
North Coast Regional Water Quality Control Board

February 12, 2013

Susan Klassen
Interim Director
Sonoma County Department of Transportation and Public Works
2300 County Center Drive, Ste. B 100
Santa Rosa, CA 95403

Dear Ms. Klassen:

Subject: *Notice of Violation* for the Sonoma County Department of Transportation and Public Works, Central Solid Waste Disposal Site, 500 Mecham Road, Petaluma, CA

File(s): SCDPW Central Solid Waste Disposal Site, 500 Mecham Road, Petaluma CA, Sonoma County WDID#'s 1B801490SON and 1B99011RSON

The North Coast Regional Water Quality Control Board (Regional Water Board) is issuing to you this *Notice of Violation* (NOV) for the discharge and threatened discharges of leachate and sediment into waters of the State from daily landfilling activities and rainfall runoff at the Central Solid Waste Disposal Site located at 500 Mecham Road in Petaluma. The facility operates under Waste Discharge Requirements Order No. R1-2004-0040 issued by this agency, which strictly prohibits the discharge of landfill wastes, leachate and sediment from the site.

Consecutive heavy rainfall events and precipitation totaling nearly 20 inches for the season thus far have resulted in impacts to the site and violations of your operating Order, as described in this NOV. This NOV also includes specific immediate and short-term measures and additional longer-term measures that must be taken to address these discharges.

The following waste discharge prohibitions are contained within the Central Landfill Waste Discharge Requirements, Order No R1-2004-0040, with immediate application to the facility's wet weather operations:

1. The discharge of waste, including solid, liquid, leachate or landfill gas to surface water, surface water drainage systems or groundwater is prohibited.
(Order Discharge Prohibition A. 3.)
2. Waste discharged at this site shall be provided with approved interim cover material. The active face shall not be excessively large for daily waste placement. The active face shall receive approved daily cover. All inactive areas shall be capped with at least one foot of clean, earthen material or approved interim cover material, compacted and graded to drain from the active area.
(Order Discharge Specification B.4.)
3. All daily cell runoff shall be collected and controlled as leachate.
(Order Discharge Specification B.5.)
4. A copy of this Order shall be kept at the discharge facility for reference by operating personnel at all times. Key operating personnel shall be familiar with its contents.
(Order Provision 16.)
5. In the event the discharger is unable to comply with any of the conditions of the Order due to:
 - a. A breakdown of waste management equipment;
 - b. Accidents caused by human error or negligence; or
 - c. Other causes such as acts of nature;the Discharger must notify the Executive Officer by telephone as soon as he/she or his/her agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.
(Order Provision 26 - Noncompliance)

Regulations governing solid waste disposal site operations are codified in the California Code of Regulations, Title 27, Environmental Protection, Division 2, Solid Waste (Title 27, CCR).

- a. Further, in accordance with Title 27, CCR, section 20705, "Interim cover over wastes discharged to a landfill shall be designed and constructed to minimize percolation of liquid through wastes."

PUBLIC COMPLAINT:

Our staff received a complaint from the public on Thursday, December 20 and Friday December 21, 2012, concerning the dumping of waste into a runoff ditch, leachate seeps and inadequate daily cover on the active face in violation of your operating Orders. Regional Water Board staff advised both County staff and the on-site operator, Republic Services, of this complaint and water quality concern on Friday, December 21, 2012.

Republic's operators responded by regrading the active area and submitting via facsimile on Saturday, December 22, 2012, site photos keyed to a site map demonstrating placement of additional cover soils over the active area. An explanation of the grading activities was also provided for a new wedge fill adjacent to the compost deck. The landfill was closed on Sunday, December 23, and again on December 25, 2012, for the holiday. Several additional inches of rainfall occurred over this time period.

