Ascon Landfill Site Final Remedy Description
Coastal Development Permit and Conditional Use Permit Applications
August 2018

This narrative provides a brief background of the Ascon Landfill Site (Site) and describes the main components of the approved final remedy for the Site.

The Ascon Site is a vacant 38-acre property located at the southwest corner of Hamilton Avenue and Magnolia Street in Huntington Beach, California (at 21641 Magnolia Street). The Site operated as a waste disposal facility from approximately 1938 through 1984. Since 1984, waste materials have not been accepted, and the Site has remained a closed landfill facility. In 2003, the Department of Toxic Substances Control (DTSC) entered into a Consent Order and agreement[1] with ten Responsible Parties (RPs)[2] to remediate the Site. As a result of these agreements, the RPs are implementing the remediation activities at the Site per the DTSC-approved Remedial Action Plan (RAP), the certified Final Environmental Impact Report (EIR) that was prepared pursuant to the requirements of the California Environmental Quality Act (CEQA), and the DTSC-approved Final Remedial Design Report. DTSC is the lead agency overseeing the remediation of the Site. A Coastal Development Permit and Conditional Use Permit are needed from the City of Huntington Beach (City) to implement the final remedy/remedial action at the Ascon Site.

The Site is owned by Cannery Hamilton Properties, LLC (CHP)[3]. The Site includes an approximately 30-foot wide margin along the northern edge of the Site along Hamilton Avenue and an approximately 20-foot wide margin along the eastern edge of the Site along Magnolia Street that was dedicated to the City of Huntington Beach in 1987. Collectively, these two dedication areas are referred to as the City easement. The Site and property line[4] are identified in **Figure 1**. Refer to **Figure 2** (Detail 1) for a cross section showing the City of Huntington Beach easement. Control of the City easement has been temporarily transferred to CHP by license agreement with the City so that the final remedy can be implemented. It is anticipated that the City will accept this dedication (of the City easement) by the time the final remedy is completed.

The final remedy for the Site includes excavation and offsite disposal of waste from Pit F, grading of the Site, construction of an engineered protective cap over the Site with a vapor collection system, a perimeter access maintenance road, and two storm water detention basins. The existing Site topography and the approved final remedy are depicted in **Figures 1** and **2**, which include the planned cap slopes and locations of the perimeter road and storm water basins.

The following is a general implementation sequence for the field activities of the final remedy. This final remedial action work will be conducted per a DTSC-approved Final Remedy Implementation Plan and the DTSC-approved Final Remedial Design. The final remedy work will be conducted between the hours of 7:00 A.M. and 6:00 P.M., Monday through Saturday, with employee arrival, safety meetings, and work

[1] Imminent and Substantial Endangerment Determination and Consent Order 02/03-007, effective January 8, 2003, and the Imminent and Substantial Endangerment Determination and Order and Remedial Action Order 02/03-018, effective March 5, 2003.

[2] The ten RPs are Chevron U.S.A. Inc., Texaco Inc. (Chevron U.S.A Inc. and Texaco Inc. are now considered a single party as they are wholly-owned subsidiaries of Chevron Corp.), Conoco Inc., Phillips Petroleum Company (Conoco Inc. and Phillips Petroleum Company are now combined as ConocoPhillips Company), ExxonMobil Corp., Shell Oil Company, Atlantic Richfield Company (ARC), The Dow Chemical Company, TRW (now Northrop Grumman Systems Corporation), and Southern California Edison Company. Two of the RPs, Chevron and ConocoPhillips, created a limited liability corporation called Cannery Hamilton Properties, LLC ("CHP") to purchase the Site, and CHP is the current Site owner.

[3] The Ascon Site (CHP's property) consists of 3 parcels. Legal description for the Ascon property: Parcels 1, 2 and 3 of Parcel Map No. 86-442, as shown on a map recorded in Book 226, Pages 19 to 21 Inclusive of Parcel Maps, in The Office of the County Recorder of Said County. Excepting therefrom all Oil, Gas and Hydrocarbon Substances in or under said land as reserved in the deed recorded May 8, 1950 in Book 2009, Page 232 of Official Records.

