California Regional Water Quality Control Board
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1-2005-0120

And

WATER CODE SECTION 13267(b) ORDER

FOR

HUMBOLDT WASTE MANANAGEMENT AUTHORITY

REGARDING

CUMMINGS ROAD SOLID WASTE DISPOSAL SITE
CLASS III WASTE MANAGEMENT UNIT
WDID NO. 1B79133OHUM

Humboldt County

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board) finds that:

1. Cummings Road Solid Waste Disposal Site (Site) is a Class III municipal landfill. On June 16, 2000, Humboldt Waste Management Authority (HWMA) (hereinafter Discharger) became the owner and operator of the landfill. The Site is currently operating under Waste Discharge Requirement (WDR) Orders 93-46, 93-83, and R1-2001-65.

2. The facility is an intermediate cover closed municipal solid waste disposal site that drains into Ryan Creek and an unnamed creek that flows into Freshwater Creek. The Site is located at the south end of Cummings Road, approximately two miles southeast of Eureka in the Northeast ¼, Section 5, Township 4 North, Range 1 East, Humboldt Base Meridian, 40° 60' 00" latitude, 124° 5' 30" longitude. The disposal site is situated on a 100-acre parcel designated as Humboldt County Assessor's Parcel Number 405-081-51F.

3. The Site has had unauthorized releases of sediment and leachate.

4. On November 7, 2005, HWMA staff informed the Regional Water Board via electronic mail of an unauthorized storm water discharge from the Site that is causing or threatening to cause sediment to discharge into waters of the State. Follow up telephone conversations with the Discharger indicate that there have been significant failures to the Site's drainage system causing sediment discharge, with the most significant failures to date occurring during a storm which occurred on November 5 and 6, 2005. The Discharger has been making ongoing temporary repairs as failures occur.

5. The Discharger submitted laboratory sampling results via facsimile on November 11, 2005. Samples were collected on September 29, 2005 from the toe berm spring area and the toe berm runoff area. The toe berm runoff sample, collected from behind the first toe berm silt fence, had measured concentrations of cis-1,2-dichloroethane and vinyl chloride at 0.89 and 0.52 parts per billion, respectively. The Discharger has resampled at the toe berm run-off location for volatile organic compounds and is awaiting analytical results.

6. The Site's WDRs specifically prohibit the discharge of wastes, including leachate, to surface waters, surface water drainage systems, or groundwater.

7. The landfill ceased accepting waste prior to reaching the permitted capacity and its anticipated closure grades. Therefore the landfill was regraded with intermediate cover during the Summer 2005 construction season in preparation of final Site cap construction at the new closure construction grades. The new closure grades included cutting back the front slope to a 4:1 grade because of slope stability concerns discovered during the preparation of the Closure and Postclosure Maintenance Plan (CPCMP). According to daily logs prepared by Envirocon, on behalf of the Discharger, erosion control for the Site was not completed until October 20, 2005.

8. Plans for site drainage and erosion control were included in documents stamped and submitted by Civil Engineer Steven E. Salzman of Winzler and Kelley Consulting Engineers. These documents included the Joint Technical Document (JTD) and Final CPCMP, received November 22, 2004; Addendum No. 4 of the surface water facilities plan, received June 1, 2005; the Report of Facility Information Amendment received, August 18, 2005; and the Storm Water Pollution Prevention Plan received August 18, 2005.

9. The landfill is of a canyon fill design and is constructed in the Hookton and Wildcat Formations with the Hookton Formation material being used as cover material. The Hookton Formation is a fine-grained, weakly consolidated marine sandstone that is relatively young in age. Hookton Formation soils were excavated from a cutoff trench and landfill toe berm, and were placed on the landfill to a depth of over three feet, for use as an interim cap. Based on field estimates, approximately 250,000 cubic yards of soil were moved during the 2005 construction season. These soils belong to the Hely Soils Series and are described in the Soils of Western Humboldt County California as being fine sandy loam with a high erosion hazard.

