

2. REGULATORY FRAMEWORK

Sections of Title 27 CCR that are applicable to clean closure and that have been addressed in this plan include:

- Section 20950 – General Closure and Post Closure Maintenance Standards Applicable to Waste Management Units (Units) for Solid Waste,
- Section 21090 – General Closure and Post-Closure Maintenance Requirements for Solid Waste Landfills, and
- Sections 21810 – Final Closure Plan Contents for Clean Closure.
- Relevant portions of the applicable sections are presented below.

2.1. TITLE 27 CCR SECTION 20950

(a)(2)(B) – Unit Clean Closed: For Waste Management Units (Unit) that are clean closed, the goal of closure is to physically remove all waste and contaminated materials from the Unit and from its underlying and surrounding environs, such that the waste in the Unit no longer poses a threat to water quality. Successful completion of clean closure eliminates the need for any post-closure maintenance period and removes the Unit from being subject to the State Water Resources Control Board (SWRCB) - promulgated requirements of this subdivision.

2.2. TITLE 27 CCR SECTION 21090

(f) – Optional Clean Closure: Notwithstanding any other SWRCB-promulgated closure or post-closure maintenance requirement in this subdivision, a discharger proposing to clean close a landfill shall submit a clean closure plan meeting the requirements of this subsection. [Note: see also California Integrated Waste Management Board's (CIWMB) additional landfill clean closure requirements under s21810.] The purpose of clean closure is to render the landfill (including all surrounding environs contaminated by waste released from the landfill) no longer capable of posing a threat to water quality. The purpose of a clean closure plan is to propose a series of actions, including an accurate estimate of the cost of each such action that will meet the requirements of this paragraph. Upon the California Regional Water

Quality Control Board's (RWQCB) finding that the discharger has successfully completed clean closure under this paragraph, the landfill shall no longer be subject to the SWRCB-promulgated requirements of this title. Nevertheless, if the RWQCB finds that the discharger's attempt to clean close the landfill does not meet the requirements of this subsection, the discharger shall close the landfill and carry out post-closure maintenance in the same manner as though the discharger had not attempted clean closure. For the purpose of this paragraph, the discharger shall have successfully clean closed a landfill only if:

- (1) all waste materials, contaminated components of the containment system, and affected geologic materials - including soils and rock beneath and surrounding the Unit, and ground water polluted by a release from the Unit - are either removed and discharged to an appropriate Unit or treated to the extent that the RWQCB finds they no longer pose a threat to water quality; and
- (2) all remaining containment features are inspected for contamination and, if contaminated, discharged in accordance with (f) (1).

2.3. TITLE 27 CCR SECTION 21810

Final Closure Plan Contents For Clean Closure (New):

- (a) The operator of a solid waste landfill may submit a closure plan for solid waste landfills that will be closed by removing solid wastes and contaminated soils (clean closure).
- (b) The purpose of the plan for clean closure is to:
 - (1) establish a closure method for a disposal site that will partially or completely remove solid wastes and contaminated soils to provide remediation of a threat to public health and safety, reduce or eliminate the need for post-closure maintenance, prepare the site for post-closure land uses, or recover materials for recycling or reuse;
 - (2) provide a basis for the operator to establish an accurate detailed cost estimate for clean closure of the site; and

(3) provide a plan and schedule for the operator to implement at the time of closure.

(c) Each submittal shall be certified by a registered civil engineer or a certified engineering geologist. The minimum components of a plan for clean closure shall include, but not be limited to:

(1) a detailed implementation schedule for clean closure activities;

(2) a characterization of the site conditions to define the extent and character of wastes present and the levels and extent of any soil contamination;

(3) a description of the excavation and material management procedures to be followed;

(4) a description of health and safety procedures to be followed and specific measures to protect public health and safety during clean closure activities; and

(5) [Reserved].

