

## 7.0 ALTERNATIVES

### 7.1 INTRODUCTION

Pursuant to Section 15126.6 of the *State CEQA Guidelines*, an EIR must address:

...a range of reasonable alternatives to the project, or to the location of the project, which would reasonably attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

As described in Section 4.3, the proposed project would cause significant, albeit short-term, air quality impacts related to NO<sub>x</sub> emissions in excess of adopted hourly and daily thresholds. All other project impacts would be less than significant or mitigated to less-than-significant levels. This EIR chapter evaluates a project alternative that would avoid the significant NO<sub>x</sub> air quality impact and a “No Project Alternative,” as required by CEQA and the *State CEQA Guidelines*. Alternatives that were considered but not carried forward for detailed evaluation are also described, followed by a discussion of the Environmentally Superior Alternative.

### 7.2 ALTERNATIVES CARRIED FORWARD FOR DETAILED EVALUATION

#### 7.2.1 Cap, Bridge and Leave In Place

The Authority is currently under no regulatory requirement to close the former NTC landfill. Accordingly, the Authority could leave the former landfill in place without modification (see Section 7.2.2, No Project Alternative, below). Leaving the landfill in its current condition, however, would not address the desire of the Authority to have the former NTC landfill site available for airport uses. As an alternative to the proposed project, the Authority could cap the site with fill, create a structural bridge over the site to provide support for future development on the site (such as an expansion of T2 West or aircraft parking aprons and taxiways), and leave the MSW and BA in place.

This alternative would require substantially less earthwork than the proposed project and would also generate substantially fewer truck trips. The reduction in earthwork reflects that the site would be graded level and, depending on the design of the ultimate landfill cap and structural supports, some new fill might be imported to the site. No waste would be hauled from the site, and there would be no need to import material to backfill holes created by the excavation and off-site disposal of waste.

The effects of this alternative in comparison to the proposed project are described below by issue area.

## Traffic/Circulation

As noted above, this alternative would generate substantially fewer truck trips than the proposed project. Accordingly, it would have less effect on local traffic circulation than the proposed project's anticipated less-than-significant impacts.

## Hazards and Toxic/Hazardous Materials

This alternative would not involve the creation of any hazards to aviation, although on-site construction would be required to comply with FAA Advisory Circular No. 150/5370-2E, *Operational Safety on Airports During Construction*, similar to the proposed project. This alternative also would not involve any disruption to or movement of the buried MSW and BA at the project site. Accordingly, there would be virtually no potential for this waste to accidentally migrate off site during construction, and there would be no potential risk of upset associated with waste transportation. As described in Section 4.2, these potential impacts were assessed as less than significant for the proposed project.

As noted previously, there is no current regulatory requirement to remove the waste from the project site. This could change in the future, however, if one of two events occurs. First, it is possible that hazardous materials contamination associated with the waste could ultimately affect groundwater in a manner such that impacts to groundwater extend off site. Under such a scenario, the Authority would likely be subject to a requirement to remediate the site and remove the potential source of contamination (e.g., a RWQCB Clean-up and Abatement Order). Second, it is possible that in the future, regulations regarding buried waste may become stricter, especially in an environment where the waste is in relatively close geographical proximity to an impaired water body such as the San Diego Bay. It is speculative as to when or if these future events would occur; however, should one of them happen, it would be problematic if the Authority had already developed over the landfill site with airport facilities.

Although the buried MSW and BA would be left in place, the monitoring conducted at the site (see Section 4.2) indicates that this is not currently causing off-site contamination. Accordingly, the Authority considers the toxic/hazardous materials impacts of this alternative to be less than significant under CEQA.

## Air Quality/Odors

Under this alternative, there would be substantially less construction activity and truck traffic. Accordingly, it would be expected that this alternative would not generate NO<sub>x</sub> emissions in excess of daily or hourly limits, thereby avoiding the only significant and unmitigated impact of the proposed

project. Emissions of other pollutants would also be reduced, and no air quality mitigation would likely be necessary to avoid significant air quality impacts.

Because this alternative would not uncover or expose the buried MSW and BA, it would not have the proposed project's potential to generate noxious odors. As described in Section 4.3, the potential odor impacts of the proposed project are considered less than significant, in part due to design measures intended to help minimize odors.

