

mately one foot of soil underlying and adjacent to the wastes, or up to the Airport Authority property boundary, whichever results in less over-excavation.

Once the buried wastes have been removed, confirmation soil samples will be obtained from the excavation floor and sidewalls at the specified frequency and analyzed for the COCs and the excavation will be backfilled. If the analytical results of confirmation samples from a specific grid or sidewall are below the site cleanup levels, that grid or sidewall will be considered to have met the clean closure requirements. If the concentrations of COCs in confirmation soil samples (sidewall and base) 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 results of the confirmation sampling will be documented in the closure report.

Stockpiled soils generated during removal of the buried wastes will be sampled prior to on-site reuse as backfill material. If results of stockpile characterization indicate compliance with site cleanup levels, then a determination of clean closure will be sought by the Airport Authority depending on other site conditions documented in the closure report. 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 results of the stockpile characterization will be documented in the closure report.

## **8. PROJECT CONTROLS**

The project controls discussed below include public and worker health and safety, airport-related security requirements of the Airport Authority and the Federal Aviation Administration (FAA); air quality control and monitoring, and odor, vapor, and gas control; waste management and waste transportation and disposal; construction quality control; traffic control, and temporary facilities.

### **8.1. COMMUNITY HEALTH AND SAFETY**

A Community Health and Safety Plan (CHSP) has been prepared for this project and is included as Appendix C. The primary purpose of this CHSP is to promote a safe and healthy environment for the public by:

- reducing community exposures to potential hazards and nuisances caused by site work,
- promoting community awareness of the proposed closure project, and
- monitoring and mitigating potential public hazards and nuisances caused by site work that may migrate off-site:
  - organic vapors and landfill gases,
  - airborne contaminant particles and dust,
  - odors, and
  - noise.

The contaminants in vapors that could potentially migrate off-site include volatile organic compounds and landfill gases such as vinyl chloride, methane, and hydrogen sulfide. The primary airborne contaminant in dust is lead. Other contaminants detected during previous investigations, include metals such as arsenic, chromium, copper, nickel, and zinc, PCBs, PAHs, and dioxin/furans, which may become airborne in dust.

### **8.2. SITE HEALTH AND SAFETY REQUIREMENTS**

The Contractor, retained by the Airport Authority to implement this closure plan, will prepare a Site Health and Safety Plan (SHSP) that provides policies, information, requirements, and guidelines for on-site worker safety during site work. The SHSP will be prepared in accordance with the Federal Occupational Safety and Health Administration (OSHA) Hazardous Waste Operators and Emergency Response (HAZWOPER) Standard (29 Code of Federal Regulations (CFR) 1910.120) and California Title 8 CCR Section 5192.

The SHSP will include a section titled 'Hazardous Waste Contingencies' to provide for contingencies and be structured to handle a variety of situations that may arise, but be concise

enough so that site workers understand the hazards and are able to follow the procedures to reduce the level of risk. Site personnel working within the exclusion zone will be trained and current in accordance with the standards provided by HAZWOPER (40-hour initial training with annual updates). Appropriate management personnel will have 8-hour supervisor training. Additional training will be required, for personnel engaged in specialized tasks, as necessary.

All field personnel will be required to review the SHSP and provide written acknowledgment of their review and understanding of the plan and willingness to abide by its requirements. In addition, a tailgate safety meeting will be held at the beginning of each workday to discuss relevant or task-specific safety issues. A brief description of major health and safety requirements is provided in the following subsections.

#### **8.2.1. WORKER HEALTH AND SAFETY**

The SHSP will provide requirements and guidelines to be followed in the field to protect the health and safety of workers. The Contractor will designate a Site Health and Safety Officer (SHSO) to provide full-time oversight of health and safety issues during site work in accordance with the SHSP. The SHSO will prepare a daily site safety report and complete a site safety weekly inspection checklist. At a minimum, the SHSP will include the components listed below.

- Hazard analysis of field activities associated with site work. The pertinent chemical, physical, and biological hazards will be identified and control measures to reduce the risk of exposure to these hazards will be provided. Activity hazard analyses will be performed to define the specific risks and hazards of each activity and means to reduce the risk and hazards.
- Analysis of excavation (and trench) hazards and potential landfill gases, vapor, and dust emissions, including environmental requirements, equipment inspections, safe equipment operating practices, and worker site safety requirements.
- Specific training requirements to increase the health and safety awareness of site workers.
- Medical surveillance procedures.