(d) The plan for clean closure shall also include a detailed schedule for disbursement of funds for closure activities in accordance with s21800(d). [Note: this section is not applicable to landfills that ceased operation prior to adoption of the regulation, as is the case with the NTC Landfill.]

(e) After clean closure activities are completed, a verification report confirming that waste and residual contaminated soils have been removed shall be prepared by a registered civil engineer or a certified engineering geologist and submitted for approval to the Environmental Assessment (EA) and the CIWMB. The report shall include the following information as appropriate:

(1) if the plan for clean closure was part of a remedial action, a description of any post-closure maintenance activities needed to comply with the implementation of the remedial action plan. In such cases the unit will not be deemed clean closed until completion of the corrective action.

(2) if all solid waste and contaminated soils are not removed, closure and post-closure maintenance plans and a financial assurances mechanism for closure and post-closure maintenance [shall be submitted]. Such a unit shall not be regarded as having been clean closed (see s21090(f)).

2.4. PROPOSED CLOSURE METHOD

Although maintaining the site as an inactive landfill is an acceptable alternative for site management, the Airport Authority proposes to remove the burned waste and MSW for future airport uses. In addition to removal and off site disposal of the buried waste the Authority will excavate up to approximately one foot of soil underlying and adjacent to the waste. Confirmation sampling of soil from the final excavation sidewalls and floor will be performed.

The soil excavated incidental to the removal of buried waste (existing soil cover, soil in interstitial spaces between waste cells, and soil underlying the waste) will be segregated to the extent practicable from the buried waste, stockpiled on site, and characterized. In general, the Airport Authority intends to use the excavated soil to backfill the excavation. However, minor quantities of soil stockpiles that contain COC concentrations exceeding the site cleanup levels may be disposed at an off-site permitted landfill facility.

After removal of the buried waste, if the confirmation soil samples and the soil stockpiles have COC concentrations that are below the cleanup levels, the Airport Authority will seek clean closure from the regulatory agencies. If the COC concentrations are at or above the cleanup levels, the RWQCB will be consulted to evaluate the feasibility of clean closure based on the number and margin of exceedences.

It should be noted that the results of the risk assessment performed by Bechtel (2000) indicated that the risk to human health and the environment for leaving the buried wastes in place was less than significant. This finding has been further substantiated by the on-going groundwater and landfill gas monitoring (Ninyo & Moore 2006g, 2006h). In general, the groundwater monitoring results have not indicated significant impacts to groundwater from

the buried wastes. The results of the latest groundwater monitoring are shown on Figures 7 through 10 and Tables A-8 through A-12 in Appendix A. The landfill gas monitoring results indicate that there is no migration of landfill gases to the landfill perimeter. The results of the latest landfill gas monitoring results are presented in Table A-13 in Appendix A.

This closure plan has been prepared to comply with applicable requirements set forth in Title 27 CCR Section 21810, and upon approval by the regulatory agencies, will provide guidelines and procedures that allow for project execution in a manner that may result in successful clean closure.

2.5. CLEANUP LEVELS

Initially disposal practices at the site are believed to have involved burning the wastes to reduce the volume. Subsequent to this, the wastes (MSW) were disposed of using the trench and fill waste disposal method. The general areas of burned waste and MSW are shown on Figure 3. The cleanup levels proposed in this plan represent concentrations of COCs, below which buried wastes and associated soil impacts are not considered to be present. Achieving the cleanup levels in confirmation soil samples will document the removal of the buried wastes and associated soil impacts. If the concentrations of COCs in discrete confirmation soil samples and the characterized stockpiles are less than the cleanup levels, then a determination of successful clean closure will be sought from the regulatory agencies. If the concentrations of COCs in confirmation soil samples (sidewall and base) are at or above the cleanup levels, or if the soil stockpile characterization results are at or above the cleanup levels, the RWQCB will be consulted to evaluate the feasibility of clean closure based on the number and margin of exceedences.