## **Water Quality**

Compared to the proposed project, this alternative would have less of a potential to cause water quality impacts in the short-term, but a greater potential for impacts in the long-term. The reasons for this comparison are similar to those described above for toxic/hazardous materials. That is, there is no current regulatory requirement to remediate the former NTC landfill site for water quality reasons, and no evidence to suggest that the buried waste is causing contaminated groundwater to migrate from below the project site. It is speculative, however, as to whether these conditions could change in the future. Accordingly, this alternative has less of a short-term potential for water quality effects, but a greater long-term potential for adverse water quality effects.

Although the buried MSW and BA would be left in place, where it could continue to affect groundwater, monitoring (see Section 4.4) indicates that this waste is not causing off-site groundwater contamination. Accordingly, the Authority considers the water quality impacts of this alternative to be less than significant under CEQA.

## **Aesthetics/Visual Resources**

This alternative would involve less construction activity and ground disturbance than the proposed project and, therefore, would have even less impact than the less-than-significant aesthetics/visual resources impacts described for the proposed project in Section 4.5.

## **Noise**

For reasons similar to those described for the proposed project, the construction activity associated with capping, bridging and leaving in place the project site waste would not cause significant noise impacts.

## Public Utilities

This alternative would avoid the less-than-significant public utilities impacts of the proposed project associated with discharge of extracted groundwater to the sewer system and disposal of MSW and BA at landfills. Under this alternative, providing protection to the existing North Metro Interceptor Sewers that underlie the project site may be more difficult, depending on the structural protection method selected for implementation. Because it would be possible to protect the sewer lines without excavating the buried waste—using slip liners, for example—the effect of this alternative on the long-term structural integrity of the North Metro Interceptor Sewers would be virtually identical to that of the proposed project.

## Biology

As with the proposed project, this alternative would entail the total disturbance of the project site. However, as described in Section 4.8 for the proposed project, the former NTC landfill site does not contain sensitive biological resources and site disturbance would not cause a significant biological resources impact.

### 7.2.2 No Project Alternative

Under the No Project Alternative, there would be no remediation of the former NTC landfill, no installation of a cap over the buried wastes, and no structural protection of the North Metro Interceptor Sewers that underlie the site.

The No Project Alternative would avoid all of the effects of the proposed project, including the project's significant and unmitigated short-term NO<sub>x</sub> emissions. The No Project Alternative would not, however, help reduce constraints on future development of the former NTC landfill property, and it would do nothing to reduce the potential for future environmental degradation associated with the buried MSW and BA on site. As noted for the previous alternative, it is possible that hazardous materials contamination associated with the buried waste (in particular, the BA material) could ultimately affect groundwater in a manner such that impacts to groundwater extend off site. Under such a scenario, the Authority would likely be subject to a requirement to remediate the site and remove the potential source of contamination. It also is possible that in the future, regulations regarding buried waste may become stricter, especially in an environment where the waste is in relatively close geographical proximity to an impaired water body such as the San Diego Bay.

### 7.3 ALTERNATIVES NOT CARRIED FORWARD FOR DETAILED EVALUATION

The Authority initially considered, but did not carry forward for detailed evaluation, alternative dewatering methods. The authority also rejected the removal of wastes buried (1) under utility lines along McCain Road and (2) under the aircraft parking apron and Taxiway B and/or within 200 feet of the Runway 9/27 centerline. The reasons for not carrying these alternatives forward for detailed evaluation are described below.

#### 7.3.1 Alternative Dewatering Methods

##### **Disposal in San Diego Bay**

Given the relatively close proximity of the project site to the boat channel and to storm drains that discharge to San Diego Bay, it would have been relatively easy from an engineering and construction standpoint to discharge the extracted groundwater to San Diego Bay. This approach was not pursued, however, due to the potential adverse effects on the bay's water quality and the regulatory requirements associated with such discharges. Because San Diego Bay is listed as an impaired water body pursuant to CWA Section 303(d), and given its sensitivity and importance as aquatic habitat, it was considered unlikely that the Authority would be able to obtain the necessary regulatory approvals for such extracted groundwater discharges.

##### **Disposal Via Groundwater Recharge**

The Authority initially considered disposing extracted groundwater on site by allowing it to infiltrate back into the project site soils (also called "groundwater recharge"). Because the groundwater would essentially be returned to the same location from which it was extracted, it is possible that this would not have had any adverse effects on groundwater hydrology or water quality.