- Site controls, including information on work zones and safe work practices, engineering controls, appropriate personal protective equipment (PPE), site safety equipment, and on-site communication.
- Real-time on-site air monitoring for worker health and safety (perimeter air monitoring to evaluate off-site impacts is addressed in the CHSP), including odor, vapor, gas, and dust monitoring.
- Radiological monitoring procedures.
- Noise monitoring procedures.
- Decontamination procedures, including contamination prevention, personal decontamination, equipment decontamination, and PPE disposal procedures.
- Accident prevention procedures.
- Health and safety issues associated with the on-site stockpiling, loading, transportation, and off-site disposal of hazardous and non-hazardous wastes, soil, and liquid.

#### **8.2.2. TRAINING REQUIREMENTS**

Supervisors and on-site workers must have completed training in hazard recognition and basic health and safety issues as required by OSHA regulations in 29 CFR 1910.120 (e) and Title 8 CCR Section 5192(e). More specifically, the training will include:

- OSHA 40-hour HAZWOPER training,
- OSHA 8-hour annual refresher training for hazardous site operations, and
- OSHA site supervisor training (personnel working in supervisory capacities).

The SHSO is required to have the following additional training:

- site-specific training (e.g., ergonomic training) prior to start of site work,
- first aid and cardio pulmonary resuscitation (CPR) training, and
- loss control/near miss incident reporting and investigation training.

The SHSO will perform the following:

- pre-construction safety meeting prior to the start of site work,

- daily safety briefings prior to site work for that day, and
- complete a site safety weekly inspection checklist.

### **8.2.3. EMERGENCY RESPONSE PLAN**

The SHSP will address the following aspects as part of an emergency response plan:

- chain-of-command and responsibilities during emergencies,
- pre-emergency planning,
- emergency site evacuation procedures,
- fire prevention and protection,
- emergency medical treatment procedures,
- response to personnel exposure to contaminants,
- decontamination during medical emergencies,
- spill control and response,
- adverse weather conditions and earthquakes, and
- accident and incident reporting procedures.

### **8.3. AIR QUALITY MONITORING**

The SHSP will include a detailed description of the on-site air monitoring program to evaluate worker health and safety. The CHSP presents an air monitoring program to monitor and measure potential off-site impacts.

#### **8.3.1. AIR QUALITY CONCERNS**

Airborne contaminants and dust may be generated during the proposed excavation and earthmoving activities. The primary concerns include exposure to contaminants in dust and reduced visibility and nuisance caused by dust. The potential contaminants in dust include:

- metals, primarily lead,
- PAHs,
- PCBs,
- pesticides,
- TPH,
- VOCs, and
- SVOCs.

#### **8.3.2. SITE WORKER AIR MONITORING**

Personal air monitoring in the breathing zone will be performed for on-site workers with the greatest potential for exposure to toxic air and dust contaminants. The workers to be monitored will be selected by the SHSO. Personal air monitoring will be performed in the breathing zone and will be accomplished by collecting air samples on appropriate sample media (e.g., charcoal sorbent tubes, glass fiber filter, polyvinyl chlorides [PVC] filter) and having the media analyzed for select COCs.

#### **8.3.3. GAS AND VAPOR MONITORING**

The SHSP will provide procedures for monitoring the concentration of VOCs and landfill gases in excavations. The SHSP will provide action levels and engineering controls to prevent potentially dangerous situations related to vapor and/or gas accumulation.

#### **8.3.4. AIR MONITORING FOR ODOR NUISANCE**

The SHSP will address monitoring of odors resulting from exposure of buried waste. It is critical that odors generated from closure activities that cause a nuisance and impact operations at the adjacent airport and nearby communities be suppressed or controlled. The plan will include measures for odor control that may include spraying inert substances to suppress odors, covering wastes that are causing odors, and delaying or

stopping work until the odors have been mitigated such that they no longer affect off-site receptors.