The COCs were evaluated based on site characterization data from previous investigations (Appendix A), and site ambient concentrations (Section 6). A review of potential site ambient concentrations and the rationale for developing cleanup levels is presented in Section 6.

It is anticipated that residual burned waste beneath the airport runway/apron will be left in place, since excavation in this area would potentially disrupt critical airport operations, or

infrastructure, such as utilities, the runway, and/or terminal use. There is sufficient data from 12 years of groundwater monitoring (22 events) in the vicinity of the runway/apron to demonstrate that the residual burned waste does not present a threat to water quality.

Should the closure actions proposed herein allow for a determination of successful clean closure, the Airport Authority may request that the RWQCB consider the area below the runway/apron clean closed as well based on Title 27 CCR Section 21090, which states that “all waste materials, contaminated components of the containments system, and affected geologic materials ...are either removed ...or treated to the extent that the RWQCB finds they no longer pose a threat to water quality.”

2.6. AGENCY REVIEW OF CLEAN CLOSURE PLAN

As noted, the content requirements of a clean closure plan are presented in Title 27 CCR Section 21810. This closure plan will be submitted to the RWQCB, the lead regulatory agency for the site. In addition, the plan will also be submitted to the LEA and the San Diego Air Pollution Control District (APCD) staff for comments and concurrence.

In accordance with Title 27 CCR 21810, this closure plan provides the following:

- site description, history of waste disposal practices, regulatory history,
- site characterization, including a summary of investigations, types and extents of buried wastes, evaluation of COCs at the site, and levels and extent of soil and groundwater impacts,
- a detailed implementation schedule of closure activities,
- a basis for a detailed cost estimate, including units of measure and quantities,
- identification of health and safety issues and description of specific procedures and measures to protect worker health and safety and the public,
- the monitoring of nuisance odors, vapors, and potential gas emissions, and measures to control or eliminate impacts to operations at the SDIA and nearby communities,

- description of the excavation and material management procedures including the transport and disposal of the excavated waste materials,
- description of specific procedures for visual observation and soil sampling and testing to evaluate whether clean closure objectives are met,
- discussion of soil reuse,
- site restoration, and
- a description of post-closure land use.

2.7. CONFIRMATION OF CLEAN CLOSURE

The following activities will be planned for and implemented:

- observation and documentation of the removal of burned waste, MSW, and soil incidental to removal of the wastes,
- documentation of the transportation and disposal of excavated wastes at off-site permitted facilities; minor quantities of excavated and stockpiled soils may also be transported off site for disposal,
- confirmation soil sampling to verify the removal of buried wastes,
- chemical characterization of stockpiled soils for comparison with site cleanup levels prior to re-use as backfill material, and
- submittal of a verification report documenting project activities, results of visual observation and soil sampling and analysis, and confirmation that the wastes have been removed. The report shall be prepared by a registered civil engineer or certified engineering geologist.

Under Title 27 CCR Section 21090(f), the final determination regarding the success of clean closure lies with the RWQCB.

2.8. POST-CLOSURE MAINTENANCE AND LAND USE

Per Title 27 CCR, Section 20950, successful completion of clean closure eliminates the need for any post-closure maintenance period and removes the site from being subject to SWRCB- and/or CIWMB-promulgated requirements. Removal activities described in this

closure plan are intended to meet clean closure criteria such that post-closure maintenance and land use planning will not be required for the site. If the clean closure is not successful, a post-closure maintenance plan and other submittals required per Title 27 CCR, Section 20950 will be included with the final closure report. As discussed previously, the proposed post-closure land use is airport operations, potentially including aircraft apron, extension of the Terminal 2 west building, roadway and parking facilities. Whether clean closure is successful or not, upon completion of closure activities, the site will be used to support airport operations.

2.9. ANTICIPATED WASTE STREAMS

This section presents information and a corresponding description for major waste streams anticipated to be generated during closure activities at the site.

