

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

Introduction

The *California Environmental Quality Act* (CEQA) requires a Mitigation Monitoring and Reporting Program (MMRP) for projects where mitigation measures are a condition of project approval and development. The Original Draft Environmental Impact Report (EIR) and Partially Recirculated Draft EIR prepared for the Chiquita Canyon Landfill (CCL) Master Plan Revision identified mitigation measures, where appropriate, to avoid or substantially reduce the environmental impacts associated with the Proposed Project. This MMRP is designed to monitor the implementation of those mitigation measures. Accordingly, this MMRP has been prepared in compliance with the requirements of CEQA Section 21081.6 and *CEQA Guidelines* Section 15097.

The MMRP that follows lists each of the proposed mitigation measures and identifies the corresponding action required to document compliance, the mitigation timing, the party responsible for implementation, and the monitoring agency or party responsible for overseeing that each measure is adequately implemented.

In addition to the mitigation measures proposed to avoid or substantially reduce the environmental impacts associated with the Proposed Project, this MMRP also includes construction and operation emission reduction practices and measures used in the analysis of potential air quality impacts. These emission reduction practices and measures are treated the same as Proposed Project mitigation measures.

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
Geology and Hydrology				
<p>GH-1 Debris Flow: Debris flow is a rapid and fluid type of downhill mass wasting, consisting of heterogeneous debris lubricated with water caused by heavy rainfall. Similar terms for debris flow are mudflow and mudslide. There is a potential for debris flow occurring at the site during heavy rains within existing drainage areas at the subject site. The proposed design shall include provisions for control and cleanup of debris flows that may encroach into the landfill cell, perimeter maintenance road, and proposed development areas. Potential mitigation measures could consist of combinations of the following mitigation measures, such as elevated development areas, drainage devices, impact walls, debris basins, and avoidance. Additional debris flow evaluation and mitigation should be performed as part of future development of rough grading plans for the entrance road.</p>	<p>A. Retain a qualified engineer to evaluate the site’s potential for debris flow, identify areas of concern and recommend design provisions for control and cleanup of debris flows should such design provisions be justified based on the evaluation.</p>	During Project design	CCL / Qualified Engineer	Los Angeles County Department of Public Works (LACDPW), Regional Water Quality Control Boards (RWQCB)
	<p>B. Incorporate provisions, as recommended by a qualified engineer, into the design for control and cleanup of debris flows that may encroach into the landfill cell, perimeter maintenance road, and proposed development areas.</p>	During Project design	CCL / Qualified Engineer	LACDPW, RWQCB
	<p>C. Perform additional debris flow evaluation and mitigation as part of future development of rough grading plans for the entrance road.</p>	During future development of rough grading plans for entrance road	CCL / Qualified Engineer	LACDPW, RWQCB
<p>GH-2 Expansive Soil: There is a potential for buildings and/or other structures to be located on expansive soil, because the site is underlain by bedrock of the Pico and Saugus formations, both of which contain potentially expansive clay-rich strata. Additional testing of the expansive properties of the soils may be required if buildings and/or other structures sensitive to expansive soils are planned for the site. Additional testing should be completed during the grading plan review if deemed necessary by the Project geotechnical and civil engineers.</p>	<p>A. Retain a qualified engineer to perform design-level geotechnical investigations to identify areas with potentially expansive or collapsible soils in relation to buildings and/or other structures.</p>	During Project design	CCL / Qualified Engineer	LACDPW
	<p>B. Perform additional testing if deemed necessary by the Project geotechnical and civil engineers.</p>	During grading plan review	CCL / Qualified Engineer	LACDPW

