

INFORMATION SHEET

ORDER NO. _____
CHICO REDEVELOPMENT AGENCY
FOR POST-CLOSURE MAINTENANCE OF
HUMBOLDT ROAD BURN DUMP OPERATIONAL UNIT
BUTTE COUNTY

The Humboldt Road Burn Dump (HRBD) is a group of fifteen properties in the City of Chico used in the past for waste disposal. The HRBD, as a whole, consists of one primary disposal area located on Assessors Parcel Number (APN) 018-500-015 (formerly APN 011-030-015), which formerly operated as the City of Chico Burn Dump, and fourteen other waste disposal areas on adjacent properties. The primary disposal area operated from the early 1900's until approximately 1965 when the Butte County Neal Road Landfill opened and City of Chico Burn Dump closed as a waste disposal facility. Wastes from the City of Chico and the unincorporated portions of Butte County were historically dumped, burned, and then leveled in a cyclic fashion at the primary disposal area. Approximately 70 of 157 total acres were impacted by waste disposal operations. On 11 December 1997, the California Environmental Protection Agency Site Designation Committee adopted Resolution No. 97-16, pursuant to Health and Safety Code (HSC) section 25260, et seq, *Unified Agency Review of Hazardous Materials Release Sites*, designating the Regional Water Board as Administering Agency. Subsequent HRBD site investigation and remediation activities were conducted in accordance with HSC section 25260, et seq.

On 3 June 2003, the Regional Water Board Executive Officer issued Cleanup and Abatement Order No. R5-2003-0707, to the parties reasonably identified as responsible for the HRBD waste. Between 2004 and 2006, four separate remediation projects occurred to clean up the HRBD waste. Waste from APN 002-180-083 was removed and transported to Ostrom Road Landfill for disposal and, on 17 November 2005, a No Further Action Determination was issued for the site. Waste from APN 011-780-014 and APN 011-780-018 was removed and transported to the Waste Management Kettleman Hills Facility for disposal. On 22 December 2006, a Certificate of Completion was issued, pursuant to HSC section 25260, for APN 011-780-014 and a No Further Action Determination was issued for APN 011-780-018. Waste from six properties (APN 011-300-016, APN 011-030-136, APN 011-030-138, APN 011-030-139, APN 002-180-084, APN 002-180-086) was removed and consolidated into the 7-acre Humboldt Road Private Properties Operational Unit on APN 011-030-138 (currently known as APN 011-500-138) and, on 10 March 2005 and 16 December 2005, Certificate of Completions were issued pursuant to HSC section 25260. The Regional Water Board regulates Humboldt Road Private Properties Operational Unit under separate Waste Discharge Requirements.

In 2005, Chico Redevelopment Agency removed waste from six properties (APN 002-180-087, APN 002-180-088, APN 002-180-089, APN 002-180-095, APN 011-030-137, and APN 011-030-150), consolidated it in the primary disposal area located on APN 011-500-015, and, on 22 December 2005 and 7 February 2006, Certificate of Completions were issued pursuant to HSC section 25260. In December 2006, construction of the consolidated waste disposal was complete. The wastes were capped, from bottom to top, with a 12-inches of sand acting as the gas collection layer, 40-mil double sided textured linear low density polyethylene (LLDPE) synthetic layer, a geo-composite drainage layer, and 24

inches of compacted clean soil for construction of a vegetative erosion resistant layer. A passive landfill gas venting system was installed directly beneath the LLDPE and ventilated at three locations on top of the Unit. Although the wastes contain very little, if any, organic matter and no subsidence or differential settlement was expected, two survey monuments were installed into the cap so that the location and elevation of wastes, containment structures, and monitoring facilities could be determined throughout the post-closure maintenance period. Other completed construction activities include; leachate collection and removal system, surface water drainage conveyance system, access road, permanent fencing, and groundwater monitoring well (MW-4).

Three monitoring wells (MW-1, MW-2, and MW-4) are used to determine groundwater quality adjacent to the Unit. MW-1 and MW-2 were installed in 1992 as part of the HRBD Solid Waste Assessment Test (SWAT). A third boring was drilled 1992 to a depth of 108 feet bgs at the site but groundwater was not encountered and a well was not completed. MW-4 was installed in 2007. Soil boring (SB-3) was also drilled in 2007 but was destroyed because no moisture or lithology with the potential to transmit groundwater was observed. Although very moist sand was encountered at depths below 75 ft bgs while drilling SB-4, monitoring well (MW-4) has been dry since construction. Three additional wells have been completed on the property to the east. Only one of these wells (MW-5) encountered groundwater and was screened from 24 ft bgs to 44 ft bgs. Wells MW-6 and MW-7 were drilled to 80 ft bgs and 100 ft bgs but groundwater has not been observed in these wells. Since the groundwater occurs in discontinuous lenses that do not appear to be in hydraulic communication, the Discharger will conduct an intra-well test to evaluate trends in the monitoring results, such as the Mann-Kendall Test for an Upward Trend.

The HRBD Remedial Investigation and Remedial Action Plan identified antimony, arsenic, and lead as the metal constituents of concern in the waste material that has been consolidated in the Unit. The same report also identified calcium, sulfate, and nitrate as soluble constituents within the waste material. Concentrations of total dissolved solids, including nitrate and sulfate, in groundwater monitoring wells MW-1 and MW-2 have generally decreased since Unit closure. However, the shallow groundwater samples have detected total dissolved solids, nitrate, and sulfate at concentrations exceeding Regional Water Board Basin Plan objectives for drinking water or agricultural use. No dissolved antimony, arsenic, lead, cyanide, volatile or semi-volatile organic compounds, pesticides, herbicides, or dioxin have been detected in the MW-1 and MW-2 groundwater samples. Therefore, Chico Redevelopment Agency has requested elimination of these parameters from the detection monitoring program.

Leachate is collected near the northwesterly toe of the Unit and directed to a collection sump. Between March and July 2006, 850 gallons of liquid was removed from the leachate sump, transferred to a temporary tank, sampled, and discharged to the City of Chico Water Pollution Control Plant. In November 2006, the collection sump depth was increased from 5 feet to 7 feet 5 inches. Since completion of Unit construction, the sump has contained about 2 feet of liquid and discharges to the City of Chico Water Pollution Control Plant have not occurred.

On 4 August 2008, Regional Water Board staff approved the financial assurance cost estimate for post-closure maintenance of the Unit. On 29 August 2008, the Discharger and

Regional Water Board staff signed a Pledge of Revenue agreement, in the amount of eight-hundred thousand dollars (\$800,000), for 30-years of Unit corrective action and post-closure maintenance. The corrective action items include seeding areas of the cover that are lacking vegetation; fertilizing the vegetative cover; replacing cover soil in worn areas of the cover; installing temporary erosion controls; repairing minor damage to the cover geosynthetics; loading and disposing of illegally dumped material on the site; maintaining and conducting minor repairs to the landfill gas vents, LCRS components and monitoring wells; cleaning of the LCRS cleanouts; redeveloping the monitoring wells; cleaning and making minor repairs to the site drainage system and perimeter fence. The Pledge of Revenue is a financial assurance mechanism that complies with the requirements of Title 27 CCR.

On 6 January 2009, the Discharger recorded a Covenant to Restrict Use of Property, Environmental Restriction (Deed Restriction) with Butte County.

These WDRs rescind WDR Order No. R5-2004-0088 and prescribe post-closure maintenance requirements for the Unit.

KLC: sae 02/04/2009