10. The average annual rainfall for the Eureka area is 37.9 inches. Rainfall monthly totals in the Eureka area were 2.40 inches for October 2005 and 4.23 inches for November 1 through November 10, 2005, totaling 6.63 inches. On October 25, 27, and 28, 2005, rainfall events of 0.61, 0.33, and 0.30 inches, respectively, were recorded, and on November 3 and 6, 2005, rainfall events of 1.28 and 1.63 inches, respectively, were recorded. The November 2004 CPCMP drainage calculations show that the culverts and ditches on the site are designed to handle runoff from a storm producing 2.8 inches of

rainfall per hour. This design storm is based on a 10-minute event with a 100-year return period.

11. Erosion control structures installed on the landfill to collect and transport runoff for the purpose of maintaining stability at the site include rock lined ditches, on-contour half–round culverts to collect rainfall runoff, and 18 to 24-inch diameter piping to collect waters from the half-rounds. All disturbed soils on the landfill footprint were cover-cropped with a rapid growing grass mixture, while other disturbed soil areas at the site were covered with reclaimed redwood bark and ground redwood.

12. Landfill staff reported that erosion damage began approximately October 26, 2005, after a moderately sized rainfall event of 0.6 inches resulted in runoff.

13. Regional Water Board staff inspected the Site on November 10, 2005. The inspection revealed numerous failures to the drainage system, including structural failure of the half-rounds, failure of the half-rounds to collect rainfall runoff, sediments deposits in the half-rounds causing overflow, failure of the half rounds to discharge collected stormwater into the large diameter drain pipes, gullying beneath the half-rounds and large diameter pipe, and failure of the rock lined ditches. All failures of the drainage system resulted in highly concentrated runoff and gullying of the interim cap to a depth of up to 3 feet, and sediment discharges to surface waters, as reported by landfill staff.

14. The Site drains into Ryan Creek and an unnamed creek that are tributary to Ryan Slough and Freshwater Creek. Ryan Slough and Freshwater Creek, part of the Eureka Plain Hydrologic Unit, flow into Humboldt Bay and, thence, to the Pacific Ocean. The Freshwater Creek watershed is listed as impaired due to excessive sediment and siltation under Section 303(d) of the Clean Water Act. Freshwater Creek, Ryan Creek, and their tributaries provide habitat for steelhead trout, chinook salmon, and coho salmon, which are listed as threatened under the Endangered Species Act.

15. The beneficial uses of tributaries to Freshwater Creek and Ryan Slough include:
    a) Domestic Supply
    b) Agricultural Supply
    c) Groundwater Recharge
    d) Water Contact Recreation
    e) Non-contact Water Recreation
    f) Cold Water Fish Habitat
    g) Migration of Aquatic Organisms
    h) Spawning, Reproduction, and/or Early Development

16. The beneficial uses of the Eureka Plain Hydrologic Unit, as designated in the Basin Plan, include:
    a) Agricultural Supply
    b) Industrial Service Supply

c) Navigation
d) Water Contact Recreation
e) Non-contact Water Recreation
f) Commercial and Sport Fishing
g) Cold Water Fish Habitat
h) Wildlife Habitat
i) Rare, Threatened, or Endangered Species
j) Marine Habitat
k) Migration of Aquatic Organisms
l) Spawning, Reproduction, and/or Early Development
m) Shellfish Harvesting
n) Estuarine Habitat
o) Aquaculture

17. The Water Quality Control Plan for the North Coast Region (Basin Plan) contains specific standards and provisions for maintaining high quality waters of the state that provide for the beneficial uses listed above. The Action Plan for Logging, Construction and Associated Activities (Action Plan) included in the Basin Plan includes two prohibitions:

- Prohibition 1 - "*The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.*"

- Prohibition 2 - "*The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.*"

18. Section 3 of the Basin Plan contains water quality objectives that specify limitations on certain water quality parameters not to be exceeded as a result of waste discharges. The water quality objectives (page 3-2.00-3.00) that are considered of particular importance in protecting the beneficial uses from unreasonable effect due to discharges from logging, construction, or associated activities, include the following:

- Color: Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.