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
Surface Water Drainage				
<p>SW-1: There is a potential for mudflow (i.e., debris flow) during repeated heavy rains within existing drainage areas at the subject site. The proposed design should evaluate and specify an appropriate amount of waiting time following heavy and sustained precipitation events before CCL staff occupy the area, to avoid the potential to expose people to the risk of injury or death from this debris. This would supplement Mitigation Measure GH-1, which specifies that the proposed design should allow for the cleanup or control of any debris flows that may encroach into the landfill cell and perimeter maintenance road from the natural drainages and slopes that are not included in the proposed grading and construction of drainage/debris basins.</p>	<p>A. Retain a qualified engineer to evaluate and specify an appropriate amount of waiting time following heavy and sustained precipitation events before CCL staff occupy the area.</p>	<p>During Project design</p>	<p>CCL / Qualified Engineer</p>	<p>LACDPW, RWQCB</p>
	<p>B. Implement specified wait time following heavy and sustained precipitation events prior to CCL staff occupying the area.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LACDPW, RWQCB</p>
Biological Resources				
<p>BR-1: The applicant shall develop a Closure Revegetation Plan for the Project in consultation with the Los Angeles County Department of Regional Planning (LADRP), consistent with the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria provided in Appendix E3 of the Partially Recirculated Draft EIR. The Plan would require approval prior to authorization of land disturbance under the Proposed Project. The Plan shall require that CCL be revegetated to offset permanent impacts to native and naturalized habitats, in accordance with the following criteria:</p> <ul style="list-style-type: none"> Native vegetation shall be used under the direction of specialists in restoration plantings. Native revegetation shall achieve a 1:1 ratio of impacted native, revegetated, and semi-natural habitat to revegetated mitigation land. Non-native grassland habitats would be initially seeded with native grassland species. 	<p>A. Develop Closure Revegetation Plan consistent with Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria provided in Appendix E of the Partially Recirculated Draft EIR.</p>	<p>Prior to earth-moving activities</p>	<p>CCL / Qualified Ecological Restoration Specialist</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<ul style="list-style-type: none"> • Revegetation types, monitoring requirements, and success criteria including milestones, along with proposed remedial actions should vegetation alliances not achieve success criteria shall be included in the Closure Revegetation Plan, in accordance with the preliminary approach outlined in the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria provided in Appendix E3 of the Partially Recirculated Draft EIR. • In order to replicate and potentially expand the available amount of native shrubland on the site, the Closure Revegetation Plan shall include a final soil cover of approximately 5 feet, or alternatively a depth approved by regulatory agencies and suitable to allow for proper root growth. • The Closure Revegetation Plan shall be developed and implemented by an ecological restoration specialist familiar with restoration of native and naturalized Southern California plant alliances, and shall specify that revegetation will be done with locally native plants, and that revegetation will not include plant species on Los Angeles County’s list of invasive species nor invasive species on the lists of the California Invasive Plant Council (Cal-IPC) nor invasive species listed by the California Native Plant Society. • If success criteria for vegetation alliances are not met, remedial actions will be performed onsite consistent with the Closure Revegetation Plan. • If success criteria for native shrub or forest alliances are not met even after remedial actions are performed, offsite mitigation land shall be purchased to offset the loss of the portion of the alliance vegetation that does not meet the success criteria at a 1:1 ratio (impacted:mitigation land). The acreage acquired shall, if feasible, be generally local to the site or the general site area, ideally situated adjacent to 	<p>B. Implement Closure Revegetation Plan, per specified criteria.</p>	<p>Site closure, or at the time of revegetation</p>	<p>CCL / Qualified Ecological Restoration Specialist</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>
	<p>C. Perform onsite remedial actions consistent with the Closure Revegetation Plan, if success criteria are not met.</p>	<p>Following revegetation, according to the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria included in Appendix D of the Partially Recirculated Draft EIR</p>	<p>CCL / Qualified Ecological Restoration Specialist</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>or in the general proximity of the Santa Clara River, Hasley Canyon, or Angeles National Forest, and will connect with other protected open space. First priority would be given to lands that contribute to connecting the wildlife movement between the Santa Clara River through CCL to Hasley Canyon and to the Angeles National Forest.</p> <ul style="list-style-type: none"> Any purchased mitigation land shall be protected by fee simple deed which contains a covenant restricting the use of such land for conservation purposes to a conservation organization experienced in management of natural lands. Additional mitigation for vegetation communities is included in Mitigation Measure BR-5 (vegetation associated with jurisdictional waters), Mitigation Measure BR-9 (rare plant communities), and Mitigation Measure BR-15 (oaks and oak woodlands). Mitigation ratios for replacement of these vegetation communities may be greater than the 1:1 ratio specified above, in coordination with California Department of Fish and Wildlife (CDFW) for jurisdictional waters and rare plant communities and in coordination with LADRP for compliance with the County Oak Woodland Conservation and Management Plan. 	<p>D. Purchase offsite mitigation land, if success criteria are not met following onsite remedial actions.</p>	<p>Following revegetation, according to the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria included in Appendix D of the Partially Recirculated Draft EIR</p>	<p>CCL</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>
<p>BR-2: The construction area boundaries shall be delineated clearly. No construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion shall occur outside of the designated construction areas. In addition, CCL ingress and egress routes shall be marked, and vehicle traffic outside these routes shall be prohibited. Vehicular traffic shall adhere to a speed limit of 15 miles per hour on non-public access roads during construction to ensure avoidance of impacts to sensitive biological resources.</p>	<p>A. Clearly delineate construction area boundaries.</p>	<p>Prior to and during construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>
	<p>B. Restrict construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion to within designated construction area.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>
	<p>C. Mark CCL ingress and egress routes and restrict vehicle traffic to these routes.</p>	<p>Prior to and during construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>
	<p>D. Restrict vehicular traffic to a speed limit of 15 miles per hour on non-public access roads during construction.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-3: Soil or invasive plant seed transfer from clothing, shoes, or equipment shall be minimized through cleaning and monitoring of personnel or equipment transfers between sites, or prior to initial entry at CCL. Contract requirements to ensure all construction vehicles, including any vehicles entering areas of site construction, are pressure washed and/or clean and free of soil or invasive weed seeds and other plant parts prior to entering the site will be implemented. Contracts will specify that pressure-washing of construction vehicles is to take place immediately before bringing the vehicle to CCL. The contractor will provide written documentation that the vehicles have been pressure washed or otherwise free of plant material that is checked by both CCL management and the biological monitor, who will jointly assure that this mitigation is implemented. The biological monitoring report will include a record of compliance with this measure.</p> <p>Within 1 year of Project approval invasive tamarisk (<i>Tamarix</i> spp.) located onsite will be identified and removed completely. All parts of removed tamarisk will be disposed of in a landfill.</p>	<p>A. Specify in contracts that construction vehicles are pressure washed and/or clean and free of soil or invasive weed seeds and other plant parts prior to site entry.</p>	During construction	CCL	LADRP
	<p>B. Provide written documentation that construction vehicles have been pressure washed or otherwise free of plant material.</p>	During construction	Construction Contractor	CCL / Construction Manager / Biological Monitor, LADRP
	<p>C. Identify, remove, and dispose of invasive tamarisk located onsite within 1 year of Project approval. Immediately report any tamarisk that may appear in the future on the site to LADRP biologist if detected and remove from the site.</p>	Within 1 year of Project approval and ongoing before and after construction	CCL	LADRP, Permittee's Registered Biologist
<p>BR-4: On-road vehicles on the construction sites will be equipped with spark arresters on exhaust equipment. Camp fires, trash-burning fires, and warming fires shall be prohibited in the construction area.</p>	<p>A. Require on-road vehicles on construction sites to be equipped with spark arresters on exhaust equipment.</p>	Prior to and during construction	CCL / Construction Manager	LADRP, Fire Marshall
	<p>B. Prohibit camp fires, trash-burning fires, and warming fires in the construction area.</p>	During construction	CCL / Construction Manager	LADRP, Fire Marshall
<p>BR-5: For potential impacts to jurisdictional waters, permits shall be obtained for the Proposed Project from United States Army Corps of Engineers (USACE) (Section 404, Clean Water Act [CWA]) and CDFW (Streambed Alteration Agreement, Section 1603); conditions of these permits would be complied with for the Proposed Project. The terms and conditions of these permits are anticipated to require mitigation consistent with <i>Compensatory Mitigation for Losses of Aquatic Resources</i>;</p>	<p>A. As applicable, obtain permits from USACE and CDFW for potential impacts to jurisdictional waters.</p>	Prior to impacting jurisdictional waters	CCL	USACE and/or CA Dept. of Fish and Wildlife (CDFW), LACDPW
	<p>B. Implement mitigation consistent with terms and conditions of permits.</p>	During construction and post construction	CCL	USACE and/or CDFW, LACDPW