- Based on waste characterization analyses for toxicity, some of the burned waste may be classified as Resource Conservation and Recovery Act (RCRA)-hazardous waste. These wastes are currently designated for disposal at Class I solid waste facilities, such as the US Ecology facility in Beatty, Nevada and/or the Clean Harbors facility in Buttonwillow, California, both of which are properly permitted facilities.
- Based on waste characterization testing, some of the burned waste may be classified as non-RCRA, California-hazardous waste. This waste is currently designated for disposal at the Copper Mountain Landfill in Wellton, Arizona, which is a properly permitted facility.
- The MSW, classified as non-hazardous waste, will be disposed of at one or more local Class III solid waste facilities, such as the Miramar Landfill, and/or the Otay Landfill, and/or the Sycamore Landfill. If permitted capacities at the local landfills are exceeded, then the MSW may be disposed of at the Copper Mountain Landfill in Wellton, Arizona.
- The soil that is excavated incidental to the removal of the wastes will be segregated from the wastes, stockpiled, characterized, and used to backfill the excavation. 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. These minor quantities are anticipated to be classified as non-hazardous waste and may be disposed of at one or more of the local permitted landfill facilities as described above.

- Water, including groundwater removed during excavation, storm water run-off, and from equipment and personnel decontamination, may be collected, stored, treated, and discharged on site in accordance with applicable RWQCB Waste Discharge Requirements (WDRs), discharged to a designated sewer discharge point under a City of San Diego Industrial Wastewater Control Program Industrial Users Wastewater Discharge Permit, or discharged to the storm drain under a National Pollutant Discharge Elimination System (NPDES) permit from the RWQCB.

2.10. COMMUNITY RELATIONS

The Airport Authority will implement a public participation program (PPP) to notify the public of the intended project and the potential chemical and physical hazards generated during site activities. The PPP will include public notification by mail, posted notices at the site and in the community, distribution of fact sheets, placement of advertisement in a newspaper with local circulation, and coordination with local environmental groups. In accordance with Section 25249.6 of the California Health and Safety Code, a Proposition 65 Warning will be included in the public notices and fact sheets.

In addition, this Closure Plan will be made available for public review and comment at public repositories (e.g., libraries) during a 30-day public comment period. Area residents and the public will be provided an opportunity to voice their concerns and ask questions about the project at a public meeting, which will be held during the public comment period and will be attended by key Airport Authority staff and consultants. The RWQCB and the LEA will be invited to attend the public meeting. The plan documents will be revised based on comments and suggestions received from the public, as applicable. The PPP will also include public comment activities required by the California Environmental Quality Act (CEQA).

At a minimum, the public information repositories allowing public review of the administrative record for this project (e.g., reports, meeting agendas, minutes, and presentation materials concerning the clean closure of the site) include:

The San Diego County Regional Airport Authority
3225 North Harbor Drive
San Diego, CA 92101

Contact: Mr. Richard Gilb
(619) 400-2790

California Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Contact: Mr. Brian McDaniel
(858) 467-2952

The City of San Diego
Solid Waste Local Enforcement Agency
1010 Second Avenue, Suite 600, MS 606L
San Diego, California 92101-4998
Contact Mr. Bill Prinz
(619) 533-3688

San Diego City Public Library
820 E Street
San Diego, CA 92101
(619) 236-5800

2.11. CALIFORNIA ENVIRONMENTAL QUALITY ACT

For this project, the Airport Authority is the lead agency under CEQA and is therefore required to prepare and disclose to the public an analysis of the potential environmental impacts of project implementation. The CEQA process will determine if the proposed closure activities of the NTC Landfill could result in potentially significant impacts and will identify mitigation measures that may reduce potential impacts to a less than significant level. The Airport Authority will prepare a CEQA document that identifies the potentially significant environmental impacts and describes necessary mitigation measures. This process will provide another avenue for public comment.