ACTIVE INSPECTION:

On December 28 and 29, 2012, Regional Water Board staff inspected the facility in follow-up to heavy rains over the holiday and to document the operator's progress in addressing wet weather operational concerns. The weather was cloudy but there had been no significant rainfall over the previous 36-48 hours. Staff noted and observed many areas of threatened waste discharge and water quality violations as follows:

Landfill 2, East Canyon Expansion Area

1. Inadequate vegetative cover and erosion control efforts.
(Attachment, Photo Set A)

Active landfilling had concluded on the East Canyon Expansion Area (Landfill 2) several months prior and the daily cell/active face was moved to Landfill 1. All of Landfill 2 thus requires appropriate intermediate cover and erosion control measures to be deployed. The top deck and eastern side slopes of Landfill 2 had been graded but lacked adequate vegetative cover. Sparse erosion control materials were in place resulting in exposed and bare soils. Although the top deck and dome are graded to promote positive drainage, the slope length off of the eastern portion is long, and it lacks benching. Hydro-seeding efforts, reportedly completed in early October 2012, did not result in a successful cover crop. Staff did not observe residual seed remaining within the cover soil. No mulch had been applied to the top deck and the dome had experienced consecutive erosion rills throughout the length of the unit's eastern face.

2. Top deck access road not rocked or winterized.
(Attachment, Photo Set B)

Vehicles and equipment had accessed the haul road/access ramp to the top deck (likely in response to the heavy rain and damage) leaving exposed mud and tire ruts along the road incline. The ramp had not been winterized or rocked, inside ditch lines had eroded with recent rains and the drainage culvert was inadequately constructed in that site drainage had been directed across the waste fill prism daylighting onto the waste slope (i.e. shot-gun culvert). Significant saturation resulted. Sediment and mud discharges were evident within the lower perimeter bench drainage ditch. Lower Sedimentation Pond 6, which receives runoff from this area, appeared turbid.

3. Leachate seeps apparent along the western facing slope and toe area.
(Attachment, Photo Set C)

The length of the western facing slopes appears highly saturated. Staff observed many individual leachate seeps at varying elevations within the slope above the perimeter road surface drainage, a drainage way which discharges to sedimentation pond #6. Seeps are present throughout the slopes and they continue around the front toe area perimeter ditch line. Staff did not observe ponding or areas of standing water on the top deck. As of Friday afternoon, December 28, appreciable rains had ceased for the ~36 hours prior. However, the perimeter road surface drainages had measureable flow discharging from the side slopes, which was being intercepted within the surface drainage features. By December 29, flows had lessened, but still continued.

In response, the site operator installed a temporary collection station by plugging the bench down drain HDPE riser and pumping the surface ditch discharge into a pumper truck via portable power source. The site operators indicated the pumper truck would remain until the seep flows cease.

Landfill 1, Existing Unit

4. Recent active cell along the compost deck partially covered with straw mulch.

A “wedge” fill area adjacent to the compost deck has just been completed with intermediate cover soils. On Friday, December 28, 2012, this fill area had received partial mulch cover for the upper half of the bench only. The lower half was bare soil awaiting straw mulch. All onsite straw mulch had been used and additional materials were reportedly on delivery soon. This area will require reinspection once materials arrive. This wedge fill area is the location depicted in the December 20 & 21, 2012, complaint regarding waste in a runoff ditch and inadequate daily cover. Landfilling is now completed in this wedge fill area and the active face has been located on the highest deck of Landfill 1, where all winter disposal cell sequencing is planned.

5. Landfill 1 top deck wide open.
(Attachment, Photo Set D.)

The active face has been located to the south end/front of the Landfill 1 top deck. The operator is planning to construct a new lift here, intending to raise the height an additional ~25 feet. Daily cover is being applied with tarps. Considerable residual wastes are being tracked through the scraper path, which is left exposed, muddy and not tarped. Active face operations are wet. Staff did not observe any active face leachate collection or engineering controls which is a requirement under the facility's operating Order.