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p><i>Final Rule</i> (USACE, United States Environmental Protection Agency [EPA], <i>Federal Register</i>, April 10, 2008), and with CDFW requirements for Streambed Alteration Agreements. A mitigation plan may be required prior to permit issuance. If a mitigation plan is required, ratios of waters impacted to waters mitigated would be negotiated with the regulatory agencies and the results of that negotiation included in the plan.</p>	<p>C. Prepare mitigation plan, if required.</p>	<p>Prior to permit issuance, if required</p>	<p>CCL</p>	<p>USACE and/or CDFW, LACDPW</p>
<p>BR-6: Stationary equipment such as motors, pumps, generators, and welders shall be located a minimum of 50 feet outside CDFW and USACE jurisdictional drainages where impacts have not been permitted. Construction staging areas, stockpiling, and equipment storage shall be located a minimum of 50 feet outside non-permitted CDFW and USACE jurisdictional drainages. Construction vehicles and equipment shall be checked periodically to ensure they are in proper working condition, including regular inspections for leaks, which would require immediate repair. Refueling or lubrication of vehicles and cleaning of equipment, or other activities that involve open use of fuels, lubricants, or solvents, shall occur at least 100 feet away from CDFW and USACE jurisdictional drainages where impacts have not been permitted, and at least 50 feet from other flagged, sensitive biological resources.</p>	<p>A. Locate stationary equipment a minimum of 50 feet outside non-permitted CDFW and USACE jurisdictional drainages.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>CDFW and/or USACE, LACDPW</p>
	<p>B. Locate construction staging areas, stockpiling, and equipment storage a minimum of 50 feet outside non-permitted CDFW and USACE jurisdictional drainages.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>CDFW and/or USACE, LACDPW</p>
	<p>C. Check construction vehicles and equipment periodically to ensure they are in proper working condition.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>CDFW and/or USACE, LADRP, LACDPW</p>
	<p>D. Locate refueling or lubrication of vehicles and cleaning of equipment, or other activities that involve use of fuels, lubricants, or solvents, a minimum of 100 feet outside non-permitted CDFW and USACE jurisdictional drainages and at least 50 feet from other flagged, sensitive biological resources.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>CDFW and/or USACE, LADRP, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-7: Only pesticides, herbicides, fertilizers, dust suppressants, or other potentially harmful materials approved by EPA and/or the California Department of Toxic Substance Control shall be applied at CCL, in accordance with relevant state and federal regulations. Rodenticides will not be used. Instead, methods that do not persist and infiltrate the natural food chain will be used for pest elimination, such as trapping, gassing, etc. Sediment basins are present along all drainages at CCL, which capture runoff prior to discharging offsite. Sediment basins will continue to be regularly maintained.</p>	<p>A. Apply only pesticides, herbicides, fertilizers, dust suppressants, or other potentially harmful materials approved by the EPA and/or the California Department of Toxic Substance Control (DTSC), in accordance with state and federal regulations.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, RWQCB</p>
	<p>B. Prohibit use of rodenticides. Instead, use trapping, gassing, or other methods that do not persist and infiltrate the natural food chain.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, RWQCB</p>
	<p>C. Maintain sediment basins regularly.</p>	<p>During operation</p>	<p>CCL / Operations Manager</p>	<p>LADRP, RWQCB, LACDPW</p>
<p>BR-8: Construction sites and landfill operation shall be kept free of trash and litter. Food-related trash and litter shall be placed in closed containers and disposed of daily. Nuisance wildlife breeding will be discouraged at CCL by excluding such species from cavities in buildings and/or equipment or facilities to be left idle for more than 6 months. To reduce risk of infestation by the non-native Argentine ant (<i>Linepithema humile</i>), a 500-foot buffer will be established adjacent to natural habitats at CCL within which no permanent, artificial water sources will be applied, and inspections for exotic ant infestations will be required for any landscape or restoration container-stock plants proposed for installation. Landfill operations require daily covering of all portions of the active landfill; this practice would be continued, further reducing risk of nuisance wildlife.</p>	<p>A. Keep construction sites and landfill operation free of food-related trash and litter.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, Local Enforcement Agency (LEA)</p>
	<p>B. Place food related trash and litter in closed containers and dispose daily.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, LEA</p>
	<p>C. Install exclusionary devices on cavities in buildings and/or equipment or facilities to be left idle for more than 6 months.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, LEA</p>
	<p>D. Establish 500-foot buffer and manage risk of Argentine ant infestation, per measure.</p>	<p>During construction and operation</p>	<p>CCL / Construction Manager / Operations Manager</p>	<p>LADRP, LEA</p>
	<p>E. Provide daily covering of all portions of active working face of the landfill.</p>	<p>During operation</p>	<p>CCL / Operations Manager</p>	<p>LEA, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-9: Preconstruction surveys by qualified botanists shall be conducted for special-status plant species in impact areas prior to ground-disturbing activities, and if necessary and feasible, resource relocation or avoidance shall be implemented. Resource relocation will be to a location deemed suitable for successful relocation by a qualified biologist and conducted in coordination with CDFW. Avoidance zones shall be established with fencing and/or signage that restricts access.</p> <ul style="list-style-type: none"> For rare plants, this shall include focused surveys by a qualified botanist conducted during the appropriate season for detection (generally during flowering period) prior to ground-disturbing activities over the entire disturbance area proposed for the Project, and then again the first season prior to disturbance over the area proposed to be disturbed for each phase (cell) of landfill development. If suitable transplant areas for rare plants exist at CCL, surveys will also include potential areas for relocation onsite in order to provide background data for determining transplant success. If no suitable relocation areas exist at CCL, potential mitigation areas in conserved areas within the local watersheds will be identified and surveyed at the same time in order to have background data. Surveys shall follow standard survey protocol for rare plants outlined in <i>Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants</i> (United States Fish and Wildlife Service [USFWS], 1996) and/or <i>Protocols for Surveying and Evaluation Impacts to Special Status Native Plant Populations and Natural Communities</i> (CDFW, 2009). If special-status plants are found at CCL they shall be field marked and mapped with global positioning system units to evaluate potential for impacts from proposed grading. Where feasible, special-status plants will be avoided; protective measures to avoid adverse impacts to the area shall be implemented. Protected zones adjacent to active construction or active landfill will be demarcated with permanent fencing. More remote protected zones not accessible by construction equipment or near adjacent road access points shall be demarcated by temporary 	<p>A. Conduct preconstruction special-status plant surveys.</p>	<p>Prior to ground-disturbing activities</p>	<p>CCL / Qualified Botanist</p>	<p>CDFW, Permittee’s Registered Forester or Biologist, LADRP</p>
	<p>B. Implement resource relocation or avoidance (if necessary and feasible) as specified in Mitigation Measure BR-9, including focused surveys, Avoidance zones, implementation of a Rare Plant Relocation Plan, and performance monitoring.</p>	<p>Prior to construction, during construction, and post construction</p>	<p>CCL / Qualified Botanist</p>	<p>CDFW, Permittee’s Registered Forester or Biologist, LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>fencing (e.g., orange construction fencing) when road access is within 100 feet. If road access becomes immediately available to the area, permanent fencing will be installed. Fencing shall be maintained and construction crews informed about avoidance during construction. The site biological monitor will continue to monitor compliance with protected zones.</p> <ul style="list-style-type: none"> • Rare plants have been identified within construction limits during 2016 surveys. For these, and any additional rare plants identified prior to ground disturbance that are within the grading footprint or other areas identified for unavoidable disturbance (including species of California Native Plant Society Rare Plant Ranks 1-4 or Locally Rare), a Rare Plant Relocation Plan will be developed in consultation with CDFW. Plant salvage for transplanting shall take place before any clearing or grading of the sensitive plant occurs. Preliminary performance criteria, general methods of transplanting, and other anticipated components of this plan are provided in the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria provided in Appendix E3 of the Partially Recirculated Draft EIR. • The Rare Plant Relocation Plan shall address mitigation for special-status plants, including topsoil salvage to preserve seed bank and management of salvaged topsoil; seed collection, storage, possible nursery propagation, and planting; salvage and planting of other plant propagules (e.g., rhizomes, bulbs) as feasible; location of receptor sites to include on- or off-site property that could serve as permanent open space areas; land protection instruments for receptor areas; and funding mechanisms. The Rare Plant Relocation Plan shall include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success. Where feasible, background data for up to 3 years will be collected on receptor sites. • If rare plant relocation cannot be achieved, through lack of receptor sites, or lack of success during the monitoring period, then purchase of mitigation credits or offsite 				

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>property with known populations of the affected species for inclusion in permanent open space areas or a conservation easement would be implemented, with priority given to acquisition of offsite property.</p> <ul style="list-style-type: none"> • Locations within CCL that will not be developed are present adjacent to existing population of these species that may serve as receptor sites, and would be investigated for additional data. If found suitable, topsoil from impacted sites may be conserved and placed on these sites, seeds, bulbs (e.g., <i>Calochortus</i> spp.), rhizomes (e.g., <i>Calystegia peirsonii</i>), and entire plants and pads (e.g., <i>Opuntia basilaris</i> var. <i>basilaris</i>), may be collected/salvaged and planted on these sites, and ongoing monitoring and maintenance of plantings implemented. The Rare Plant Relocation Plan shall have the final details of plant transplant methods. • The on-site receptor/mitigation sites would be monitored for a minimum of 5 years to determine mitigation success or failure, consistent with the Draft Revegetation, Rare Plant Relocation, and Oak Tree Performance Criteria provided in Appendix E3 of the Final EIR and the Rare Plant Relocation Plan. If necessary, remedial measures consistent with the approved plan would be implemented to satisfy mitigation objectives. 				

