## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

## **DRAFT TECHNICAL REPORT**

# ENROLLMENT OF FORMER ALPINE II BURN DUMP: TENTATIVE ADDENDUM NO. 6 TO ORDER NO. 97-11

FOR

**COUNTY OF SAN DIEGO** 

IN COMPLIANCE WITH THE CALIFORNIA WATER CODE SECTION 13263

Former Alpine II Burn Dump

**AUGUST 8, 2007** 

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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**To request copies of Tentative Addendum No. 6 to Order No. 97-11,** for General Waste Discharge Requirements for Post-Closure Maintenance of Inactive Hazardous and Nonhazardous Waste Landfills within the San Diego Region, please contact Ms. Carol Tamaki, Water Resource Control Engineer, at (858) 467-2982, <a href="mailto:ctamaki@waterboards.ca.gov">ctamaki@waterboards.ca.gov</a>.

Documents are also available at: <a href="http://www.waterboards.ca.gov/sandiego">http://www.waterboards.ca.gov/sandiego</a>.

## TENTATIVE ADDENDUM NO. 6 TO ORDER NO. 97-11

**FOR** 

## ENROLLMENT OF FORMER ALPINE II BURN DUMP

## **Draft Technical Report**

Adopted by the California Regional Water Quality Control Board San Diego Region On August 8, 2007

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#### 1. INTRODUCTION

This Technical Report provides the rationale and factual information supporting the findings and directives of Tentative Addendum No. 6 to Order No. 97-11.

#### 2. BASIS FOR FINDINGS AND DIRECTIVES

This section provides the rationale and factual information supporting the findings and directives of tentative Addendum No. 6 to Order No. 97-11. The text of each finding or directive is presented first, followed by a summary of the rationale and factual evidence supporting the finding.

#### A. FINDING NO. 1 STATES:

 WASTE DISCHARGE REQUIREMENTS. Except as contradicted or superceded by the findings and directives set forth in this Addendum, (Addendum No. 6) all of the previous findings and directives of Order No. 97-11, General Waste Discharge Requirements for Post-Closure Maintenance of Inactive Nonhazardous Waste Landfills Within the San Diego Region remain in full force and effect.

### BASIS FOR FINDING NO. 1

Order No. 97-11 applies to waste management units which ceased operations prior to 1984. The Alpine II Burn Dump will be added to Attachment No. 2 to tentative Addendum No. 6 to Order No. 97-11. Burn ash waste does not generally pose a threat to ground water since the metal constituents are bound to soils and do not migrate to the ground water table under ambient conditions. Therefore, the County of San Diego is hereby exempted from complying with ground water monitoring requirements of Monitoring and Reporting Program No. 97-11. However, burn ash waste could be transported to surface waters in absence of adequate cover and maintenance. Therefore, the County of San Diego will be responsible for compliance with landfill maintenance and control of storm water discharges from the site.

#### **B. FINDING NO. 2 STATES:**

2. **WASTE DISCHARGE:** Between 1963 and 1972, the County of San Diego owned and operated the Alpine II Burn Dump (hereinafter Site) located at 9715, 9725 and 9727 Chocolate Summit Drive, Alpine, CA. The County discharged household rubbish, tree trimmings, non-combustibles and conducted waste burning operations at the Site.

#### **BASIS FOR FINDING NO. 2**

The County of San Diego submitted to the Department of Forestry, "Application for Rubbish Dump Permit", dated October 1963 that listed the wastes that would be accepted at the Alpine II Burn Dump. The Operational History and Status of the Alpine II Burn Dump is described on page 3 of the Corrective Action Work Plan, received on November 20, 2006.

