

1. INTRODUCTION

The former Naval Training Center (NTC) landfill (site) is located in San Diego, California, approximately 2.5 miles northwest of downtown San Diego (Figure 1). The site is bordered to the northwest by the U.S. Marine Corps Recruit Depot (MCRD) and the Boat Channel, to the north-east and east by the San Diego International Airport (SDIA), to the west by McCain Road and the Boat Channel, and to the south by Harbor Drive and San Diego Bay (Figure 2).

The San Diego County Regional Airport Authority (Airport Authority) plans future development of the site with airport facilities, including aircraft apron, airport terminal buildings, roadway, and parking facilities. The proposed action will remove and dispose of off-site an estimated total 137,000 to 145,000 bank cubic yards (bcy) of buried wastes – comprised of approximately 25,000 bcy of burned waste (burned refuse and ash) and approximately 112,000 to 120,000 bcy of municipal solid waste (MSW – more commonly referred to as everyday trash and debris). The soil that is segregated from the excavated wastes will be stockpiled, characterized, and used to backfill the excavations. Based on the results of the stockpile characterization and comparison with the cleanup levels proposed in this plan, the Airport Authority may elect to dispose minor quantities of the excavated soil, off site at a permitted landfill facility.

Although existing landfill site conditions are being managed in a manner protective of public health and safety and the environment, the proposed action will remove those buried wastes that require such management, significantly reduce future potential environmental impacts to soil and groundwater, and provide a suitable sub-grade for the future construction of airport improvements.

This closure plan provides information on the types and extent of the buried wastes subject to removal, recommends cleanup criteria to satisfy clean closure requirements, and describes the proposed procedures and record-keeping to be implemented during closure activities. A combination of visual screening and confirmation soil sampling and analysis will be used to demonstrate compliance with clean closure requirements. Although clean closure is a secondary goal of this project, the Airport Authority is anticipating that clean closure may be achieved based on the planned action. Therefore, this closure plan has been prepared in general accor-

dance with the requirements for “clean closure plans” in Title 27 CCR Section 21810. This plan was prepared to obtain concurrence from the regulatory agencies and is not a design document, nor should it be construed as one. Data presented in this report should not be relied on for bidding purposes.

If the California Regional Water Quality Control Board San Diego Region determines that execution of the proposed action did not meet the requirements for clean closure as stated in Title 27 CCR Section 21090, then Airport Authority will continue to manage the site as a closed landfill with significantly reduced potential for environmental impacts.

Since 1986, numerous investigations have been performed at the landfill site and adjacent properties (Appendix A). The investigations have generally identified, characterized, and delineated the vertical and horizontal extent of buried wastes associated with the landfill (Bechtel 1996a and Ninyo & Moore 1998, 2001b). The Final Extended Site Inspection (Bechtel 1996a), and the Revised Final Engineering Evaluation/Cost Analysis Non-Time Critical Removal Action for Installation Restoration Program Site 1 (EE/CA) (Bechtel 2000) identified chemicals-of-potential-concern (COPC) in soil, groundwater, air, and landfill gas; and evaluated the risk to receptors and the environment. The EE/CA identified and analyzed closure alternatives, provided a comparative analysis of these alternatives, and included a detailed discussion of Applicable or Relevant and Appropriate Requirements (ARARs) for each alternative.

1.1. PROJECT OBJECTIVES

The primary goal of the project is to remove the buried wastes for off-site disposal and return the site to approximate grade by filling the excavation with a combination of on-site soils and imported clean soil to allow future site use for airport facilities. A secondary goal of the project is to conduct the closure activities in a manner that may satisfy requirements for “clean closure” in accordance with Title 27 California Code of Regulations (CCR) Sections 20950 and 21090. The project goals will be achieved by accomplishing the objectives listed below.

- Remove landfill cover/overburden soils to allow access to buried wastes and temporarily stockpile these soils on site.
- Excavate burned waste and MSW and temporarily stockpile each of the wastes separately on site.
- Excavate soil incidental to the removal of the wastes (the landfill cover soil and interstitial soils between waste areas), and up to one foot of soil underlying and adjacent to the buried wastes and temporarily stockpile these soils on site.
- Perform a combination of visual observation, confirmation soil sampling, and analytical testing to assess the adequacy of the removal.
- Profile the excavated wastes in accordance with this closure plan and the acceptance criteria of permitted disposal facilities deemed suitable for use by the Airport Authority.
- Transport the excavated wastes off site to the disposal facilities.
- Characterize the temporarily stockpiled soils for comparison with the site cleanup levels proposed in this plan.
- Restore the excavation areas with on-site stockpiled soils and clean imported materials that are appropriate for future airport improvements.

1.2. SCOPE OF WORK

The estimated extents of burned waste and MSW, based on previous site characterization data (see Appendix A) are illustrated on Figure 3. Removal of the buried wastes will include the excavation of incidental soil (the landfill cover soil and interstitial soils between waste areas), and up to one foot of soil underlying and adjacent to the buried wastes. As the buried wastes and soils are excavated, the nature of the adjacent and underlying soils will be evaluated through visual observation, confirmation soil sampling, and analytical testing. Following excavation and verification sampling, the excavation will be backfilled with on-site and imported soils. A report will be prepared to document the closure activities conducted at the site.