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-10: Preconstruction surveys by qualified biologists shall be conducted for special-status wildlife species in impact areas prior to ground-disturbing activities, and if necessary and feasible, resource relocation or avoidance for special-status species shall be implemented. Wherever practical, relocation shall be passive, allowing animals to exit the area on their own. Any grubbing, grading or other ground disturbing activities at CCL would be done in a manner that encourages mobile wildlife species to leave the Project area to escape safely into immediately adjacent undisturbed habitat, wherever feasible. For low mobility species, salvage and relocation by a qualified biological monitor would be implemented. Resource relocation shall be to a location deemed suitable for successful relocation by a qualified biologist and conducted by individuals with appropriate handling permits as required by CDFW or USFWS. Where practical, avoidance zones shall be established in lieu of relocation with fencing and/or signage that restricts access. Construction and construction monitoring for animals will occur at discrete time periods. Construction monitoring shall be conducted in areas containing native vegetation at the time of construction activity within the limit of active construction disturbance. Within areas containing native vegetation, ground-disturbing activities shall be prohibited until the area is cleared by a qualified biological monitor during a preconstruction survey within 7 days prior to the beginning of construction activities. Biological monitors shall also monitor construction activities within 100 feet of avoided CDFW and USACE jurisdictional drainages.</p> <ul style="list-style-type: none"> For burrowing owl, suitable burrows will be identified during surveys and if feasible, protected from disturbance during construction. If avoidance is not feasible, burrows will be scoped during the non-breeding season (September 1 to January 31) to determine if they are occupied. If unoccupied, burrows will be collapsed. If burrows are occupied, owls will be evicted by installing one-way doors in burrow openings during the non-breeding season to exclude burrowing owls. After eviction, burrows will be collapsed. If feasible, alternative man-made burrows will be installed on lands not subjected to construction 	<p>A. Conduct preconstruction special-status wildlife species surveys.</p>	<p>Prior to ground-disturbing activities</p>	<p>CCL / Qualified Biologist</p>	<p>CDFW and/or USFWS, Permittee's Registered Forester or Biologist, LADRP</p>
	<p>B. Implement resource relocation or avoidance (if necessary and feasible) as specified in Mitigation Measure BR-10, including agency coordination, acquisition of appropriate handling permits, field monitoring, clearance sweeps, avoidance zones.</p>	<p>Prior to construction, during construction, and post construction</p>	<p>CCL / Qualified Botanist</p>	<p>CDFW and/or USFWS, Permittee's Registered Forester or Biologist, LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>disturbance, and within 300 feet of cleared burrows. Surveys would be consistent with the CDFW requirements for burrowing owl survey; mitigation measures presented here are consistent with CDFW (2012), and details of how mitigation would be implemented would be consistent with this document.</p> <ul style="list-style-type: none"> • For special-status reptiles (coast patch-nosed snake, coastal western whiptail, California legless lizard, San Diego horned lizard), preconstruction surveys in areas where land clearing will occur shall consist of gently raking areas of soft soils, sand, and dense leaf litter to identify individuals burrowed or buried in leaf litter. Individuals encountered will be captured and translocated to an area of undisturbed, intact habitat nearby deemed suitable for successful translocation by a qualified biologist. Translocation will be performed by biologists with appropriate handling permits by CDFW. • Special-status land mammals (San Diego black-tailed jackrabbit, San Diego desert woodrat, American badger): pre-construction surveys will consist of surveying and identifying evidence of occupancy and use, including rabbit forms, woodrat nests, and badger natal dens. If located during the breeding season for these species, features will be surveyed or scoped to determine occupancy if possible. If unoccupied, they will be dismantled or collapsed. If occupied, or if occupancy cannot be determined, avoidance zones will be established until occupancy can be determined or until the breeding season concludes. If features are identified during the non-breeding season, they will be gently dismantled or collapsed, allowing any occupants if present to disperse. Where habitat must be dismantled, alternative habitat features will be established in nearby undisturbed areas, including creating specific conditions suitable for the species if necessary, such as downed wood structures in shade suitable for woodrat. • For western spadefoot, if ground-disturbing activities will be conducted within 1,000 feet of the sedimentation basins at CCL, preconstruction ground surveys shall occur within 1,000 feet of potential breeding ponds (sediment basins). 				

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>The top 6 inches of soft soils and leaf litter shall be gently raked and small mammal burrows and soil cracks will be inspected or scoped for aestivating spadefoot. In addition, silt fencing will be installed between upland habitat slated for vegetation removal and grading, and potential breeding ponds (detention basins), if the basins are holding water at the time of construction, with pitfall traps located along the silt fence. Depending on proposed scheduling of upland habitat disturbance (relative to spadefoot breeding season), fencing and pitfall traps will target spadefoot moving from or to the upland habitat. Pitfall traps will be inspected daily when active, which will be during periods of likely spadefoot emergence or movement (during early season rainfall and pool formation and during late season drawdown of the basins). If found or trapped, western spadefoot will be relocated to suitable natural or artificial burrows adjacent to a proposed western spadefoot mitigation pond (BR-16). This pond will serve as an alternative habitat for spadefoot found at CCL, and will be set aside to support spadefoot breeding with adjacent upland habitat for aestivation. Any aestivating western spadefoot encountered during construction within 1,000 feet of sedimentation basins would be relocated to the spadefoot mitigation pond, and placed in similar habitat and conditions. Details of spadefoot mitigation, to include components described above including the spadefoot mitigation pond, will be documented in a Spadefoot Mitigation Plan, to be reviewed by CDFW and LADRP.</p> <ul style="list-style-type: none"> • Bird nests: Preconstruction surveys for nesting pairs, nests, and eggs shall occur in areas proposed for vegetation removal and in surrounding areas, including cliff sites, and active nesting areas flagged. Mitigation shall be implemented as described below under BR-13. • Bat Roosts: Where bat roosting habitat cannot be avoided, preconstruction surveys consisting of exit surveys, roost surveys of potential roost sites, and evidence of bat sign (guano) shall occur to identify bat species, as feasible, and active roosts. Mitigation shall be implemented as described below under BR-14. 				