#### C. FINDING NO. 3 STATES:

3. **PERSON RESPONSIBLE:** The former Alpine II Burn Dump is currently located on three different parcels which were formerly leased by the County of San Diego. Two of these parcels (9715 Chocolate Summit Drive, APN 402-350-38 and 9727 Chocolate Summit Drive, APN 402-350-40) were subsequently developed with single-family homes; the remaining parcel (9725 Chocolate Summit Drive, APN 402-350-60) is currently undeveloped and owned by the County of San Diego. As a current property owner and the former operator of the Alpine II Burn Dump, the County of San Diego is identified as the "Discharger" responsible for the management of wastes and waste related constituents discharged at the Alpine II Burn Dump.

#### **BASIS FOR FINDING NO. 3**

Figure 2 of the Corrective Action Work Plan is a Site Plan of the Alpine II Burn Dump. It shows the approximate extent of burn ash debris on each of the privately owned parcels. The burn ash is located on two privately owned parcels. The majority of the burn ash is contained on the Daniel's parcel, APN 402-350-40. The remaining burn ash is contained on the Major's parcel, APN 402-350-40.

#### D. FINDING NO. 4 STATES:

4. **CORRECTIVE ACTION WORK PLAN:** On November 20, 2006, the Regional Board received a technical report entitled: "Corrective Action Work Plan, Former Alpine II Burn Dump, San Diego County, California." The work plan includes a proposal to consolidate and cap burn debris from two parcels adjoining a parcel owned by the County of San Diego. It is estimated that approximately 2,900 cubic yards of burn ash will be relocated to the County of San Diego parcel.

#### BASIS FOR FINDING NO. 4

The corrective action work plan contains a description of the activities that will be implemented by the County of San Diego to consolidate and

relocate burn ash from the two privately owned parcels to the County of San Diego parcel.

#### E. FINDING NO. 5 STATES:

5. WATER QUALITY CONTROL PLAN. The Water Quality Control Plan Report, San Diego Basin (9) (hereinafter Basin Plan), was adopted by this Regional Board on September 8, 1994, and subsequently approved by the State Water Resources Control Board (State Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Alpine II Burn Dump is located in the El Capitan Hydrologic Area (7.30) The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and waste discharge prohibitions that are applicable to discharges regulated under this Order.

### BASIS FOR FINDING NO. 5

The Site is located in the Conejos Creek Hydrologic Subarea (HSA 907.31) of the El Capitan Hydrologic Area (HA 907.30)

The Basin Plan designates existing groundwater beneficial uses in the El Capitan Hydrologic Area (HA 907.30) as municipal and domestic water supply (MUN)<sup>1, 2</sup> and agricultural supply water (AGR) supply. The Basin Plan also contains numeric water quality objectives<sup>3</sup> for chemical constituents to protect ground waters designated for MUN. The numeric objectives are derived from primary maximum contaminant levels (MCLs)<sup>4</sup> established by the Department of Health Services (Department) in Title 22 of the California Code of Regulations.<sup>5</sup> In general, the Department

<sup>&</sup>lt;sup>1</sup> See Water Quality Control Plan for the San Diego Basin (Basin Plan), Page 2-3. The Basin Plan defines MUN as "[u]ses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply."

<sup>&</sup>lt;sup>2</sup> Basin Plan, Table 2-5 at page 2-50.

<sup>&</sup>lt;sup>3</sup> "Water quality objectives" are defined in Water Code section 13050(h) as "the limits or levels water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area."

<sup>&</sup>lt;sup>4</sup> MCLs, maximum contaminant levels, are public health-protective drinking water standards to be met by public water systems. MCLs take into account not only chemicals' health risks but also factors such as their detectability and treatability, as well as the costs of treatment. Primary MCLs can be found in Title 22 California Code of Regulations (CCR) sections 64431 - 64444. Secondary MCLS address the taste, odor, or appearance of drinking water, and are found in 22 CCR Section 64449.

establishes MCLs to ensure the safety of public drinking water supplies at the point of use, i.e. at the tap. The Basin Plan also contains a narrative water quality objective to protect ground waters designated for agricultural supply (AGR) as follows: "Waters designated for use as agricultural supply (AGR) shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use".

