

PROSECUTION STAFF REPORT

Consideration of an Amendment to Cleanup and Abatement Order R5-2006-0721
For
Ma-Ru Holding Company, Inc. and Bonzi Sanitation Landfill, Stanislaus County

Background

The Ma-Ru Holding Company, Inc. and Bonzi Sanitation Landfill (hereafter jointly referred to as "Discharger" or "Bonzi") own and operate the Bonzi Sanitation Landfill, in Modesto California. The facility is on a 128-acre parcel near the Tuolumne River, and has accepted waste since 1967. The Riverdale community lies between the landfill and the River, and draws its drinking water supply from a nearby well. The majority of the landfill is not constructed to today's standards, and some of the waste is periodically in contact with shallow groundwater. None of the four waste management units were constructed with a bottom liner or a leachate collection and removal system, as is required of modern landfills. The landfill has created a plume of volatile organic compounds (VOCs) in the groundwater, which must be contained and treated through a groundwater extraction and treatment system.

History of Violations

In 1984, Bonzi reported that its activities had resulted in a release of VOCs to groundwater. The first enforcement order issued at this site was in 1984, when the Executive Officer issued a Cleanup and Abatement Order (CAO No. 84-153) requiring an evaluation of the groundwater plume. The Discharger did not comply, and the Executive Officer subsequently issued a \$3,500 Administrative Civil Liability Complaint. The Discharger was then issued another Cleanup and Abatement Order (No. 89-195) to require the installation of a groundwater extraction system. Due to delays in installing and operating the extraction system, the Executive Officer issued a \$50,000 ACLC (No. 90-093). Although the Discharger installed the groundwater extraction and treatment system, they failed to operate it for at least one year, from March 2004 through March 2005. In late 2008, the Discharger submitted data that again verifies the system is not adequate to contain the entire extent of the contaminant plume nor is it strong enough to prevent groundwater from coming in contact with the waste in the landfill units.

Regional Water Board staff issued 17 Notices of Violation to the Bonzi Landfill from January 2001 through December 2005. In April 2005, the Regional Water Board issued a Cease and Desist Order (No. R5-2005-0073; found as an Attachment to this staff report) to address a number of issues, including acceptance of non-permitted waste, failure to close the inactive units, failure to evaluate the groundwater detection and corrective action systems, failure to establish a financial assurance fund, and failure to continuously operate the groundwater extraction and treatment system.

Because Bonzi failed to comply with this CDO, in September 2005 Regional Water Board staff began working with the Stanislaus County District Attorney to prepare a Stipulated Judgment for Injunction, Civil Penalties, and Relief. The District Attorney's complaint alleged that Bonzi failed to comply with numerous requirements of the CDO, including failing to

demonstrate that the groundwater detection and extraction system is adequate for site conditions and failing to post financial assurances for corrective action, closure, and post closure maintenance activities at the landfill. One of staff's gravest concerns was the fact that the groundwater treatment and extraction system was not operated for at a minimum a one-year period, potentially impacting the downgradient domestic drinking water wells for the Riverdale community and several other properties.

Ultimately, the parties agreed to a Stipulated Judgment, which was filed with the Superior Court of Stanislaus County on 23 December 2005. The Judgment required a payment of \$450,000 and includes a compliance schedule with assigned penalties for missing deadlines. Under the Stipulated Judgment, the Regional Water Board may impose penalties for violating the compliance schedule by adopting a resolution. The Regional Water Board has done so twice, for a total of \$100,000 in penalties. As of this date, Bonzi continues to violate the Stipulated Judgment, and is subject to substantial additional penalties.

Due to the continued detection of groundwater pollution downgradient of the Bonzi Landfill, on 2 August 2006, the Executive Officer signed Cleanup and Abatement Order No. R5-2006-0721 (found as an attachment to this staff report). Among other items, the CAO requires the Discharger to monitor the Riverdale well on a semi-annual basis, conduct a Human Health Risk Assessment, evaluate the extent of the groundwater plume, redesign the extraction system to capture the entire groundwater plume, and prevent groundwater from inundating the landfill waste. The Discharger has not fully complied with this Order.