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-11: USFWS protocol-level surveys shall be conducted for all coastal California gnatcatcher habitat well in advance of any ground-disturbing activities. If surveys are negative, the species shall be presumed absent, and no further impacts shall be anticipated or mitigation measures required.</p> <p>If the surveys are positive (i.e., coastal California gnatcatcher is present), then coordination shall be initiated with USFWS on required measures to avoid, minimize, or mitigate take of this species. These are anticipated to include:</p> <ul style="list-style-type: none"> • Construction activities in the vicinity of active gnatcatcher nests shall be prohibited within a specified distance of nests (500 feet unless otherwise agreed to by USFWS) until after the young have fledged and the nesting is complete. • Clearing of occupied habitat shall be avoided if possible or practicable. If it is not practicable, clearing shall be prohibited during the nesting season (February to August). 	<p>A. Conduct USFWS protocol-level surveys for coastal California gnatcatcher well in advance of ground-disturbing activities.</p>	<p>Well in advance of ground-disturbing activities</p>	<p>CCL / Qualified Biologist</p>	<p>USFWS, Permittee’s Registered Forester or Biologist</p>
	<p>B. Coordinate with USFWS if surveys are positive and implement required measures to avoid, minimize, or mitigate take.</p>	<p>Prior to and during ground-disturbing activities</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>USFWS, Permittee’s Registered Forester or Biologist</p>
<p>BR-12: Although no nighttime construction is anticipated, lighting for construction activities conducted during early morning or early evening hours shall be minimized to the extent possible through the use of directional shading to minimize impacts to nocturnal or crepuscular wildlife. Only CDFW-recommended designs for lighting, fences, power poles, or other man-made features would be implemented where available.</p>	<p>A. Use directional shading for construction lighting to minimize impacts to nocturnal or crepuscular wildlife.</p>	<p>During construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>
	<p>B. Implement only CDFW-recommended designs for lighting, fences, power poles, or other man-made features where available.</p>	<p>During Project design</p>	<p>CCL / Construction Manager</p>	<p>CDFW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-13: In habitats where nesting birds might occur, vegetation removal shall be avoided when feasible during the nesting season (December through August); winter months are included because this area has potential for owls and hummingbirds, which may breed during this period. In addition, raptor nesting may be initiated by early January. Where this is not feasible, preconstruction surveys for nesting pairs, nests, and eggs shall occur in areas proposed for vegetation removal, and in buffer areas affected by construction, and active nesting areas flagged. The biological monitor shall assign a buffer around active nesting areas (typically 300 feet for songbirds, 500 feet for raptors, and 1,000 feet for sensitive cliff-nesting raptors – golden eagle, prairie falcon, and turkey vulture). The biological monitor will also clearly communicate the limits of buffers to the contractor and crew, and post and maintain, throughout the time of nest use, flagging, fencing, staking, or signs as otherwise needed. Construction activities shall be prohibited within the buffer until the nesting pair and young have vacated the nests, unless it can be demonstrated through biological monitoring that the construction activity is not hindering the nesting effort. Alternatively, if unused nests are identified in the disturbance area during preconstruction surveys, nests may be destroyed prior to active nesting. Rocky escarpments that may support cliff-nesting raptors not proposed for current construction activity at CCL would not be disturbed for the duration of the construction activity.</p>	<p>A. Avoid vegetation removal in nesting bird habitat during the nesting season.</p>	<p>During Project construction</p>	<p>CCL / Construction Manager</p>	<p>LADRP</p>
	<p>B. Conduct preconstruction nesting bird surveys where vegetation avoidance is not feasible and flag active nesting areas.</p>	<p>Prior to vegetation removal in nesting bird habitat</p>	<p>CCL / Qualified Biologist</p>	<p>LADRP, CDFW, USFWS</p>
	<p>C. Assign buffers around active nests, clearly communicate limits to contractor/crew, and post and maintain flagging, fencing, and staking.</p>	<p>During Project construction</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>LADRP, CDFW, USFWS</p>
	<p>D. Prohibit construction activities within buffer until nests are vacated, or unless biological monitoring can demonstrate activity is not hindering nesting.</p>	<p>During Project design</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>LADRP, CDFW, USFWS</p>
	<p>E. Destroy unused nests in the disturbance area prior to active nesting.</p>	<p>Prior to vegetation removal in nesting bird habitat, and following preconstruction surveys</p>	<p>CCL / Qualified Biologist</p>	<p>LADRP, CDFW, USFWS</p>
<p>BR-14: A qualified bat biologist acceptable to CDFW shall be employed to supervise and report on construction activities with respect to bats. In habitats where roosting bats may occur, ground disturbance and roost destruction shall be scheduled, as feasible, during October 1 through February 28 or 29. Ground disturbance and roost destruction shall be avoided during the parturition period (generally March through August). Where this is not feasible, a qualified bat biologist shall conduct exit</p>	<p>A. Employ qualified bat biologist to supervise and report on construction activities with respect to bats.</p>	<p>During Project construction</p>	<p>CCL / Qualified Biologist</p>	<p>LADRP</p>
	<p>B. Schedule ground disturbance and roost destruction in bat roost habitat to avoid the parturition period.</p>	<p>During Project construction</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>surveys, roost surveys of potential roost sites, or surveys for bat sign (e.g., guano) to identify bat species, if feasible, and active roosts. Construction activity within 300 feet of identified active roosts shall be prohibited until the completion of parturition (end of August), unless it can be demonstrated through biological monitoring that the construction activity is not affecting the active roost. Alternatively, if potential roosts are identified prior to onset of parturition, with concurrence from CDFW, roosts may be vacated during the evening forage period (within 4 hours after dark) or fitted with one way exit doors to effectively eliminate and exclude roosting bats. If tree roosts are identified that require disturbance, and from which bats can't be excluded, the trees would be initially disturbed by cutting small branches (less than 2 inches) to encourage habitat abandonment, prior to full tree removal (implemented the following day and supervised by a qualified bat biologist). Roost eviction will be conducted by a qualified bat biologist. Eviction shall be preferentially done before March or after September for eviction of a maternity colony, and only with concurrence from CDFW. If eviction is necessary, the bat biologist shall identify the bat species to be evicted, as feasible, and roost sites appropriate to the species to be displaced in the vicinity (within 1 mile) prior to any bat eviction. Alternative active roost areas, including rock escarpments at CCL that are not proposed to be disturbed by current construction activity would be avoided for the duration of the construction activity. If no alternative roost sites are identified, CCL shall provide artificial roost construction appropriate to the bat species to be displaced to offset loss of active roosts. Artificial roost construction would follow industry standard design, be sized to offset impacted roost(s), and be located greater than 300 feet from the active construction area, but within CCL property. A report will be prepared for submittal to CDFW and copied to LADRP on activities related to bat surveys and eviction, including survey methods, findings including species and size of roosts if available, alternative roost locations and characteristics, and constructed roosts.</p>	<p>C. Conduct exit surveys, roost surveys of potential roost sites, or surveys for bat sign (e.g., guano) to identify bat species and active roosts if ground disturbance cannot be scheduled outside parturition period.</p>	<p>Prior to disturbance activities in active roost areas within the parturition period</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>LADRP, CDFW</p>
	<p>D. Prohibit construction activities within 300 feet of active roosts until completion of parturition, or unless biological monitoring can demonstrate activity is not affecting active roost.</p>	<p>During Project construction</p>	<p>CCL / Qualified Biologist / Construction Manager</p>	<p>LADRP, CDFW</p>
	<p>E. Exclude roosts (with CDFW concurrence) prior to onset of parturition, as identified in Mitigation Measure BR-14 (including requirements for artificial roost construction and reporting).</p>	<p>Prior to disturbance activities in active roost areas, and following preconstruction surveys</p>	<p>CCL / Qualified Biologist</p>	<p>LADRP, CDFW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>BR-15: For unavoidable impacts to qualifying oak trees, an Oak Tree Permit application has been submitted to the LADRP. All permit terms and conditions shall be complied with from the final permit issuance, including planting of replacement trees. An Oak Tree and Woodland Mitigation Plan which identifies the mitigation area shall be submitted to LADRP for review and approval prior to impacts to any scrub oaks or issuance of a grading permit for the Proposed Project that would disturb areas within the protected zone of any oak trees regulated by the County Oak Tree Ordinance. The site shall be assessed for oak woodlands, including scrub oaks, at the time of disturbance according to the County Oak Woodland Conservation and Management Plan, and the Oak Tree and Woodland Mitigation Plan would also address mitigation for oak woodland impacts, including scrub oaks. As appropriate, potential impacts to oak woodlands shall be mitigated by planting understory plants in the same area identified onsite for mitigation oaks pursuant to the Oak Tree Permit and Oak Tree and Woodland Mitigation Plan for the Proposed Project.</p> <p>CCL will coordinate with Tataviam to provide a monitor during the removal or disturbance of native oak trees at CCL, if desired by the tribe.</p>	<p>A. Comply with Oak Tree permit terms and conditions, including planting of replacement trees.</p>	<p>During Project construction and post construction</p>	<p>CCL</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>
	<p>B. Submit Oak Tree and Woodland Mitigation Plan.</p>	<p>Prior to any impacts to oak woodlands, including scrub oaks, or issuance of a grading permit where any oaks are to be impacted</p>	<p>CCL</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>
	<p>C. Implement approved Oak Tree and Woodland Mitigation Plan.</p>	<p>During Project construction and post construction</p>	<p>CCL</p>	<p>LADRP, Permittee’s Registered Forester or Biologist</p>
<p>BR-16: To avoid operational impacts to western spadefoot which may occur during intentional draining of detention basins, or sediment removal from detention basins, the following protocol must be implemented, under an approach coordinated with CDFW: (1) All drainage equipment would be new or used exclusively for detention basins on CCL to avoid transfer of Chytridiomycosis (i.e., chytrid fungus) or any other amphibian diseases or pathogens to detention basins on CCL from other</p>	<p>A. Coordinate approach for draining or removing sediment from detention basins with CDFW.</p>	<p>Prior to draining or removing sediment from detention basins</p>	<p>CCL</p>	<p>CDFW, Permittee’s Registered Forester or Biologist, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>sites; (2) pumping equipment intakes would be screened with fine mesh and would pump from deeper portions of the detention ponds to ensure that eggs, larvae, or adults of western spadefoot would not be entrained in pump apparatus; (3) if a biological monitor determines that spadefoot adults, larvae, or egg masses are present during pumping, a secondary pump enclosure with maximum pore size of 0.125 inches will be utilized if determined necessary by the biological monitor; (4) at any given pumping event, only 80 percent of the volume (measured as depth at the deepest point of the detention basin) would be pumped, leaving pooled water of at least a 5-inch depth for any potential western spadefoot to complete its life cycle; however, the biological monitor would evaluate remaining pooled water volume and spadefoot development stage and make a determination if the remaining water was sufficient for spadefoot to complete their life cycle; and (5) sediment removal would only occur during the dry season, when ponded water was not present. A Spadefoot Mitigation Plan will be developed in consultation with CDFW, to incorporate the above measures and other measures in BR-10 to protect spadefoot. The Spadefoot Mitigation Plan will include design and development of a spadefoot breeding pond on CCL property in a relatively undisturbed location where adjacent uplands are present, including 1,000 feet of undeveloped land as feasible. This pond will be suitable for establishment of a western spadefoot breeding pond, and will not undergo the regular maintenance that is necessary for the onsite stormwater detention basins. Relocation of western spadefoot will be to the mitigation pond.</p>	<p>B. Implement protocol for draining or removing sediment from detention basins, as coordinated with CDFW and identified in Mitigation Measure BR-16.</p>	<p>During detention basin draining or sediment removal activities</p>	<p>CCL / Operations Manager</p>	<p>CDFW, Permittee’s Registered Forester or Biologist, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
Cultural Resources and Paleontological Resources				
<p>CR-1: A qualified archaeologist will flag off the area around Bowers Cave and establish a buffer in consultation with the Permittee to ensure avoidance of grading of the cave site. Grading plans will clearly depict the sensitive area and state that grading must not occur beyond the established buffer. The qualified archeologist will monitor earth-moving activities that would occur within 100 feet of the established buffer.</p>	A. Flag off the area around Bowers Cave and establish a buffer in consultation with CCL.	Prior to earth-moving activities	CCL / Construction Manager / Qualified Archaeologist	LADRP
	B. Depict sensitive area on grading plans and state that grading must not occur beyond the established buffer.	During development of grading plans	CCL / Qualified Engineer	LADRP
	C. Archaeological monitoring and reporting.	During earth-moving activities within 100 feet of the established buffer	CCL / Construction Manager / Qualified Archaeologist	LADRP
<p>CR-2: Prior to the start of monitoring activities, a Cultural Resources Monitoring Plan (CRMP) will be developed. The CRMP will include, at a minimum: (1) the location of areas to be monitored, (2) frequency of monitoring, (3) description of resources expected to be encountered, (4) description of circumstances that would result in a construction halt, (5) description of monitoring reporting requirements, and (6) disposition of found/collected materials.</p>	Develop a CRMP.	Prior to construction	CCL / Qualified Archaeologist	LADRP
<p>CR-3: Native American consultation has indicated that Bowers Cave and the surrounding region may be important to local Native Americans, specifically Tataviam. Provisions will be made to provide cave access to interested Tataviam, and Tataviam will have the option to provide a construction oversight monitor during ground-disturbing activities. The Tataviam monitor will act as a liaison between archaeologists, the Permittee, contractors, and public agencies to ensure that cultural features are treated appropriately from the Tataviam point of view. All</p>	A. Make provisions to provide Bower’s Cave access to interested Tataviam.	Prior to and during construction	CCL / Construction Manager / Tataviam Native American	LADRP Native American Heritage Commission (NAHC)
	B. Tataviam Native American monitoring and reporting and liaison activities, as applicable.	During construction	CCL / Construction Manager / Tataviam Native American	LADRP NAHC