The Basin Plan also designates existing beneficial uses of surface waters in the Conejos Creek Hydrologic Subarea (907.30) including municipal and domestic water supply (MUN), agricultural supply water (AGR), contact recreation (REC1), non-contact recreation (REC2), wildlife habitat (WILD), cold freshwater habitat (COLD), warm freshwater habitat (WARM), and support of rare, threatened or endangered species (RARE). The Basin Plan contains numeric surface water quality objectives for chemical constituents to protect the surface water designated beneficial uses. In addition the USEPA's California Toxics Rule (CTR) and National Toxics Rule (NTR) water quality criteria are also applicable to the surface waters of the Conejos Creek Hydrologic Subarea (907.30). The Basin Plan also contains a narrative water quality objective to protect surface waters designated for agricultural supply (AGR).

#### F. FINDING NO. 6 STATES:

6. **LEGAL AUTHORITY:** This Order is based on (1) section 13260 et seq. of the <u>Porter-Cologne Water Quality Control Act (Division 7 of the Water Code</u>, commencing with Section 13000); (2) applicable state and federal regulations; (3) all applicable provisions of statewide Water Quality Control Plans adopted by the State Water Resources Control Board and the <u>Water Quality Control Plan for the San Diego Basin (Basin Plan)</u> adopted by the Regional Board including beneficial uses, water quality objectives,

<sup>&</sup>lt;sup>5</sup> Basin Plan, Page 3-10 and Table 3-6 at 3-11. The Basin Plan provides that "Water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in California Code of Regulations, Title 22, Table 64444-A of Section 64444 (Organic Chemicals) which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. (See Table 3-6.)"

<sup>&</sup>lt;sup>6</sup> Basin Plan, Page 2-12

<sup>&</sup>lt;sup>7</sup> Basin Plan, Chapter 3 and Table 3-2 at Page 3-22.

<sup>&</sup>lt;sup>8</sup> The USEPA promulgated a final rule prescribing water quality criteria for toxic pollutants in inland surface waters, enclosed bays, and estuaries in California in 2001 (The California Toxics Rule or "CTR;" [40 CFR 131.38]). CTR criteria constitute applicable water quality objectives in California. In addition to the CTR, certain criteria for toxic pollutants in the National Toxics Rule (NTR) [40 CFR 131.36] constitute applicable water quality objectives in California as well.

<sup>&</sup>lt;sup>9</sup> Basin Plan, Page 3-5.

and implementation plans; (4) State Water Board policies, including State Water Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*) Resolution No. 88-63 (*Sources of Drinking Water*); California Code of Regulations (CCR) Title 27 [§20090(g) and §20385(a)(3)]; and (5) relevant standards, criteria, and advisories adopted by other state and federal agencies.

## **BASIS FOR FINDING NO. 6**

Solid waste landfills<sup>10</sup> in California are subject to both the Porter-Cologne Water Quality Control Act<sup>11</sup> and various policies and regulations promulgated by the State Water Resources Control Board (SWRCB) including Title 27, California Code of Regulations – CCR Title 27 and the federal Resource Conservation and Recovery Act (RCRA), including regulations implementing RCRA's Subtitle D found in Title 40 Code of Federal Regulations (C.F.R.), Part 258) (hereinafter "Subtitle D regulations"). In 1993, the SWRCB adopted Resolution No. 93-62, *Policy for Regulation of Discharge of Municipal Solid Waste*, requiring each Regional Water Quality Control Board to incorporate both the Chapter 15 (now CCR Title 27, as of 1997) and the Subtitle D regulations in waste discharge requirements (WDRs) for landfills.

Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. SWRCB Resolution No. 68-16 is a state policy that establishes the requirement that discharges to waters of the state shall be regulated to achieve "the highest water quality with maximum benefit to the people of the State." Resolution 68-16 also establishes the intent where the waters of the State are of higher quality than required by state policies, including Water Quality Control Plans, such higher "shall be maintained to the maximum extent possible" consistent with the maximum benefit to the people of the State.

