Republic Services, Inc.  
West Contra Costa Sanitary Landfill  
Attn: Doug Brewer, PE Environmental Manager  
1 Parr Boulevard  
Richmond CA 94801  
Sent via email to dbrewer2@republicservices.com

Subject: Review of Slope Maintenance Work Plan and Notice of Violation - West Contra Costa Sanitary Landfill, Richmond, Contra Costa County

Mr. Brewer:

Republic Services West Contra Costa Sanitary Landfill (WCCLF) is in violation of the Regional Water Quality Control Board’s Updated Waste Discharge Requirements (WDR) Order No. R2-2002-0066. Provision C.20 of the WDR requires notification of any flooding, ponding, settlement, equipment failure, slope failure, exposure of waste, or other change in site conditions that could impair the integrity of the landfill cap, waste or leachate containment facilities, and/or drainage control structures and shall immediately make repairs. Water Board staff were not notified about a slope failure that was observed on April 11, 2017.

Contra Costa Environmental Health, Solid Waste Program (CCEH) and the Regional Water Board verbally requested a work plan during an April 11, 2017, site inspection to address slope failures along the south slope beneath the Construction and Demolition Processing Area (C&D area).

Regional Water Board staff have reviewed Work Plan – Slope Maintenance below the West Contra Costa Sanitary Landfill Construction and Demolition Processing Area, submitted by Geo-Logic Associates on June 26, 2017.

Timeline and Details Resulting in Violation

On April 11, 2017, Regional Water Board staff performed an inspection at the Site as a follow up to a Notice of Violation on February 10, 2017, which was issued to address numerous violations previously observed at the Site’s composting operation.

During the April inspection, staff observed a large slide on the upper slope on the south side of the C&D area (Attachment A). The slide exposed a layer of dark compost-rich material which was underlain by a light brown soil. The slide deposited debris over and below the central bench,
affecting surface drainage and providing substantial material available for erosion and deposition into Pond B below. The entire upper slope on the south side of the C&D area appeared to have been covered by plastic sheeting, although much of the area was exposed because the sheeting had been moved by the wind. Also during the inspection, Regional Board staff noted that the top deck around the compost operation appeared to have been extended outward, resulting in an over-steepened upper slope.

Following the April 11 inspection, Regional Board staff used online historic aerial photography to determine the timing and extent of slope modification at the Site. By comparing aerial views from October 2015 and March 2016 (Attachment B), staff determined that the C&D area deck had been expanded to the south approximately 40 feet. In addition, stockpiles of process materials and a concrete containment wall were also expanded south beyond the original slope break, further loading the already-steepened slope. Portions of the top deck around the composting operation have also been extended, resulting in over-steepened upper slopes especially along the north and west sides of the upper deck. We have no record that Republic Services notified the Regional Water Board or any other agency of this modification to the landfill slope, nor of the slope failures that occurred as a result.

Regional Water Board staff subsequently inspected the Site with staff from CCEH on June 12, 2017, and with CCEH, City of Richmond, and CalRecycle on August 2, 2017. The latter inspection was to evaluate the site with respect to the submitted Work Plan. During that inspection, Regional Water Board staff observed standing water (possibly leachate from the landfill or compost piles, considering that the ponded water appeared stagnant and could not have been derived from rainfall) in low spots along the bench below the upper slope at several locations along the south side of the landfill, including just below the over-steepened slope on the south side of the C&D area (Attachment C). Staff suspects this water may be seeps from ponded water on the decks above (including the C&D area and the compost operations) that infiltrated the cover and migrated along the low-permeability cap. If so, this in combination with over-steepening and loading heightens our concern over slope stability.

Provision C.20 requires a technical report within 30 days documenting the corrective measures taken. However, since the Regional Water Board was not informed of the slope failure until it was observed during our inspection on April 11, 2017, this report would have to have been submitted some time prior to mid-May 2017. This deadline has been missed.