[4] The property line for the Site along Magnolia St. and Hamilton Ave. is considered to be the boundary separating the City easement from the remainder of CHP's property.

day preparations (e.g., equipment inspections) beginning as early as 6:00 a.m.[5], in accordance with the certified Final EIR for the RAP for the Ascon Landfill Site[6]. As many as 37 employees and 10 visitors are expected to be routinely onsite during the final remedy.

Step 1 – Mobilization & Site setup: Mobilize equipment (excavators, loaders, dump trucks, water tanks, foam applicators, etc.), materials, and construction personnel to the Site. Set up office trailers, staging areas, water supply, temporary utilities, and access roads. Abandon (i.e., destroy) onsite groundwater monitoring wells that cannot be protected during remedy implementation[7].

Proposed Primary Equipment

- Excavators
- Off-road dump trucks
- Water trucks
- Front End Loaders
- Motor Graders
- Bulldozers
- Soil Compactors

Step 2 – Vegetation and Debris Clearing: Remove vegetation from the Site[8]. Stockpile, then break or crush[9] concrete debris, where necessary. Remove debris and Site materials that are incompatible with the final remedial design. Stockpiles of vegetation and debris will be located and maintained at various locations within the Site boundary.

Step 3 – Pit F Removal: Remove Pit F waste and dispose at an offsite disposal facility. Pit F will be excavated under a negative pressure enclosure, or tent, with emissions treated, prior to discharge to the atmosphere in accordance with a South Coast Air Quality Management District (SCAQMD) permit to operate (PTO). The waste material will be excavated using a slurry trench method where the waste will be excavated from deep, narrow, vertical trenches filled with a slurry composed of water, bentonite, and Portland cement. The slurry will stabilize the trench and minimize potential odorous emissions by minimizing the exposure of waste to air within the enclosure.

Waste removed from Pit F will be loaded into sealed bins located inside the tent and transported to an approved offsite disposal facility. The slurry used to stabilize the excavation and minimize VOC emissions will remain in the trench following the excavation of the Pit F waste. The slurry will solidify in the trench to backfill the excavation and support the placement of overlying soil and construction of the engineered cap for the remedy (see Step 6).

Step 4 – Lagoon Strengthening in Lagoons 4 and 5: Construct an internal berm within Lagoons 4 and the north half of Lagoon 5 on the northern and eastern boundaries of the lagoons to enable engineered slopes within the Site. This work will include the construction of a buttress

[5] Construction activities will not begin before 7:00 a.m., nor will mechanized construction equipment operate before 7:00 a.m.
[6] DTSC's EIR for the remedial action was finalized and certified on June 18, 2015.
[7] The onsite groundwater monitoring wells are planned to be abandoned prior to mobilization for the remainder of the remedy. New groundwater monitoring wells will be installed as needed near the end of or after remedy implementation (see Step 7) to continue long-term groundwater monitoring.
[8] Some vegetation clearing could occur prior to mobilization, depending on time of year.
[9] The breaking and crushing of concrete debris, if needed, could occur during multiple steps of the remedy.

composed of a mixture of Portland cement and water ("neat" cement) mixed with the in-place lagoon materials to contain the remaining waste. The top of the buttress will be beneath the final vegetated cap surface and, hence, not visible once the final remedy is complete.

Step 5 – Waste Reconsolidation: Remove waste from areas along Hamilton Avenue and Magnolia Street as shown in **Figure 1** and reconsolidate to the Site interior. The removal will include the following areas or items:

- Above street-level Site materials located on the City easement;
- Impacted Site materials, if any, found below street-level within the City easement that exceed the RAP's risk-based concentrations (RBCs) and exceed background concentrations of contaminants of potential concern (COPCs), and are found above the groundwater table;
- Impacted Site materials, if any, found below street level on the Site adjacent to the property line[10] around the perimeter of the cap that exceed the RBCs and exceed background concentrations of COPCs, and are found above the groundwater table (to enable construction of a perimeter access road);
- Portions of pits, as needed, located near the Site perimeter (to enable construction of the storm water basins in the northwest and southeast corners of the Site);
- Portions of Lagoons 4 and 5, as needed, to achieve final cap elevations; and
- Other materials (soils, drilling mud, construction debris, etc.) present near the Site perimeter, as needed to achieve final cap elevations.