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
artifacts that may be found will be returned to the Tataviam or reinterred into the earth.	C. Return all artifacts that may be found to the Tataviam or reinterred into the earth.	During construction	CCL / Construction Manager / Tataviam Native American	LADRP NAHC
<p>CR-4: Prior to construction, the services of a qualified vertebrate paleontologist shall be retained to develop and implement a Paleontological Resources Mitigation Plan prior to earth moving activities. The Plan will include the following elements:</p> <ul style="list-style-type: none"> • development of agreement with a recognized museum repository; • identification of final disposition, permanent storage, and maintenance of any fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered; and • determination of level of treatment (preparation, curation, cataloguing) of the remains that would be required before the mitigation program fossil collection would be accepted for storage. 	Retain a qualified vertebrate paleontologist to develop and implement a Paleontological Resources Mitigation Plan.	Prior to earth-moving activities	CCL / Qualified Vertebrate Paleontologist	LADRP
<p>CR-5: The paleontologist and/or monitor shall conduct a preconstruction survey of the Project site prior to the start of any earth moving associated with the landfill expansion.</p>	Preconstruction survey.	Prior to earth-moving activities	CCL / Qualified Vertebrate Paleontologist and/or Environmental Monitor	LADRP
<p>CR-6: The paleontologist or monitor shall coordinate with landfill personnel to provide information regarding regulatory agency requirements for the protection of paleontological resources. Landfill personnel also will be briefed on procedures to be followed in the event that a fossil site or fossil occurrence is encountered during construction, particularly when the</p>	A. Coordinate with landfill personnel to provide information regarding regulatory agency requirements and procedures for the protection of paleontological resources.	Prior to and during construction	CCL / Qualified Vertebrate Paleontologist and/or Environmental Monitor	LADRP