**Work Plan Review**

Regional Water Board staff have reviewed the Work Plan for slope maintenance. While the Work Plan addresses correcting the south slope below the C&D area through reconstruction of the slope, it does not specify if the slope will be re-graded to the pre-modified conditions consistent with the approved Final Closure Plan. The Closure Plan, which is supported by a slope-stability evaluation, stipulates a maximum penultimate slope angle of 3.5:1 (horizontal to vertical). The upper portion of the south slope below the C&D area was modified to an approximate angle of 2:1. In the absence of an acceptable geotechnical evaluation, the Regional

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1 In the Final Closure Plan, the maximum ultimate slope angle, after settlement, is 4:1.
Water Board does not consider any reconstruction acceptable that includes a final slope that exceeds 3.5:1, as stipulated in the Final Closure Plan.

It is unclear in the Work Plan if reconstruction of the slope to pre-modified conditions will be, or can be accomplished as proposed. Furthermore, it appears that reconstruction of the slope to pre-modified conditions requires that the C&D operations be relocated back to the pre-modified location to allow the slope to be reconstructed and prevent loading at the top of the slope. In addition, measures also need to be taken to address the presence of water seeping along the base of the upper slope to prevent slope failure. Lastly, the Work Plan only addresses the slope below the C&D deck, whereas observations of over-steepened slopes and seeps include areas around the western side of the top deck of the landfill.

I urge you to re-submit a Work Plan that address the above deficiencies forthwith. As described above, you are currently in violation of the WDR. Violations of the WDR may result in the imposition of administrative civil liability pursuant to Water Code section 13350, including $10 per gallon of waste discharged, or up to $5,000 per day of violation. For any actual discharge to waters of the State or United States, you may be subject to administrative civil liability up to $10,000 per day per violation, and up to $10 per gallon of waste discharged over 1,000 gallons not cleaned up. The Regional Water Board may refer the matter to the Attorney General for enforcement. The Regional Water Board reserves the right to take any enforcement action authorized by law.

These requirements are in addition to any in response to the February 10, 2017, Notice of Violation, which Regional Water Board staff will address in a separate letter.

If you have any questions, please contact Cleet Carlton of my staff at (510) 622-2374 or by email at cleet.carlton@waterboards.ca.gov.

Sincerely,

Dyan C. Whyte
Assistant Executive Officer

Attachment A: Slope Failure below C&D Area – April 11, 2017 Inspection
Attachment B: Aerial Comparison of C&D Area, October 2015 and March 2016
Attachment C: Seep at base of Slope Failure below C&D Area – August 2, 2017 Inspection
cc with attachments:

Eric Fung/Lori Braunesreither
Contra Costa Environmental Health
Solid Waste Program
2120 Diamond Avenue, Suite 200
Concord, CA 94520
Eric.Fung@hsd.cccounty.us
Lori.Braunesreither@hsd.cccounty.us

Frank Davies Jr./Beatrice Poroli
California Department of Resources Recycling and Recovery (CalRecycle)
Waste Permitting, Compliance and Mitigation Division
1001 I Street
Sacramento, CA 95814
Frank.Davies@CalRecycle.ca.gov
Beatrice.Poroli@CalRecycle.ca.gov

Joanne Le
Water Resource Recovery Department
City of Richmond
450 Civic Center Plaza
Richmond, CA 94804
Joanne.Le@ci.richmond.ca.us

Nadine Langley
State Water Resources Control Board
Division of Water Quality, Groundwater Protection Section
1001 I Street
Sacramento, CA 95814
Nadine.Langley@waterboards.ca.gov

Richard Mitchell
Geo-Logic Associates, dba RMC Geosciences, Inc.
405 East D Street, Suite N
Petaluma, CA 94952
rmitchell@rmcgeoscience.com
ATTACHMENT A

Slope Failure below C&D Area – April 11, 2017 Inspection
ATTACHMENT B

Aerial Comparison of C&D Area, October 2015 and March 2016
ATTACHMENT C

Seep at base of Slope Failure below C&D Area – August 2, 2017 Inspection