The reconsolidation will be accomplished through grading of the Site to create side slopes no steeper than 3H:1V (horizontal to vertical) and top deck slopes not flatter than 3%. Lagoon 4 and Lagoon 5 materials that are not to be reconsolidated (i.e., materials that are already located in areas to be capped and at an elevation under the final cap elevation) will be solidified or otherwise fortified, as needed, to create an acceptable foundation for cap construction. A contour map of the preliminary final remedy surface elevations (after waste reconsolidation and cover construction) is shown in **Figure 1**.

Excavated materials within the City easement and perimeter road portions of the project will be replaced with imported fill materials that meet the requirements for "Clean Imported Fill Material" in accordance with the approved Remedial Design specifications[11] and the California Department of Toxic Substances Control (DTSC) Information Advisory. The surface of the property within the City easement portion of the Site will be graded to drain to the street at a nominal grade (1%), and the surface will be covered with a 6-inch thick layer of Class 2 aggregate base, except at the main Site entrances where concrete hardscaping will be installed. Cross sections of the final remedy, including along the perimeter, are included in **Figure 2**. Surfaces internal to the Site property line will be graded to drain toward one of the storm water basins and will either be vegetated or covered with aggregate base and/or concrete (perimeter road). **Figure CP-01** shows the conceptual Site landscaping plan. Establishment of the landscaping may take up to two years, depending on weather. Landscaping will be maintained as needed to address cap areas determined to have insufficient coverage required to minimize soil erosion. Areas of the cap determined to have insufficient coverage will be addressed by additional seeding, best management practices (i.e., erosion control blankets), or a combination of both.

To assess whether the RBCs and City of Huntington Beach Soil Cleanup Standards have

[10] The boundary that separates the City easement (ultimate right-of-way) and the remainder of the Ascon Site along Hamilton Ave. and Magnolia St.
[11] This includes compliance with City Specification 431-92, Soil Clean-Up Standard, for the import fill material.

been met in the area of the perimeter access road around the cap and in the City easement during fieldwork, COPC concentrations in soils will be measured at the excavation bottoms during remedy implementation, provided the excavation did not proceed down to groundwater. One confirmation sample will be collected for every 100 linear feet in the City easement and the area of the perimeter access road around the cap from the bottom of the excavation, anticipated to be approximately two feet below existing ground surface for the City easement and approximately four feet below existing ground surface in the perimeter access road. The lateral excavation limits for the City easement will be the existing fence line, with grading as needed to tie in to the edge of pavement along Hamilton Avenue and Magnolia Street for the northern and eastern Site perimeter, and the Site's fence line for the western and southern perimeter.

During the waste reconsolidation step, the depth of excavation will be limited to no further than the depth to the groundwater table to minimize the potential for a pathway for waste to enter groundwater. Excavations that could potentially approach the groundwater table, aside from the deep Pit F excavation, are limited to areas outside the cap, specifically the City easement, the perimeter road, and the storm water basins.

Step 6 – Cap Installation: Construct cap over the Site interior (area to which all waste that is to remain onsite has been reconsolidated). The planned cap will consist of an upper deck with a 3% gradient surrounded by side slopes along the Site perimeter with a 3H:1V gradient. The planned upper deck cap will include, from top to bottom, a 2-foot thick vegetative cover soil layer containing a geonet biotic layer to minimize animal burrowing into cap, placed at the mid depth of the vegetative cover soil layer; a geosynthetic drainage layer; a geomembrane barrier layer (60-mil [0.060-inch] thick linear low-density polyethylene [LLDPE] geomembrane), a vapor collection system, and a 2-foot thick foundation layer comprised of *in-situ* and/or re-compacted materials derived onsite. The side slopes will be a soil cap and will include, from top to bottom, a 2-foot thick vegetative cover soil layer overlying a 2-foot thick low permeability soil layer, a geonet biotic layer placed one foot below the surface, and a 2-foot thick foundation layer comprised of *in-situ* and/or re-compacted materials derived onsite. Cross-sections of the preliminary cover design are shown in **Figure 2**. The vapor collection system will treat vapors with granular activated carbon (GAC) filtration prior to release to the atmosphere. The vapor treatment system will be located along the western perimeter of the Site (see **Figure 1**).