Conversely, however, it is also possible that this approach to extracted groundwater disposal could alter subsurface groundwater flows in the project area. In short, allowing extracted groundwater to infiltrate back into the project site soils could create hydraulic pressure (head) at the location where the recharge is occurring. This, in turn, could place outward pressure on the groundwater located below the recharge location, causing groundwater that had been intermingled with the buried waste to begin to migrate off site. Given the project site's location in close proximity to the boat channel and San Diego Bay, it would be undesirable to cause, or increase the rate of, off-site migration of groundwater.

In contrast, the proposed project approach of discharging extracted groundwater into the sewer is likely to create a "sink" that draws outside groundwater toward the site, thereby making it unlikely

that project construction would cause potentially contaminated groundwater to reach the boat channel or bay.

The potential on-site infiltration of extracted groundwater also has potential engineering/construction constraints. Specifically, it is possible that recharging the extracted groundwater back into the former NTC landfill site could increase the rate at which groundwater infiltrates active, open trenches, thereby contributing to an increased need for groundwater extraction. This positive feedback loop could potentially make excavation more difficult than under the currently proposed approach of discharging extracted groundwater to the sewer system.

### **7.3.2 Removal of Waste from Under Utilities, Aircraft Apron, Taxiway B, and Runway 9/27**

As described in Chapter 2.0, if the areas of buried waste extend under utility lines that parallel McCain Road along the west side of the project site, that waste will be left in place. This approach reflects that removing the waste from under these utility lines would require relocating the lines prior to construction. Given the relatively minor amounts of waste, the effort involved in utility line relocation was not considered warranted.

Similarly, it is possible that waste may be located under the active aircraft apron and Taxiway B, or (less likely) within 200 feet of the Runway 9/27 centerline. Removal of the waste under Taxiway B and/or the aircraft apron would require the closure of portions of these facilities, which would generate unacceptable disruptions to Airport operations. Similarly, pursuant to FAA requirements (see EIR Section 2.2.5) construction within 200 feet of the Runway 9/27 centerline would require that the runway be shut down while construction proceeds. This is not a feasible option given that SDIA is the nation's busiest single-runway airport. It would not be possible to schedule around this restriction by working at night because although there is a departure curfew at SDIA, the Airport is open 24 hours per day, 7 days per week for landings.

Accordingly, small amounts of waste may be left in place following the completion of construction. As described in Section 4.2, data from 12 years of groundwater monitoring in the project area demonstrates that the waste thought to be present beneath the runway/taxiway/apron or utility lines does not present a threat to water quality (Ninyo & Moore 2007). Title 27 CCR Section 21090 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." Therefore, if the former NTC landfill is considered successfully clean closed, the Authority may also request that the RWQCB also consider the area below the utility lines and runway/taxiway/apron to be clean closed.

## 7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the *State CEQA Guidelines* requires that, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” In this instance, determining the Environmentally Superior Alternative largely depends on balancing short-term, but unmitigated NO<sub>x</sub> impacts—as well as other less-than-significant impacts associated with project construction—against the long-term effects of leaving buried MSW and BA in place near the boat channel and San Diego Bay.

As described in Section 4.3, the proposed project’s NO<sub>x</sub> emissions would exceed established thresholds, but would be short-term and would not prevent the San Diego Air Basin from reaching attainment with state and federal air quality standards. As described in Chapters 4.0 through 6.0, all other effects of the proposed project would be less than significant or mitigated to less-than-significant levels. Given that the proposed project would remediate a potential long-term source of contamination, it suggests that this is an acceptable tradeoff for short-term air quality impacts. However, the potential positives of site remediation must be considered in light of the fact that, as noted in Section 4.2 and reiterated above, the buried MSW and BA has not to date been documented or identified as a threat to environmental health or safety, and there is no current regulatory requirement to remove this waste and dispose of it at regulated landfills. Nonetheless, in consideration of the short-term nature of the project’s significant NO<sub>x</sub> emissions, the less-than-significant effects of the project on other resource areas, and the potential long-term benefits of the proposed project’s removal of MSW and BA from a site close to the boat channel and San Diego Bay, the Authority considers the proposed project to be environmentally superior to each of the other alternatives considered, including the No Project Alternative..

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