#### G. FINDING NO. 7 STATES:

7. **NOTIFICATION:** The Regional Board has notified the Discharger and all known interested parties of its intent to enroll Alpine II Burn Dump to Order No. 97-11.

<sup>&</sup>lt;sup>10</sup> "Landfill" means a waste management unit at which waste is discharged in or on land for disposal. It does not include surface impoundment, waste pile, land treatment unit, injection well, or soil amendments. [Note: see also the definition of "waste management" Title 27 §20164 and §\$20090(c&f).]

<sup>&</sup>lt;sup>11</sup> Division 7 of the California Water Code, commencing with Section 13000.

#### **BASIS FOR FINDING NO. 7**

A public notice was published in the Regional Board agenda for the meeting held on June 13, 2007. The draft agenda package was sent to the Discharger via email and by U.S. Mail on July 6, 2007; and the draft agenda package was made available to the public via the Regional Board web page on July 6, 2007.

#### H. FINDING NO. 8 STATES:

8. **CEQA COMPLIANCE:** The County of San Diego approved a Notice of Exemption (NOE) from the California Environmental Quality Act (CEQA). The NOE was dated March 22, 2007 and cited Categorical Exemption, G Section 15304, CCR Title 14. The Regional Board received a copy of the Notice of Exemption on March 26, 2007.

#### **BASIS FOR FINDING NO. 8**

California Code of Regulations (CCR) Title 14, Chapter 3, Article 19 provides categorical executions for projects or sites that have been determined not to have a significant effect on the environment, and are therefore exempt from the provisions of CEQA. This project qualifies under Section 15304, Minor Alterations to Land, which consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes.

#### H. FINDING NO. 9 STATES:

9. **BOARD HEARING:** The Regional Board, in a public meeting, heard and considered all comments pertaining to the proposed action.

#### **BASIS FOR FINDING NO. 9**

Porter-Cologne Water Quality Control Act (California Water Code, Division 7), Section 13263.

#### I. ENROLLMENT IN GENERAL ORDER No. 97-11 STATES:

"1. The Alpine II Burn Dump is hereby enrolled, as a closed, inactive or abandoned waste management unit (Unit), for coverage by general waste discharge requirements issued as Order No. 97-11 and addenda thereto. The Alpine II Burn Dump is added to the list of enrollees, per attachment 2. to this Addendum.

- 2. The Regional Board identifies the County of San Diego as the Discharger responsible for the discharge of waste and waste constituents at the Alpine II Burn Dump.
- 3. The Discharger shall comply with all post-closure maintenance, monitoring, and reporting requirements of Order 97-11, and addenda thereto, for the Alpine II Burn Dump."

## **BASIS FOR ENROLLMENT IN GENERAL ORDER No. 97-11**

The Alpine II Burn Dump qualifies as either a closed, inactive or abandoned waste management unit under Order No. 97-11. The County of San Diego is the discharger responsible for compliance with Order No. 97-11.

#### J. ADDED MAINTENANCE SPECIFICATION C.18 STATES:

## C.18. Consolidation of Burn-ash Wastes at the Alpine II Burn Dump

- a. Burn ash wastes shall be placed within the consolidation area to a height of approximately 1 to 10 feet above existing grade.
- b. The consolidated burn debris cap shall be compacted to a minimum relative compaction of 90%. Moisture content of burn-ash wastes during placement should be between 0 and 3% above optimum moisture content. Compaction test results shall be documented by field personnel and attached to Daily Field Reports.

## BASIS FOR ADDED MAINTENANCE SPECIFICATION C.18

The consolidation of burn ash wastes is the same description contained in the Corrective Action Workplan as submitted to the Regional Board. This Maintenance Specification ensures that the County of San Diego consolidates the burn ash waste in accordance with the Corrective Action Workplan.

## K. ADDED MAINTENANCE SPECIFICATION C.19 STATES:

#### "C.19 Construction of Landfill Cover at the Alpine II Burn Dump

- The burn ash wastes shall be capped with a minimum two feet thick layer of soil.
- b. After the soil cap is constructed and graded to final elevations, the Discharger shall implement best management practices (BMPs) to control erosion of the landfill cover and control/convey surface water runoff.