- Suspended Material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

- Settleable Material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

- Sediment: The suspended sediment load and suspended discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

- Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring back ground levels. Allowable zones within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

19. Intermediate Cover Material as defined in Title 27 California Code of Regulations (CCR) means cover material placed on all fill surfaces where additional cells are not to be constructed for 180 days or more to control vectors, fires, odors, blowing litter, scavenging, and drainage. In accordance with Section 20705 Title 27 CCR, intermediate cover over wastes discharged to a landfill shall be designed and constructed to minimize percolation of liquids through wastes.

20. WDR Order No. 93-46, Discharge Prohibition A. 2. states that the treatment, storage, or disposal of wastes, including leachate, shall not cause a pollution or nuisance as defined in Section 13050, (l) and (m) of the California Water Code.

21. WDR Order No. 93-46, Discharge Prohibition A. 6. states that the discharge of wastes, including leachate, to surface waters, surface water drainage systems, or groundwater is prohibited

22. The following sections of the Porter-Cologne Water Quality Control Act authorize the Regional Water Board Executive Officer to make the following requirements for persons suspected of violating the applicable Waste Discharge Requirements and Basin Plan prohibitions:

    - Section 13267(a) - *"A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement or authorized by this division, may investigate the quality of any waters of the state within its region."*

    - Section 13267(b) - *"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or proposes to discharge waste within its region…that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."*

- Section 13267(c) - *"In conducting an investigation pursuant to subdivision (a), the regional board may inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with. The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure. However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant."*

- Section 13304(a) - *"Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, 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, including, but not limited to, overseeing cleanup and abatement efforts."*

23. Recent activities on the Site have resulted in violations of both the Basin Plan prohibitions contained in the Action Plan for Logging, Construction and Associated Activities and WDR Orders No. 93-46, 93-83, and R1-2005-65. Specifically, the Discharger has: 1) caused or permitted waste to be discharged or deposited into waters of the State, causing a condition of pollution or nuisance; 2) caused or permitted waste to be placed where it is or probably will be discharged to waters of the State and where it threatens to create a condition of pollution or nuisance, as a result of grading/earthwork and road construction activities; 3) discharged leachate to the surface water or surface water drainage system; failed to provide adequate interim cover which threatens to discharge leachate and threatens slope stability.

24. All of the technical reports required by this Order are necessary to ensure that the prior harm and future threat to water quality created by the discharges described above are properly abated and controlled. More detailed information is available in the Regional Water Board's public file on this matter.

25. This enforcement action is being taken for the protection of the environment and, therefore, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

26. Failure to comply with the terms of this Order may result in enforcement under the California Water Code. Any person failing to provide technical reports containing information required by this Order by the required date(s) or falsifying any information in

the technical reports is, pursuant to Water Code Section 13268, guilty of a misdemeanor and may be subject to administrative civil liabilities of up to one thousand dollars ($1,000.00) for each day in which the violation occurs. Any person failing to clean up or abate threatened or actual discharges as required by this Order is, pursuant to Water Code Section 13350(e), subject to administrative civil liabilities of up to five thousand dollars ($5,000.00) per day or ten dollars ($10) per gallon of waste discharged. Any person discharging waste into navigable waters of the United States without waste discharge requirements is, pursuant to Water Code Section 13385(c), subject to administrative civil liabilities of up to ten thousand dollars ($10,000.00) per day in which the discharge occurs plus ten dollars ($10.00) per gallon of waste discharged, and may also be subject to criminal prosecution pursuant to Water Code Section 13387.

27. Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code Section 13320 and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, any such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13267(b) and 13304, the Discharger shall:

Short-Term Emergency Erosion Control:

1. By **December 9, 2005**, implement short-term emergency mitigation measures at the Site to prevent erosion, control sediment sources, and prevent the discharge of earthen material into waters of the State. Erosion control measures implemented shall adequately address existing erosion sources within the Site.