6. Mixed waste materials intended for daily cover inadequately contained.
(Attachment Photo Set D)

New import materials have been end dumped in various locations along the haul road top deck alongside the winter soil stockpile. Import materials consist of mixed wastes, predominantly whitish (possibly styrofoam?) material with minimal soil content. The materials are reportedly being generated by screenings from a recycling operation. Mixed waste material is a *waste* and should not be left exposed to rain. It has not been approved for wet weather daily cover operations, and it is not acceptable for use as intermediate cover. The large quantity of mixed waste materials requires a stockpile management plan demonstrating adequate containment during wet weather and a proposal for any use as approved Alternative Daily Cover during dry weather only.

7. Haul road through the center of the winter stockpile.
(Attachment Photo Set D)

The winter soil stockpile which had been compacted and hydroseeded is now opened up and completely exposed. A scraper path has been constructed through the center of the pile. Staff observed one perimeter stretch of wattles on the south side of the stockpile. Staff did not observe cover or adequate engineering controls in place on Friday, December 28th, 2012. All active winter operations must be minimized and adequate erosion control measures must be deployed.

8. Inadequate Notification of Non-compliance.

No telephone notification was made in accordance with WDRs regarding this matter. Regional Water Board staff contacted both county staff and then the operator on December 21, 2012, in response to a public complaint regarding site violations stated above.

Failure to comply with WDRs including notification requirements carries civil liability potential under Section 13305 of the Porter Cologne Water Quality Control Act. The existing Orders issued to the Sonoma County Department of Transportation and Public Works clearly state the duty to comply.

In summary, the facility was not adequately winterized in advance of the heavy seasonal rains that occurred in December 2012 which resulted in water quality violations. During our inspections on December 28 and 29, 2012, Regional Water Board staff discussed the site conditions and water quality concerns initially with operator Fred Brunner and then in follow-up with Rick Downey of Republic Services. Staff advised the operators to take immediate actions to comply with operating Order, WDRs and MRP No. R1-2004-0040, and thus implement rain event based surface water monitoring at keyed-in locations for

Landfill 2 to demonstrate the effectiveness of all repairs taken to address discharges at the site. For each rain event resulting in measurable runoff, surface water monitoring is to include all field parameters and confirmation laboratory sampling for leachate constituents and turbidity in accordance with the facility's MRP No. R1-2004-0040. Staff further advised the operator to report the results of the rain event based surface water sampling via facsimile as soon as possible following the sampling events, and to use this data in assessing adequate progress and any further needed measures to abate all violations. The sampling is to proceed until such time as all repairs are implemented, the site has stabilized and leachate seeps are fully abated as evidenced by review of analytical sampling results.

Additionally, staff provided copies of field notes on a site map identifying problem areas requiring immediate attention. Staff reviewed with the operator the facility WDRs, operating, reporting and notification requirements as well as observed violations, and staff advised the operator that improved remedial actions and coordinating efforts are needed to address wet weather operating conditions for the protection of water quality and abatement of ongoing violations. Lastly, staff advised the operator that notification requirements for any non-compliance are taken seriously and that improved communication in this regard is critical.

Concurrent with our site inspections, this office received additional public complaint information on December 28, 2012 regarding leachate seeps, inadequate seep collection, saturated slopes with cover failure, inadequate daily cover and overall discharge concerns. The information has been reviewed in context with our inspection findings and found to be consistent with our observations of site conditions at the end of December 2012.

Thus, we are issuing this NOV, with required actions as necessary to document and correct the above site conditions and violations identified by our staff during the December 28 and 29, 2012 inspection. The issues requiring correction are detailed below:

SUMMARY OF ACTIONS NEEDED TO ADDRESS OBSERVED VIOLATIONS:

Immediate and Short Term Actions

1. Collect, contain and abate all leachate seeps. Leachate must be collected and discharged to the designed and permitted leachate collection recovery system within the landfill liner system or to the onsite surface impoundments for designated legal disposal.
2. Implement adequate slope protection and erosion control measures for all exposed slopes. Adequate erosion control materials include seed, straw mulch, rock, and soil and standard erosion control materials such as waddles, jute netting and erosion control blankets, etc. In the event slopes remain too saturated to access or repair, tarping as a temporary measure may be needed, to abate further infiltration of rainfall.