### **8.3.5. SAMPLING METHODS**

On-site air monitoring will be performed in the breathing zone of the workers closest to the active excavation face. The purpose of breathing zone sampling is to evaluate exposures from COCs. The following are major features of the proposed breathing zone air-monitoring program that will be addressed in the SHSP:

- air sampling equipment,
- air sample collection methodologies,
- frequency of air sampling,
- laboratory analyses of airborne contaminants,
- calibration and maintenance of air monitoring equipment, and
- reporting requirements.

### **8.3.6. BIRD CONTROL**

The plan should address concerns related to birds, such as seagulls, that may be attracted to the exposed MSW and that may affect airport operations. These measures may include minimizing the size of the exposed excavation area (active face), maintaining human presence at all times, and recorded distress calls. Active methods of gull control, such as pyrotechnics, propane cannons, or shooting, will require the permission of the Airport Authority, the FAA, the California Department of Fish and Game, and the United States Fish and Wildlife Service (USFWS). In addition, trucks used to transport waste will be tarped to reduce potential odor issues during transportation.

#### **8.4. RADIATION MONITORING**

The need for radiation monitoring will be established in the SHSP. Radiation monitoring procedures, action levels, and record keeping will be in accordance with 20 CFR and 29 CFR 1910.96.

#### **8.5. NOISE MONITORING**

Noise monitoring and hearing conservation requirements will be defined in the SHSP and implemented in accordance with 29 CFR 1910.95.

#### **8.6. TRAFFIC CONTROL**

The Contractor will prepare a traffic plan to address vehicular traffic control related to site work. The traffic plan will discuss the location of major points of ingress and egress at the site and major on-site and off-site roads that would be utilized by project personnel vehicles, heavy equipment mobilization and demobilization at the site, and material transportation to and from the site. The traffic plan will also discuss traffic routes, major roadways outside and in the vicinity of the landfill site, circulation patterns, and volume/numbers of various vehicles that are expected at the site during the closure activities.

The southern portion of the site is not subject to the removal action, and therefore, may be available for use as a staging area, and for temporary soil and waste stockpiles.

The traffic control plan will provide for the efficient completion of the work activities in a safe working environment while minimizing the impact on the normal traffic flow. Traffic controls will be required during removal activities in the excavation and stockpile areas to provide for equipment operation and truck loading. All traffic control activities will conform to the applicable specifications of the *Manual of Traffic Controls for Construction and Maintenance Work Zones* (Caltrans 1996).

It is anticipated that there will be approximately less than 20,000 truck loads of wastes and other materials removed from the landfill over the duration of the closure project. A truck

route will be established such that trucks will enter and exit the work site via McCain Road, and use the appropriate access gate(s) as outlined in the traffic control plan. The trucks will exit the site at McCain Road and proceed to Harbor Drive. From Harbor Drive the trucks will proceed to Interstate 5. From Interstate 5, the truck route will depend on the final destination of the wastes. The potential impacts from truck and worker traffic are addressed in the CEQA document for this project.

## **8.7. GENERAL PERMIT FOR STORM WATER DISCHARGES**

The Airport Authority will obtain coverage under a General Permit by filing a Notice of Intent (NOI) with the associated filing fee and a vicinity map, and ensure the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The NOI, the SWPPP, and other reporting requirements are briefly discussed in this section. Requirements for coverage under the General Permit are described in the SWRCB NPDES General Permit for Storm Water Discharges Associated with Construction Activity Handbook (SWRCB 1999). Upon project completion, the Airport Authority will file a Notice of Termination (NOT) with the RWQCB, certifying that all state and local requirements were met in accordance with the Special Provisions for Construction Activity under the General Permit.

In addition to complying with the General Permit, the Contractor will comply with the lawful requirements of the Airport Authority, and other local agencies regarding discharges of storm water to systems or other water courses under their jurisdiction. The General Permit does not authorize the discharger to discharge contaminants to San Diego Bay or to the storm drain system unless a separate NPDES permit has been issued to regulate such discharge.