The CDO, Stipulated Judgment, and WDRs require that Bonzi establish financial assurances, as required by Title 27. The total funding obligations for closure and postclosure, as well as corrective action, has been set by the California Integrated Waste Management Board at \$10.124 million. The Discharger has funded \$3.8 million so far, with \$2.6 million in arrears as of June 2008. The remaining balance is due in annual payments of \$1.3 million per year. In September 2007, the Executive Officer extended the Stipulated Judgment's compliance schedule and gave Bonzi an additional three months to meet the outstanding financial assurances. In addition, the Regional Water Board adopted uncontested WDRs (No. R5-2007-0148) in October 2007 that required the Discharger to immediately fund its financial assurance accounts. However, none of the delinquent payments have been made. Findings No. 6 through 15 of the WDRs, which are attached to this staff report, contain a detailed description of enforcement activities from 1984 through mid-2007.

Beginning 31 January 2008, or earlier, and until at least 2 November 2008, or later, the Discharger operated the Bonzi Sanitation Landfill without complying with the monitoring and reporting requirements of the CAO and the WDRs. Bonzi did not submit any of the required monitoring or technical reports, make any progress on site remediation, or contact staff to discuss the lack of submittals. Therefore, staff was unable to assess compliance with physical requirements and standards, and it is unknown whether Bonzi's groundwater extraction/treatment system was fully operational. However, the landfill continued to accept waste during this period.

In April 2008, the Regional Water Board referred this case to the Attorney General. Since then, Regional Board staff has worked closely with counsel from the State Water Board's Office of Enforcement, as well as counsel from the Attorney General's office.

Amendment to the Cleanup and Abatement Order

The economically disadvantaged Riverdale community lies between the Bonzi Landfill and the Tuolumne River. The 300 community residents obtain their drinking water from one well, which is approximately 500 feet from the landfill property. The Discharger's plume of polluted groundwater extends beyond its property to near the Riverdale well. The CAO requires that the Discharger sample the Riverdale well twice per year, and as of the 3 November 2008 sampling event, the well does not contain any of the VOCs (or their breakdown products) that make up the Bonzi plume. However, the two closest monitoring wells, which were installed in 2006 and are only 30 feet upgradient of the Riverdale well, now contain VOCs. Based on data trends, this shows that the Bonzi plume has migrated to the immediate vicinity of the Riverdale well.

Finding No. 8 of the 2006 CAO lists the six known domestic, municipal, and industrial wells that are downgradient of the Bonzi Landfill. These include the Riverdale municipal well, the Bonzi Landfill's industrial well (now abandoned), and domestic wells at Ace, Helmer, the VFW building, and the Waste Management facility. The CAO required that the wells be sampled and that the Discharger provide a recommendation as to which wells should be added to a routine monitoring program. The Discharger did so, and when the WDRs were updated in 2007, the monitoring program was updated to require that five wells (Riverdale, Ace, VFW, Helmer, and Waste Management) be sampled on a semi-annual basis.

Regional Water Board staff's highest priority is to ensure that the local residents' high quality source of drinking water is maintained. Based on data previously provided by the Discharger, the groundwater extraction system is likely not capturing the entirety of the existing VOC plume. Downgradient domestic water supply wells near the landfill have been impacted by VOCs, and the Discharger provides a wellhead treatment system for the VFW well. The 2006 CAO requires that the Discharger upgrade its groundwater extraction system to capture the entire plume. Given the data trends and Discharger's lack of compliance with all its prior Orders, staff is concerned that continued delays in upgrading the extraction system may allow the Bonzi VOC plume to enter the Riverdale well.

On 3 December 2008, the Executive Officer signed Amendment No. 1 to the existing Cleanup and Abatement Order (CAO No. R5-2006-0721). This amendment requires that the Bonzi Sanitation Landfill owners have a plan in place to provide an alternate supply of drinking water to the Riverdale community if landfill pollutants are found in the Riverdale well at or above levels exceeding drinking water standards. The amendment also required that any domestic or municipal well downgradient of the facility that has concentrations of landfill pollutants exceeding drinking water standards be supplied with replacement water.

The Discharger has petitioned the Amendment to the State Water Board and also asked that the Amendment be heard before the Regional Water Board.

Issues

The Discharger's consultant submitted a letter on 2 January 2009, taking issue with numerous Findings contained in Amendment No. 1 to CAO R5-2006-0721. This letter is found as an attachment to the staff report. Regional Board staff responded by letter dated 14 January 2009; also attached to this staff report.

The Discharger objects to findings in the Amendment No. 1 that identify the landfill as a source of pollution. For its argument, the Discharger provided a new conceptual model that includes: an alternate source for the VOC pollution; a shift in the historical groundwater flow direction; and the belief that the Bonzi groundwater treatment system is capable of capturing the plume at the point of compliance. It is unclear if historical data or previous reports were used in preparation of the model. Many of Bonzi's arguments have been addressed in previous enforcement Orders.