3. Winterize and minimize all open stockpiles.
4. Develop and submit an updated as-built drawing of the storm water piping and drainage conveyances.
5. Develop and submit a winter operation cell sequencing plan that provides for collection and control of all active face runoff. Within the cell sequencing plan, provide a construction detail demonstrating active face runoff collection capabilities. Winterize all active area outside slopes and provide intermediate cover and mulch for prevention of outward leachate seeps.
6. Screen all import daily cover material. Any unsuitable winter operation daily cover is to be adequately contained and set aside for periods of dry weather. Provide for a protected stockpile area for mixed wastes. Note that import daily cell cover material comprised of mixed waste such as that observed by staff during the December 28 and 29 inspections, is unsuitable daily cover during rain events.
7. Inspect all other benches, ditch lines and problem areas for leachate seeps. Conduct field parameter testing in areas of standing water or flow including non-rain event days. Report any incident in accordance with the notification requirements of the facility's operating Order.
8. Initiate and continue surface water monitoring with field parameters and confirmation laboratory sampling for each rain event resulting in runoff until the leachate seeps and waste discharges are adequately abated and all erosion control measures are effectively functioning to abate sediment delivery. Provide a written request to discontinue this sampling program when the confirmation sampling report demonstrates that waste discharges have been abated.
9. Review the conditions of the facility Order with all key operating personnel. Review and confirm that the notification requirements for any condition of non-compliance will be implemented in accordance with WDRs.

Longer Term

By March 13, 2013:

10. Submit a field exploration plan to investigate all surface seep areas of each landfill to determine the degree of shallow waste saturation, its potential for surface seepage, relative field conditions and remedial steps needed for correction.
11. Submit a work plan for the installation of leachate piezometers within the LF2 area.

12. Conduct laboratory sampling for the Landfill 2 underdrain for all leachate parameters and Constituents of Concern as per Monitoring and Reporting Program No. R1-2004-0040.
13. Deploy sufficient thickness of intermediate cover soils over all areas of Landfill 2 decking and side slopes. This material must be constructed with sufficient thickness, quality and compaction to impede leachate seep discharges to surface ditches. Deploy all necessary erosion control measures to stabilize the intermediate cover. Reevaluate any long slope runs and consider benching and regrading where necessary for long term slope stability. Major earth moving or regrading plans should be planned accordingly, but implemented outside of winter operations. Continue to monitor any evidence of leachate breakthrough or active seeps in accordance with WDRs.

The January 2013 weather has been unseasonably dry, favorable for moving quickly to correct many of the noted problem areas. Staff acknowledges the actions taken thus far by the operator to address, improve and correct noted problems at this facility. We appreciate the efforts taken thus far by the operator to quickly mobilize, secure additional materials and to implement repairs for ongoing violations. Much work is ongoing and much is dependent on weather conditions. We encourage you to monitor weather forecasts and to continue to make rapid, successful progress.

Regional Water Board Notification

Please have your operator notify the Regional Water Board in writing following: (1) completion of all short-term NOV measures (NOV Measures 1 -9) by February 19, 2013; and (2) submittal of all longer-term tasks (NOV Measures 10-13) by March 13, 2013. A summary report of actions taken and photographs documenting implementation of short-term and any ongoing longer-term measures should be included with the notification.

Implementation of the measures included in this report is for the purpose of addressing the observed violations at the site. Failure to address the observed and documented controllable discharge sources may result in further enforcement action under sections 13267 or 13350 of the Porter-Cologne Water Quality Control Act.