### **8.7.1. STORM WATER POLLUTION PREVENTION PLAN**

In accordance with the General Permit, the Contractor will implement the SWPPP prior to initiating closure activities at the site. The SWPPP will remain on-site at all times and be available for review. The SWPPP will describe best management practices (BMPs) to reduce or eliminate sediment and other pollutants in storm water and non-storm water

discharges. The BMPs shall emphasize source control, including erosion and sediment controls, waste handling and disposal, and non-storm water management. The BMPs will utilize the Best Available Technology, economically achievable (BAT) and the Best Conventional Pollution Control Technology (BCT). The Contractor will prepare the SWPPP in accordance with the General Permit requirements. The SWPPP will include a Monitoring and Reporting Program in accordance with the General Permit Handbook.

#### **8.7.2. AIRPORT SECURITY**

The Contractor's personnel, including subcontractors, will be required to undertake airport security training and follow the airport security procedures mandated by the Airport Authority and the FAA.

#### **8.8. WASTE MANAGEMENT**

A WMP (Appendix F) has been prepared to discuss waste management activities from generation through off-site disposal. The WMP provides information on the different types of wastes, and how the excavated wastes, including burned waste, MSW, recyclable wastes, effluent from dewatering operations, and soils will be managed and re-used. In addition, an important goal of the WMP is to ensure that waste minimization practices are followed, to the extent practical, to reduce the volume of waste that will be generated, temporarily stored, and transported off site for disposal/recycling.

#### **8.9. WORK IMPLEMENTATION PLAN**

The Contractor will prepare a Work Implementation Plan (WIP) that presents the Contractor's general approach to implementing the landfill closure. At a minimum, the WIP will include information on the following planned activities associated with closure of the landfill:

- site preparation, including demolition, clearing and grubbing, utility relocation/protection, and monitoring well abandonment under permit,
- site laydown, including location and details of waste stockpile construction,

- shoring and dewatering plan,
- odor, vapor, gas, and dust control plan,
- pest control plan,
- SWPPP,
- excavation plan,
- physical segregation and temporary stockpiling of excavated materials,
- waste management and characterization,
- stockpile characterization,
- confirmation sampling,
- survey of excavation and sampling locations,
- preparation of waste for transportation,
- waste loading, hauling, and off-site disposal/recycling,
- backfilling the excavated area with on-site material and imported clean material, and
- site cleanup and restoration.

#### **8.10. ENVIRONMENTAL CONSIDERATIONS**

Major environmental considerations associated with this closure project include the following:

- San Diego Boat Channel/Bay, located northwest and west of the site, supports a significant biological community; however, there is no anticipated ecological risk associated with closure activities as discharges to the Bay or storm drain system will be controlled or eliminated through the Contractor's SWPPP or a NPDES permit.
- SDIA, residential, and business communities are located near the site. Measures will be taken to ensure that odors, vapors, and landfill gases do not cause a nuisance or impact these receptors. Dust generated during earthmoving activities will be reduced such that there is no interference with airport operations. These measures will include decontamination of waste-hauling trucks prior to leaving the site and covering the waste during on-site stockpiling and transportation for off-site disposal/recycling.

- Airborne contaminants generated during earthmoving activities have potential health hazards that will be addressed through air monitoring and mitigation measures specified in the attached CHSP.

### **8.11. REGULATORY REQUIREMENTS**

The applicable federal, state, and local regulations are:

- San Diego APCD Regulations (Rules 50, 51, and 59),
- RWQCB, Region 9, Water Quality Control Plan for the San Diego Basin,
- Order No. 97-11, as amended,
- 27 CCR Section 21090(f) and 21810,
- 8 CCR, Sections 1539 through 1541,
- Labor Regulations, 29 CFR Parts 1910 and 1926,
- RCRA Generator and Transporter Regulations (40 CFR Parts 261-263),
- RCRA Treatment, Storage and Disposal Facilities Regulations (40 CFR Parts 264 and 265),
- RCRA Land Disposal Restrictions (40 CFR Part 268),
- OSHA Standards for Hazardous Site Responses and General Construction Activities (29 CFR Parts 1904, 1910, and 1926), and
- Department of Transportation (DOT) Hazardous Materials Transportation Regulations (49 CFR Part 100 et seq.).

Federal and state statutes and executive orders that may apply include:

- CAA – Clean Air Act,
- CHSA – California Hazardous Substances Act,
- HMTA – Hazardous Materials Transportation Act,
- OSHA – Occupational Safety and Health Act,
- RCRA – Resource Conservation and Recovery Act, and