A storm water collection system is included in the remedial design and is in compliance with the General Industrial National Pollutant Discharge Elimination System (NPDES) permit with the California State Water Resources Control Board (SWRCB) and the Site's Water Quality Management Plan (WQMP). Storm water will be conveyed from the final cap top deck to the basins using downdrains, v-ditches, and culverts designed to meet City and County of Orange requirements. Storm water will be discharged from the two onsite basins into the existing 60-inch diameter reinforced concrete piping beneath Hamilton Avenue. Connection to the existing 60-inch RCP will be made through an existing manhole in Hamilton Avenue and existing City tributary piping that extends to the south of the Hamilton Avenue and Magnolia Street intersection.

Stockpiles of imported materials required to construct the cap will be located and maintained at various locations within the Site boundary (up to six feet in height).

Step 7 – Final Field Work: Perform final Site grading, seeding of vegetative surfaces[12], perimeter road surfacing (aggregate base/concrete hardscaping), fence and gate construction, groundwater monitoring well construction, soil gas monitoring probe construction[13], and demobilization. Refer to **Figures CP-01**, **CP-02**, and **CP-03** for the conceptual landscaping and fencing plans and details. Site security fencing is planned to be installed three inches inside of the property line (ultimate right-of-way)[14]. The fencing will consist of a 6-foot high aluminum fence (8-ft panels with 3 rails, bronze color) with 6-foot 6-inch high split face block pilasters every approximate 49-feet 4-inches along the northern and eastern boundaries of the Site and the southeastern boundary along the green belt. A 6-foot high chain-link fabric[15] and line posts will be installed along the majority of the western and southern boundaries of the Site. The existing fence (located on adjacent property) and building walls (located on adjacent property) along the northern portion of the western Site boundary will form the security fencing along this portion of the Site perimeter, and a second fence inside the Ascon property line will not be installed. Four main vehicle fence gates[16] will be installed -- two at the northwest corner of the Site and two at the southeast corner of the Site -- providing Site access from Hamilton Avenue and Magnolia Street, respectively. Refer to **Figure 1** to see the locations and details for these gates[17]. The Site perimeter road will consist of a 24-foot wide aggregate base surface on the southern and western perimeters, a 15-foot wide aggregate base surface on the northern and eastern perimeters, and a concrete surface at the four main gate entrances to the Site. A fifth gate will be installed near the middle of the Site property boundary along Magnolia Street (see **Figure 1**) in the event that future access to Krik Well No. 80 oil well is required. Concrete hardscaping is not included for this entrance as it will only be used for limited access.

To monitor the effectiveness of the cap to contain soil gas, soil gas monitoring probes along each side of the approximately square shaped cap will be installed, with soil gas collection screens at approximately 5-feet depth below street level (i.e., above groundwater level). The number and spacing of soil gas monitoring probes will comply with the April 1, 2011, amendment of SCAQMD Rule 1150.1. The shallow groundwater table at Ascon precludes the installation of multiple-depth probes as deep as 10 feet below ground surface; therefore, the depth of the monitoring probes is an exception to Rule 1150.1. These gas monitoring probes will be monitored following cap construction to check if soil gases have migrated from under the cap.

To continue to monitor groundwater, new groundwater monitoring wells will be installed onsite, within the perimeter road.

Step 8 – Final Administrative Work: Establish final Site condition, monitoring and maintenance requirements, including groundwater monitoring, soil gas monitoring, landscaping

[12] Vegetation shall be shallow-rooted, so that it will not interfere with the integrity of the cap. Trees will therefore not be planted on the property. Final remedy cap is designed to preclude surface water migration into the waste; therefore, the final remedy does not include irrigation or non-drought tolerant vegetation.

[13] Construction of groundwater monitoring wells and soil gas monitoring probes may also occur after the final remedy is complete.

[14] The fencing will be installed along the property line (3-inches inside of the property line) to ensure the security of the Site. A larger setback between the fence and the property line is not feasible (any additional setback would require an increased amount of waste to be moved from the perimeter of the Site to areas beneath the cap, raising the height of the cap). The southwest portion of the cap cannot be raised further due to geotechnical stability concerns. There is also an access road along the toe of the cap (just inside of the fence line), including on the northern and eastern boundaries of the Site. This access road is needed to allow for long-term operation and maintenance of the cap and does not allow for the fence to be moved to accommodate a setback.