- c. The side slopes of the consolidated burn ash wastes shall be no steeper than 3:1(H:V).
- d. The top deck of the consolidated burn ash wastes shall be constructed and maintained to ensure a minimum 2 percent grade to promote drainage of surface water towards the northeast."

#### **BASIS FOR ADDED MAINTENANCE SPECIFICATION C.19**

The landfill cover for the consolidated burn ash wastes is the same description contained in the Corrective Action Work Plan as submitted to the Regional Board. This Maintenance Specification ensures that the County of San Diego provides the landfill cover in accordance with the Corrective Action Work Plan. Figure 4 of the Corrective Action Work Plan contains a proposed surfacemanagement channel. According to County of San Diego staff, this is a conceptual model. Actual design of the surface water management channel will be completed after approval of the Corrective Action Work Plan by the Regional Board.

#### L. ADDED MAINTENANCE SPECIFICATION C.20 STATES:

#### C.20 Confirmation Sampling at the Alpine II Burn Dump

The Discharger shall collect and analyze an adequate number of confirmation soil samples to verify that the burn debris has been removed from the clean closed areas of the site. The number of samples to be collected and analyzed shall be adequate to demonstrate compliance with the "clean closure requirements" in CCR Title 27, §20324(d)."

#### **BASIS FOR ADDED MAINTENANCE SPECIFICATION C.20**

The Corrective Action Work Plan contained a confirmation sample and analysis plan. After the propose cavation of the burn dump located on the privately owned parcels, confirmation samples will be collected beneath the area excavated. One confirmation soil sample (from 0-6 inches below the excavated surface) will be collected per 1000 square feet of excavated surface area. Soil samples will be analyzed for metals and approximately 50% of the samples will be analyzed for PAHs via EPA Method 8310. Approximately 10-20% (no less than 2 samples/parcel, but no more than 3 samples/parcel) will also be analyzed for Dioxins and Furans by EPA Method 8290.

#### M. ADDED REPORTING REQUIREMENT E.13 STATES:

## "E.13 Construction Quality Assurance (CQA) Report for the Alpine II Burn Dump

The Discharger shall provide the Regional Board with a final Construction Quality Assurance (CQA) Report, including information required in California Code of Regulations Title 27, §20324(d):

- a. Daily summary reports pursuant to CCR Title 27, §20324(d)(1)(A).
- b. Acceptance reports pursuant to CCR Title 27, §20324(d)(1)(B).
- c. Final documentation pursuant to CCR Title 27, §20324(d)(1)(C).
- d. A tabulation of confirmation sampling results for clean closed portions of the burn-ash waste site. A written technical evaluation and interpretation of those confirmation sampling results.
- e. The final CQA Report shall be provided to the Regional Board within 90-days after the completion of field work identified in the corrective action work plan. "

### **BASIS FOR ADDED REPORTING REQUIREMENT E.13**

The basis for added Reporting Requirement E.13 is California Code of Regulations, Title 27, §20324(d).

#### N. ADDED REPORTING REQUIREMENT E.14 STATES:

"E.14 The Discharger shall notify the Regional Board within 48 hours after completing field work, pursuant to the Corrective Action work plan, for consolidation of burn ash wastes at the Alpine II Burn Dump."

## **BASIS FOR ADDED REPORTING REQUIREMENT E.14**

The basis for added Reporting Requirement E.14 is the Corrective Action Work Plan.

#### O. ADDED REPORTING REQUIREMENT E.15

"E.15 The Discharger shall notify the Regional Board within 10 working days after completing field work, pursuant to the Corrective Action work plan, for construction of the landfill cover for burn ash wastes at the Alpine II Burn Dump."

## **BASIS FOR ADDED REPORTING REQUIREMENT E.15**

The basis for added Reporting Requirement E.15 is the Corrective Action work plan.