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>monitor is not onsite. The briefing will be presented to new landfill personnel as necessary. Names and telephone numbers of the monitor and other appropriate mitigation program personnel shall be provided to the landfill manager.</p>	<p>B. Brief landfill personnel on procedures when a fossil site or fossil is encountered during construction.</p>	<p>Prior to and during construction</p>	<p>CCL / Qualified Vertebrate Paleontologist and/or Environmental Monitor</p>	<p>LADRP</p>
	<p>C. Provide monitor and mitigation program contact information to the landfill manager.</p>	<p>Prior to and during construction</p>	<p>CCL / Qualified Vertebrate Paleontologist and/or Environmental Monitor</p>	<p>LADRP</p>
<p>CR-7: Earth-moving activities shall be monitored by the paleontologist only in those areas of the Project site where these activities would disturb previously undisturbed strata in the Saugus and upper Pico Formations (not in areas underlain by artificial fill or younger alluvium). With concurrence from the Project paleontologist, if no fossil remains are found once 50 percent of earth moving has been completed in an area underlain by a particular rock unit, monitoring can be reduced or suspended in that area.</p>	<p>A. Paleontological monitoring in areas of the Project site where activities would disturb previously undisturbed strata in the Saugus and upper Pico Formations (not in areas underlain by artificial fill or younger alluvium).</p>	<p>During construction</p>	<p>CCL / Qualified Vertebrate Paleontologist</p>	<p>LADRP</p>
	<p>B. Paleontological monitoring and reporting.</p>	<p>During construction</p>	<p>CCL / Qualified Vertebrate Paleontologist</p>	<p>LADRP</p>
<p>CR-8: All diagnostic fossil specimens recovered from the Project site shall be treated (prepared, curated, catalogued) in accordance with designated museum repository requirements.</p>	<p>Treat all diagnostic fossil specimens recovered from the Project site in accordance with designated museum repository requirements. Treatment of recovered fossil specimens would be documented in final paleontological technical report prepared by the Project paleontologist.</p>	<p>During and after construction</p>	<p>CCL / Qualified Vertebrate Paleontologist</p>	<p>LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
CR-9: The monitor shall maintain daily monitoring logs. A final technical report of results and findings shall be prepared by the paleontologist and included with the material submitted for curation (see above).	A. Maintain log demonstrating compliance.	During construction	CCL / Qualified Vertebrate Paleontologist and/or Environmental Monitor	LADRP
	B. Prepare and submit a final paleontological technical report.	Following earth-moving activities within previously undisturbed strata in the Saugus and upper Pico Formations	CCL / Qualified Vertebrate Paleontologist	LADRP
Air Quality				
AQ-1: CCL shall use certified street sweepers that comply with South Coast Air Quality Management District (SCAQMD) Rule 1186.1.	Use certified street sweepers.	During construction	CCL / Construction Manager	LEA
AQ-2: CCL shall use innovative approaches to reducing potential air emissions from construction of buildings, such as modular building products, where prefabricated portions of structures are assembled elsewhere and are erected at the construction site, as feasible. This would eliminate the need for onsite painting, a majority of the plumbing, and other consumer product usage.	Incorporate air emissions reducing provisions for construction of building into the design.	During Project design	CCL	LACDPW
AQ-3: CCL shall provide offsetting emission reduction credits for predicted net emission increases from sources requiring permitting under New Source Review regulations.	Provide offsetting emission reduction credits.	During permitting	CCL	SCAQMD
AQ-4: Prior to operation of the composting facility, CCL shall develop an Odor Impact Minimization Plan (OIMP) pursuant to the requirements of the <i>California Code of Regulations (CCR)</i> , Title 14, Division 7, Chapter 3.1, Article 3, and Section 17863.4; CCL shall comply with the OIMP during compost facility operation.	A. Develop OIMP.	Prior to operation of composting facility	CCL	LEA, LACDPW
	B. Maintain log demonstrating compliance.	During operation of composting facility	CCL	LEA, LACDPW