Public Meeting Complaint

Finally, on January 9, 2013 Regional Board staff held a public meeting to receive comments on the Central Solid Waste Disposal Site's tentative operating permit revisions. At the meeting we received a public complaint regarding strong compost pond odors affecting the neighboring residential subdivision. As such, we are recommending the County take action to investigate, follow-up and address the public complaint. Immediate and short term measures to address this complaint could include pumping of the compost ponds to alleviate odor concerns as follows:

- 1) Compost pond waters could be pumped and discharged to the leachate storage ponds in accordance with the facilities operating permits, as appropriate;
- 2) Compost pond waters could be drafted for re-use and incorporation within the compost windrows;
- 3) Compost pond waters could be pumped for use as light dust control during non-rain events within the County's property boundaries using best management practices to ensure there is no offsite discharge, no saturated conditions and no discharges to drainage ways;
- 4) Compost pond water odors could be managed by some combination of all the above.

Please advise us of your follow-up to the public complaint of compost odors.

We trust the County will continue to make rapid progress to address these matters and we look forward to receipt of the notifications of both short term and longer term NOV measures, your rain event based sampling reports and your response to the public odor complaint. If you have any questions or comments regarding this matter, please contact Terri Cia at (707) 576-2668 or her supervisor, Diana Henriouille, at (707)576-2350 or, by email, at Diana.henriouille@waterboards.ca.gov.

Sincerely,

Original Signed By

David F. Leland, PE
Chief, Watershed Protection Division

130212_CentralNOV

cc: Alex Sebastian, Glenn Morelli, SCDTPW, Central Solid Waste Disposal Site, 500 Mecham Road, Petaluma, CA 94952
Rick Downey, Republic Services, 500 Mecham Road, Petaluma, CA 94952
Randy Hagen, Pacific GeoScience, 7393 Palm Avenue, Sebastopol, CA 95472
John Anderson, SCEHD-LEA, 625 5th Street, Santa Rosa, CA 95404
Nevin Yeates, Michael Wochnick, Cal Recycle, P.O. Box 4025, Sacramento, CA 95812-4025

Photograph Attachment

(All photographs taken by Terri Cia on December 28 and 29, 2012)

Photo Set A



December 29, 2012

Landfill 2
Rilling off top deck, sparse erosion control measures deployed. Inadequate vegetative cover on long slope run.



December 29, 2012

Landfill 2-Decking looking north
Inadequate vegetative cover and exposed soil.



December 29, 2012

Landfill 2-Decking looking south
Inadequate vegetative cover and rilling.

Photo Set B



December 29, 2012

Landfill 2
Access ramps are not winterized.



December 28, 2012

Landfill 2
Deck access ramp drainage culvert with discharge across waste prism. Requires removal and redesign of access road drainage system.



December 29, 2012

Landfill 2
Haul road is not winterized, stabilized or properly abandoned.

Photo Set C



December 29, 2012

Landfill 2
Surface drainage and perimeter seeps on west facing slopes. Consistent flow.



December 28, 2012

Landfill 2
Saturated slope conditions with seepage.



December 28, 2012

Landfill 2
Surface drainage and perimeter seeps on west facing slopes. Flow in drainage.



December 29, 2012

Landfill 2
Seep discharges, lessened flow. Collection at bench end via pumper truck.

Photo Set C- continued



December 29, 2012

Landfill 2
Toe area perimeter seeps.



December 29, 2012

Landfill 2
Perimeter seep discharge through previous repair.



December 29, 2012

Landfill 2
Midslope leachate seeps. Inadequate intermediate cover.



December 29, 2012

Landfill 2
Inadequate temporary seep repair.



December 29, 2012

Landfill 2
Temporary plug and pump station installed to collect leachate seeps in perimeter road drainage ditch.

Photo Set D



December 29, 2012

Landfill 1
Scraper path with residual wastes.
No active face runoff engineering controls in place.



December 29, 2012

Landfill 1.
New Cell –Outward facing slopes
Intermediate cover will require adequate compaction and erosion control.

Photo Set D- continued



December 29, 2012

Landfill 1

Winter stockpile is wide open.

Mixed wastes to be used for daily cover require adequate containment.



December 29, 2012

Landfill 1

Inadequate erosion control measures at the winter stockpile areas. All active winter operational areas are required to be minimized and contained.