[15] The new chain-link fence will be vinyl coated (coating will be a dark color, such as black or green).

[16] The color and appearance of these gates will be bronze, to match the bronze color of the 6-foot high aluminum fence.

[17] Note that two gates (24 ft. wide double gates) will provide access to Krik Well No. 80 and Deeble 1 oil wells located beneath the southeastern portion of the Site.

maintenance, and operation of the vapor collection and treatment system, and document in the Operation and Maintenance (O&M) Plan. Establish and implement administrative controls/restrictive covenants, as appropriate, to assure appropriate limitations on any future development and activities.

Step 9 - Post Remedy Operations: Continue monitoring and maintenance requirements, including groundwater monitoring, soil gas monitoring, and operation of the vapor collection and treatment system.

Haul Route and Approximate Volumes for the Ascon Landfill Site Final Remedy

Export – Up to **32,250 CY** (cubic yards) of contaminated materials may be removed from the Site and transported to an approved disposal facility.

Import – A total of up to approximately **225,000 CY** of suitable soils are estimated to be imported to the Site to construct the cap and backfill the non-capped areas.

Export Trucks[18] – A maximum of up to **100** daily haul trucks (bottom or end-dump trucks and/or roll-off bins) for export materials.

Import Trucks[14] – A maximum of up to **200** daily bottom or end-dump trucks for import materials.

Supply Trucks – A maximum of up to **10** daily supply trucks to deliver various supplies, including water, equipment, construction materials, and other project related items.

Haul route[19] – I-405 Freeway to Ascon: South on Beach Boulevard, left on PCH, left on Newland Street, right on Hamilton Avenue, right into Ascon Site's Hamilton gate.

Ascon to I-405 Freeway: Exit Ascon Site onto Magnolia Street, south/right onto Magnolia Street, right onto PCH, right onto Beach Boulevard, merge onto I-405 Freeway.

Figure 3 shows the planned locations for contractor staging (including haul trucks) and parking area. Contractor staging and parking areas, as well as Site entrance(s), are subject to change as the Site progression dictates.

APPROXIMATE TIMELINE

Anticipated Start: January 2019 (pending DTSC approval, receipt of required permits, and contractor availability)

Step 1: Mobilization and Site Set-up – Approximately 3 weeks

[18] Truck routes and onsite staging will be in accordance with a site-specific haul plan approved by the City of Huntington Beach. Truck routes and staging will conform to the requirements outlined in the certified Final EIR.
[19] Up to 100 haul trucks per day will use this haul route. Additional material import haul trucks over 100 haul trucks per day will use an alternative haul route per the certified final EIR: I-405 Freeway to Ascon -- south on Brookhurst, right on PCH, right on Newland Street, right on Hamilton Ave., right into Ascon's Hamilton gate; Ascon to I-405 Freeway -- south/right onto Magnolia Street, left onto PCH, left onto Brookhurst, merge onto I-405 Freeway.

Step 2: Vegetation and Debris Clearing – Approximately 1 month

Step 3: Pit F Excavation and Disposal – Approximately 3 months

Step 4: Lagoon Strengthening in Lagoons 4 and 5: – Approximately 1 month

Step 5: Waste Reconsolidation – Approximately 12 months

Step 6: Cap Installation – Approximately 6 months

Step 7: Final Field Work – Approximately 2 months

Step 8: Final Administrative Work – Approximately 2 months

Step 9: Post Remedy Operations – O&M ongoing

Anticipated Finish: June 2020, based on a January 2019 start without project delays (except for Step 9, which will continue through the O&M period)

Note that some of the above project steps will overlap. The overall schedule for the remedial action is estimated at approximately 18 months, without delays.

Next steps: When the remedial action is complete, the Site will be fenced. Potential future development after the remedial action/construction of the protective cap would be subject to DTSC authority and other state regulations for the protection of the cap, and would include environmental review as appropriate pursuant to CEQA, with the City of Huntington Beach as the lead agency.