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<p>Current Emission Reduction Measures: CCL currently implements the following emission reduction measures on an ongoing basis, and these measures would continue to be implemented during construction and operation of the Proposed Project.</p> <ul style="list-style-type: none"> • Onsite traffic is managed. • Engine-powered equipment is properly maintained. • Onsite vehicles are routed along the most direct routes. • Electrically powered equipment is used to the extent feasible. • A 15 mile per hour (mph) speed limit is enforced on paved roads and 10 mph speed limit on unpaved roads. • Permanent onsite haul roads are paved, to the extent feasible. • Temporary unpaved roads are surfaced with low-dust courses of material. • Roads are watered four to seven times daily, dependent on conditions, including weather. • Active sites of soil disturbance are watered four to seven times daily, dependent on conditions, including weather. • Soil stabilizers are used in areas with long-term exposure of disturbed or un-vegetated surfaces (e.g., stockpiles). • Trucks hauling dirt, sand, or other loose materials for site construction projects on public roadways are covered or maintain at least 2 feet of free board in accordance with the requirements of California Vehicle Code Section 23114. • Construction access roads are paved at least 100 feet onto the site from the main road. • Where feasible, other construction roads not covered by the above measure heaving a daily traffic volume of 50 vehicular trips, are paved; where infeasible, these roads are watered. • Disturbed areas are covered with erosion control materials if needed. 	<p>Maintain log demonstrating compliance.</p>	<p>Ongoing</p>	<p>CCL</p>	<p>LEA, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<ul style="list-style-type: none"> • SCAQMD-approved street sweepers are used on all paved haul roads onsite as needed during rainy periods to reduce mud and during dry periods to reduce dust. 				
<p>Construction Emission Reduction Best Management Practices (BMPs):</p> <ul style="list-style-type: none"> • The construction equipment, not owned by CCL, would be equipped with engines meeting California Air Resources Board (CARB) requirements for a large fleet at the time of construction (13 CCR 2449). • The construction equipment, not owned by CCL, would be equipped with engines meeting Tier 4f emission standards after Project year 2020. • Trucks would be prevented from idling longer than 5 minutes, to the extent feasible. • Construction equipment idling times and excessive use would be prevented, to the extent feasible. • Use of construction equipment would be suspended during Stage 2 and 3 smog alerts. • To reduce/minimize construction-related fugitive dust, water would be applied four to seven times daily, dependent on weather, within the construction site. • Fugitive dust from vehicle travel on unpaved roads would be controlled through the application of water 4 to 7 times daily, dependent on weather. 	<p>Maintain log demonstrating compliance.</p>	<p>During construction</p>	<p>CCL</p>	<p>LEA, LACDPW</p>
<p>Operation Emission Reduction BMPs:</p> <ul style="list-style-type: none"> • Off-road diesel equipment purchased by CCL for operation of the Proposed Project (used for additional waste received) would be equipped with engines meeting Tier 4f emission standards. • Unnecessary truck and equipment idling would be limited to less than 5 minutes, to the extent feasible. • Use of all off-road diesel equipment would be suspended during Stage 2 and 3 smog alerts (SCAQMD, 1993), to the extent feasible. 	<p>Maintain log demonstrating compliance.</p>	<p>During operation</p>	<p>CCL</p>	<p>LEA, LACDPW</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
<ul style="list-style-type: none"> Fugitive dust BMPs for vehicle travel on paved roads, vehicle travel on unpaved roads, and soil disturbance would be the same as described above for construction. Operate the landfill to improve landfill gas collection efficiency to a site-wide average of 85 percent through application of a combination of daily cover, intermediate cover, and final cover to provide a beneficial improvement in ongoing landfill gas collection efficiency. The existing, approved landfill gas-to-energy (LFGTE) plant would be optimized to use collected landfill gas (LFG) as fuel to produce electricity and to minimize flaring of collected LFG. 				
<p>Composting Emission Reduction BMPs:</p> <ul style="list-style-type: none"> Green waste composting piles would be covered with at least 6 inches of finished compost within 24 hours of initial pile formation. Piles would not be turned for the first 7 days of active phase composting. For the first 15 days of initial pile formation, and within 6 hours before turning, the top half of the pile would be kept wet to a depth of at least 3 inches. Covered, aerated composting system would be equipped with an SCAQMD-approved emission control system (e.g., thermal oxidizer, bio-filtration) (SCAQMD, 2015). Composting facility would implement a site-specific Odor Impact Minimization Plan (OIMP). 	<p>A. Maintain log demonstrating compliance.</p>	<p>During operation of composting facility</p>	<p>CCL</p>	<p>LACDPW, SCAQMD, LEA</p>
	<p>B. Implement site-specific OIMP.</p>	<p>During operation of composting facility</p>	<p>CCL</p>	<p>LACDPW, SCAQMD, LEA</p>
<p>Landfill Operation Odor Reduction Measure (ORM)</p> <p>ORM-1: For landfill operation, CCL shall develop an OIMP. The OIMP will describe an odor monitoring protocol, a description of meteorological conditions that affect migration of odors, a complaint response protocol, a description of design considerations for minimizing odors, and a description of operating procedures for minimizing odors.</p>	<p>A. Develop OIMP for approval by the responsible agencies</p>	<p>Within 3 months of receipt of Conditional Use Permit</p>	<p>CCL</p>	<p>SCAQMD, LEA, LACDPW, LADRP</p>
	<p>B. Maintain log demonstrating compliance and implementing all remedial action as recommended by the responsible agencies</p>	<p>During operation of landfill</p>	<p>CCL</p>	<p>SCAQMD, LEA, LACDPW, LADRP</p>

Table 1. Chiquita Canyon Landfill Master Plan Revision Mitigation Monitoring and Reporting Program

Mitigation Measure / Project Design Measure	Action Required	Mitigation Timing	Responsible Party	Monitoring Agency or Party
Greenhouse Gas Emissions and Climate Change				
<p>GHG-1: Beginning in 2020, the applicant shall provide the Department of Regional Planning with reports every 5 years, which shall evaluate consistency of landfill operations with current State and County greenhouse gas (GHG) emission reduction plans. If the Department of Regional Planning finds that a report demonstrates that landfill operations do not meet the GHG emission reduction targets of then-current State and County GHG emission reduction plans, the applicant shall develop and within one year submit to the Department of Regional Planning for review and approval of a GHG Emission Reduction Plan, which shall require implementation of additional feasible GHG emission reduction measures within the waste management sector to further reduce GHG emissions in accordance with then-current State and County goals. The GHG Emission Reduction Plan may incorporate some or all of the following measures:</p> <ul style="list-style-type: none"> • Further or additional composting; • Further or additional recycling; • Development of alternative energy, including additional landfill gas-to-energy production capacity and/or development of other on-site renewable energy generation capacity; • Use of alternative fuels in on-site equipment; or some combination of the listed strategies; and/or • Other waste management sector strategies developed by California Department of Resources Recycling and Recovery (CalRecycle) and CARB addressing GHG emissions from waste management 	<p>A. Provide reports evaluating consistency of landfill operations with current State and County GHG emission reduction plans</p>	<p>Beginning in 2020, and subsequently every 5 years</p>	<p>CCL</p>	<p>LADRP, LACDPW, SCAQMD, LEA</p>
	<p>B. Develop GHG Emission Reduction Plan.</p>	<p>Within one year, if LADRP finds consistency reports demonstrate GHG emission reduction targets of then-current State and County GHG emission reduction plans are not met</p>	<p>CCL</p>	<p>LADRP, LACDPW, SCAQMD, LEA</p>
<p>GHG-2: Following closure of the landfill, the applicant shall continue to operate, maintain, and monitor the landfill gas collection and control system as long as the landfill continues to produce landfill gas, or until it is determined that emissions no longer constitute a considerable contribution to GHG emissions, whichever comes first.</p>	<p>Maintain monitoring log of landfill gas collection and control system.</p>	<p>Following closure of the landfill</p>	<p>CCL / Operations Manager</p>	<p>SCAQMD, LACDPW</p>

References

California Department of Fish and Wildlife (CDFW). 2009. *Protocols for Surveying and Evaluation Impacts to Special Status Native Plant Populations and Natural Communities*.

California Department of Fish and Wildlife (CDFW). 2012. *Special-status species and vegetation communities search within 10 miles of the Project area*. California Natural Diversity Database. December.

South Coast Air Quality Management District (SCAQMD). 1993. *SCAQMD California Environmental Quality Act Air Quality Handbook*. Supplemental information available: Available online at: <http://www.aqmd.gov/ceqa/hdbk.html>. Accessed April 2013.

South Coast Air Quality Management District (SCAQMD). 2015. Guidelines for Calculating Emissions from Greenwaste Composting and Co-Composting Operations. Available online at: <http://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidecalcgreenwaste.pdf?sfvrsn=6>. February.

United States Army Corps of Engineers (USACE) and United States Environmental Protection Agency (EPA). 2008. *Compensatory Mitigation for Losses of Aquatic Resources; Final Rule*. *Federal Register*. April 10.

United States Fish and Wildlife Service (USFWS). 1996. *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*.