharge) method resulted in an underestimation of the volume of run-off generated from 3.16 inches of rain. (*Id.*) Merely employing the weighted Q method alone, and keeping all other CN values the same, would have resulted in almost double the amount of estimated run-off. (*Id.*) On 6 August 2014 and again on 19 August 2014, Board staff raised

these issues regarding the accuracy of the hydrology calculations that conveyed skepticism with respect to the Discharger's estimated volume of 183,000 gallons of run-off.

To Board staff's knowledge, at no time prior to the 1 October 2014 deadline did the Discharger formally reexamine the CN values used to calculate the volume of run-off nor provide revised calculations to staff despite Board staff repeatedly raising concerns that the amounts were grossly underestimated. The Discharger did increase the originally proposed storage capacity from 126,000 gallons to 252,000 gallons, however, this decision did not appear to be informed nor verified by any sort of technical analysis. The Discharger's reexamination of the run-off calculation did not occur until 14 January 2015 when the Discharger submitted a revised water balance analysis in response to the Board's directive in the 9 December 2014 Investigative Order. Despite submitting a revised water balance on 14 January 2015, the Discharger remained in violation through 20 January 2015, the date the Complaint was issued, as it did not transmit its City of Marysville disposal permit to Board staff until 28 January 2015. The Discharger currently has 39 Baker Tanks onsite, for a storage volume of 819,000 gallons. This is over six times the storage capacity that the Discharger originally stated was required, supporting Board staff's statements that the run-off volumes were substantially underestimated.

The CAO required that the Discharger determine the type of leachate collection system it would install by 1 February 2014, and provide a water balance justifying its design. Had the Discharger submitted a work plan that was responsive to the CAO in February, the Discharger would have had ample opportunity to install a compliant system prior to the start of the rainy season. However, the work plan submitted on 31 January 2014 was deficient and did not meet the intent of the CAO as noted in the 14 May 2014 Notice of Violation. Given the level of Board staff's concerns and the discussions with the Discharger on two occasions in August (regarding the underestimated run-off calculation), the Discharger still had ample time to ensure that the installed collection system was appropriately sized based on valid hydrology calculations and that the collection system complied with requirements in the Amended CAO by 1 October 2014. For the foregoing reasons and the explanations previously provided in Attachment A to the Complaint, the Prosecution Team continues to assert that a culpability factor of 1.3 is appropriate.

VII. Conclusion

For the reasons stated above in the Prosecution Team's Legal and Technical Analysis, the Complaint, and Attachment A to the Complaint, the Central Valley Water Board should assess administrative civil liability in the amount proposed.

For the Prosecution Team:

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