Staff believes that the Discharger's consultant failed to evaluate the entire historical data set when preparing its response. There is no evidence to support the assertion that there is an alternate source of VOCs. The Discharger has made statements in previous reports that contradict its newly-created conceptual model and its new opinions and conclusions. Furthermore, many data gaps exist. Examples of these data gaps include data which would demonstrate the effect of the Riverdale supply well pumping on local groundwater flow, data to demonstrate VOC concentrations in landfill gases, and data to demonstrate the radius of influence of the Discharger's groundwater extraction system. Fundamentally, the Discharger has not provided the data necessary to defend its conceptual model.

Revisions to Amendment No. 1

Regional Water Board staff has prepared a revised Amendment (No. 2) for the Board's consideration. Amendment No. 2 rescinds Amendment No. 1, clarifies several items, and incorporates relevant portions of the Discharger's 31 December 2008 water replacement plan.

In particular, Amendment No. 2 has been revised to list the five specific wells to which it applies (the Riverdale municipal well, and the domestic wells at Ace, Helmer, VFW, and Waste Management). The Amendment incorporates the proposal in the Discharger's water replacement plan that City of Modesto water be supplied if the Riverdale well exceeds applicable standards. This task can be readily accomplished, as the City of Modesto has already constructed a water supply line to the community. If the Amendment is adopted, the Discharger would be required to contact the City of Modesto and arrange the particulars of providing replacement water (in the event that it becomes necessary) by 1 March 2009.

The Amendment incorporates the Discharger's proposal for verification sampling should a sample show a positive result above applicable standards. The requirement to provide replacement water would not take effect unless the confirmation sample(s) verify the concentration is greater than applicable standards. The verification procedure closely follows

that found in Title 22 of the California Code of Regulations for domestic water quality. The “applicable standards” have been clarified to be the Maximum Contaminant Levels found in Title 22. Finally, the Amendment has been clarified to reflect that, while the chemicals of concern are volatile organic chemicals, the detection of trihalomethanes would not trigger the need to initiate water replacement (due to the fact that the Riverdale well water is chlorinated, and the wastewater is disposed of through septic tanks.)

Conclusion

The Bonzi Landfill has been receiving permitted and non-permitted waste since 1967. The facility lacks protective barriers to isolate the waste or leachate from the underlying groundwater. Groundwater data collected by the Discharger indicates that VOCs have been released to the groundwater. The Discharger was directed by the 2006 Cleanup and Abatement Order to define the extent of this pollution, as well as expand its groundwater extraction system to prevent the continued migration of VOC pollution downgradient of the site. However, the Discharger has not complied with the CAO. Until the groundwater treatment system can capture the plume, the landfill remains a threat to the nearby supply wells. As a safeguard to anyone that uses this water downgradient of the landfill, the amendment to the CAO requires the Discharger to provide replacement water service if any of the above mentioned wells have concentrations of VOCs (excluding trihalomethanes) that exceed their applicable MCLs. Because the Riverdale well serves so many users and providing replacement water requires coordination with the City of Modesto, the amendment also requires the Discharger to have a plan in place to provide replacement water service to the Riverdale community within the 24-hour period specified in the amendment.

The Discharger already provides wellhead treatment to the VFW property and bottled water to the Ace property because of landfill VOCs in those wells. No other replacement water service is currently required. This amendment to the CAO is a prudent precaution given the risk to the water supply posed by the landfill, and would only take effect if VOCs are found in a domestic well at concentrations exceeding the MCLs. Once the Discharger complies with the 2006 CAO requirements to upgrade its extraction well system, the need to provide replacement water service should no longer be an issue.

WSW/SER/HH: 15-Jan-09

Attachments: In order to conserve resources, paper copies of the adopted Orders referenced below may not accompany this report. Interested persons may download the documents from the Central Valley Water Board's Internet website at the links shown below. Copies of these documents can also be obtained by contacting the Board's office at 11020 Sun Center Drive, #200, Rancho Cordova, California 95670, weekdays between 8:00 a.m. and 5:00 p.m.

- 2 January 2009 letter from Amec Geomatrix on behalf of Bonzi Landfill
- 14 January 2009 response from Regional Water Board staff
- WDRs Order No. R5-2007-0148:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/stanislus/r5-2007-0148.pdf.

- CDO No. R5-2005-0073:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/stanislus/r5-2005-0073.pdf
- CAO No. R5-2006-0721:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/stanislus/r5-2006-0721.pdf