The proposed action will include removal of an estimated 25,000 bank cubic yards (bcy) of burned waste, approximately 112,000 to 120,000 bcy of MSW, encountered primarily in the non-operational areas of the airport shown on Figure 3. Soil segregated from the excavated

wastes will be stockpiled, characterized, and used to backfill the excavations. Based on the results of the stockpile characterization and comparison with the cleanup levels proposed in this plan, the Airport Authority may elect to dispose minor quantities of the excavated soil, off site at a permitted landfill facility.

The general scope of work anticipated for landfill closure is listed below.

- Preparing this closure plan, review and approval by regulatory agencies, and public participation.
- Pre-removal surveys and permitting.
- Site mobilization.
- Monitoring of nuisance odors and measures for odor control to eliminate impacts to operations at the SDIA and nearby communities.
- Excavating buried wastes and soil.
- Removing groundwater from the excavation(s) to facilitate waste removals, as necessary.
- Confirmation soil sampling and analytical testing of the excavation floor and sidewalls.
- Characterization of the stockpiled soils.
- On-site management and off-site disposal of excavated wastes and potentially minor quantities of excavated and characterized soil stockpiles.
- On-site management and potential on-site reuse or off-site disposal of extracted groundwater, as necessary.
- Backfilling the excavation with on-site soil and clean imported material.
- Site restoration and demobilization.
- Preparing a closure report.

There is a potential that waste material will be left in place and not removed as part of the closure activities, since excavation in certain areas could potentially disrupt critical airport operations and/or infrastructure, such as utilities, the runway, and/or terminal use. For these

reasons, the proposed action does not address burned waste that exists beneath the airport runway/apron. There is sufficient data from 16 years of groundwater monitoring (24 events) to demonstrate that the residual burned waste in this area does not present a threat to water quality.

The inert construction debris fill has been encountered below grade at some locations in the southern portion of the site, beginning approximately 300 feet north of Spruance Road. The proposed closure activities do not address this portion of the site. Site characterization data, including the site history, suggest that the area south of the former playing field and track contains areas of inert debris, such as concrete, asphalt, lumber, bricks, tile, and steel (Appendix A). As such, soil sample analytical results from previous investigations in this area have not indicated significant impacts from buried wastes. The site characterization data summarized from previous investigations is presented in Tables A-2 through A-7 and Figures A-1 through A-6. The on-going groundwater and landfill gas monitoring, shown on Figures 7 through 10 and in Tables A-9 through A-13, have not indicated the presence of significant impacts associated with buried wastes in this area. The excavation will extend far enough south to adequately remove the MSW, but is not anticipated to extend into the inert debris fill. A combination of visual observation of MSW removal and confirmation sampling of the sidewalls will be used to define the southern extent of removal.

1.3. REPORT ORGANIZATION

This closure plan has been organized into 13 sections, each of which provides details on the major aspects of the proposed closure project. The sections are organized as follows:

- Section 2 identifies the regulatory framework and the applicable regulatory requirements for clean closure.
- Section 3 describes the site and location and summarizes the history of the landfill, including types and methods of waste disposal.
- Section 4 describes the site regulatory history.

- Section 5 summarizes the results of site characterization, including previous site investigations; describes the physical characteristics of the site; and, the types, and nature, and extent of buried wastes.
- Section 6 describes the contaminants-of-concern (COCs), site ambient concentrations, and proposes cleanup levels for soil that would satisfy clean closure requirements.
- Section 7 describes the excavation area.
- Section 8 describes the applicable project controls, including health and safety requirements; air monitoring requirements; odor, vapor, and gas control; traffic control; control of storm water discharges; and, airport security.
- Section 9 presents the anticipated project management process and identifies key project personnel and responsibilities.
- Section 10 describes the activities that need to be performed prior to excavating wastes at the site, including surveys, permits and notification, utility protection, and destruction of groundwater and landfill gas monitoring wells that are within the excavation footprint.
- Section 11 describes the site work, including shoring, dewatering, excavating buried wastes and soils incidental to removal of the wastes, confirmation soil sampling, stockpile and waste characterization/profiling, on-site management of wastes, loading, transporting, and disposal of wastes, and backfilling the excavation areas with on-site stockpiled and characterized soils and clean imported materials.
- Section 12 describes site demobilization, project documentation, and preparation of a closure report.
- Section 13 presents a schedule and rough cost estimate for the project.

The appendices to this plan include the following: Summary of Previous Site Investigations (Appendix A), Letters from the City of San Diego Solid Waste Local Enforcement Agency (LEA) regarding Imported Soil (Appendix B), the Community Health and Safety Plan (CHSP, Appendix C), the Field Sampling and Analysis Plan (FSAP, Appendix D), the Quality Assurance Plan (QAP, Appendix E), and the Waste Management Plan (WMP, Appendix F).