2. All short-term emergency erosion control measures shall be routinely maintained throughout the winter period to provide adequate functional protection to waters of the State.

3. By **December 15, 2005**, submit a Short-Term Erosion Control Completion Report (STCR) to the Regional Water Board Executive Officer. The STCR shall fully document the implementation of specific short-term erosion control measures, describe the specific locations of those measures, and identify the locations on a **current** site topographic map at

a scale of not less than one inch to 100 feet. The STCR shall be prepared and signed by a professional engineer or geologist licensed in the State of California and experienced in erosion control and landfill construction. The STCR shall include photographs, descriptions, and mapped locations of all erosion control measures that have been implemented to control sediment delivery to waters of the state from the Site.

4. **By the 15th of each month thereafter**, submit a monthly progress report describing all actions taken to comply with this Order. Reports shall contain sufficient detail to determine progress and to document any new failures and action taken during the previous month. The report shall include photographs documenting the general condition of the site, documenting any new failures and repairs, and the condition of the surface water discharge locations, downstream conditions, and upgradient sample location condition. The report shall also include an updated site map showing new failures and erosion control work.

Drainage Design Failure Analysis and Long-Term Erosion Control Plan:

5. By **February 15, 2006**, the Discharger shall submit a drainage design failure analysis and long-term erosion control plan (FA/ECP) for review and approval by the Regional Water Board Executive Officer. At a minimum the FA/ECP shall identify all drain failure points and other sources of sediment delivery to waters of the State associated with the Site; an analysis of the original drainage design and why it failed; and a new drainage design and erosion control plan. The FA/ECP shall include a map of the Site, prepared using a USGS topographic map at a scale of not less than one inch to 100 feet. The map shall identify all existing and newly constructed/reconstructed roads and drainage structures, watercourses, springs, monitoring wells, surface and storm water sampling points. The FA/ECP shall contain engineering plans, drainage calculations, and construction specifications for the new drainage and erosion control design plan. The FA/ECP shall include a plan to stabilize, eliminate, or otherwise correct each of these sources of sediment.

6. The FA/ECP shall be prepared and stamped by a California licensed geologist or civil engineer experienced in erosion control, drainage design, and landfill construction design. This person shall be independent from the original design, construction, and construction oversight firms associated with the Summer 2005 regrading project.

7. The Long-term Erosion Control Plan must be fully and adequately implemented by **August 31, 2006**.

8. By **December 15, 2005**, the Discharger shall submit as-built designs for all work completed for the 2005 construction season up to the contractor's demobilization on October 20, 2005. These as-built records shall be signed and stamped by a California licensed geologist or civil engineer. This report shall include, but not be limited to, a topographic map showing the intermediate cover grades, the drainage system, and the location of new structures such as sumps and french drains; details of the toe berm french drains installations; and details the sump for the spring near the interception trench. All

work completed after this demobilization shall be documented in the STCR progress reports.

9. By no later than **December 5, 2005**, begin conducting monitoring and reporting in accordance with Monitoring and Reporting Program No. R1-2005-0120, and the General Monitoring and Reporting Provisions. These documents are attached to this Order and incorporated herein.

10. If, for any reason, the Discharger is unable to perform any activity or to submit any document in compliance with the schedule set forth herein or in compliance with any work schedule submitted pursuant to this Order and concurred with by the Executive Officer, the Discharger may request, in writing, a specified time extension. The extension request must be received by the Regional Water Board at least five days in advance of the due date, and shall include justification for the delay, including a description of good faith efforts performed to achieve compliance with the due date. The extension request shall also include a proposed time schedule with new performance dates for the due date in question and all dependent dates. An extension may be granted for good cause, in which case this Order will be revised accordingly. A failure to deny a requested extension of time in writing shall not be deemed approval.

Ordered by _____

Catherine Kuhlman
Executive Officer

November 29, 2005