SECTION 4  REVISIONS TO THE DRAFT EIR

The following section contains a set of addendum pages to the Draft EIR dated September 2006. The revisions identified in this section are the result of staff and public review, and are meant to provide clarification of the analysis and mitigation with the Draft EIR. Revisions have been made to the Draft EIR to reflect responses to comments received during the public review period and to correct editorial and typographical errors that were discovered after circulation of the Draft EIR. The revisions cited in this section were found by the County of San Bernardino not to be substantial; therefore, the recirculation of the Draft EIR is not warranted.

In the following pages, headings describing the location of changes in the Draft EIR are underlined (i.e., Section 4.1, page 4-1, paragraph 1). Below this entry, are the revisions made to the Draft EIR. Additions of text are noted by the double underlining of new text, whereas deletions are shown as strikeout text (old text).

Section 2, page 2-14

The Project will use a combination of windrow and modified static pile composting methodologies. With the windrow method, the active composting stage generally can last up to nine weeks for biosolids composting, though it is expected to be completed much quicker in a hot, dry, arid environment. The windrow composting process includes aeration through mechanical processes on a periodic basis. This is referred to as turning the windrow, and is done by using heavy equipment to lift and turn the windrow inside out. The objective is to maintain the active compost under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, the windrows will be turned a minimum of five times. The windrow method would comply with federal composting regulations found in Title 40, Code of Federal Regulations Part 503 (40 CFR 503).

Section 2, page 2-17

A modified static pile process will be used at times if the US EPA determines that this process is equivalent with 40 CFR 503 requirements. The modified static pile composting process will be a 60-day process. The windrow would be monitored for temperature and may remain undisturbed for up to thirty days. On approximately the thirtieth (30th) day and then again on approximately the forty-fifth (45th) day, the windrow would be turned such that the very bottom will be exposed. The pile will remain undisturbed for fifteen more days (until day 60), at which time the composting process is complete. …

Samples of the finished compost will be delivered monthly to a U.S. Composting Council-approved laboratory for analysis and quality control. The laboratory analytical results on parameters such as size, stability, maturity, nutrients, salts, pH, carbonates, and bulk density shall be available to the LEA. Analytical testing will verify that the compost meets the maximum acceptable metal concentration limits specified in 14 CCR 17862, and pathogen reduction requirements specified in 14 CCR 17868.3.
Variations or combinations of these processes are also possible. Windrows or static piles can be enclosed within a building. This is the approach proposed by the IEUA project discussed above (Section 3.2.1), and is becoming more common for composting operations in urban or suburban areas. The IEUA project also will use a mechanical system of conveyors to move material within the large warehouse building where composting will occur, and an extensive air ducting system to control airflow and pass all exhaust air through large biofilters before release to the atmosphere. While providing state of the art material and odor control, this system is very expensive. Additionally, the electricity needed to power the conveyors and airflow systems can be substantial. The current estimate for the completed facility cost is over $60 million (IEUA 2006), which is about twice the original estimate for the building and equipment. The IEUA project is located in an industrial park in Rancho Cucamonga, near extensive populated areas, so the expense may be justifiable in this setting. Alternative composting technology, including an enclosed facility would not be an economically feasible alternative for this project as one of the primary objective is to provide a cost-effective composting operation.

AQ-1 – The applicant shall development of an Odor Impact Minimization Plan (OIMP) that will outline self-imposed operating requirements that will avoid or mitigate significant odor impacts result in odor control and reduction. The OIMP shall be submitted to the Local Enforcement Agency (LEA) for review and approval prior to operation. Specific mitigative actions...

AQ-2 All unpaved on-site and access road shall be sprayed with water frequently enough to minimize the generation of visible dust. Alternatively, these roads may be paved to eliminate the watering requirement. Additionally, windrows shall be sprayed with water to prevent visible dust during windy conditions.

AQ-3 The applicant shall maintain a functioning anemometer at the site at all times and shall refraining from turning the windrows during episodes of high wind speeds (30 miles per hour or higher).

AQ-4 Heavy equipment powered by diesel fuel used at the site shall use lower emitting diesel fuels. All trucks owed and operated by the applicant that make deliveries to the site shall also use lower emitting diesel fuels. The operator shall also encourage truckers the delivering materials to the proposed facility that are not under the control of the applicant to use Nursery Products lower emitting diesel fuels. Biodiesel is the preferred lower emitting fuel.

A total of three special-status species were identified during the Project specific biological surveys: one federal- and state-listed species, desert tortoise (Federal and State threatened), and three California Species Special of Concern (CSSC): northern harrier (Circus cyaneus,
CSSC) sage sparrow (Amphispiza belli, CSSC), and California horned lark (*Eremophila alpestris actia*, CSSC). Sage sparrow was detected but it was not the sensitive subspecies. Mohave ground squirrel were not detected during the 2006 spring surveys (a total of 4 spring-season survey days), although white-tailed antelope squirrel, an ecologically similar species, were commonly detected. Burrowing owl (*Athene cunicularia hypugaea*, CSSC), and the CNPS List 1B desert cymopterus (*Cymopterus deserticola*) have been documented in the vicinity, approximately 6 miles to the northeast of the Project site.

Section 4, page 4-34

Because Mohave ground squirrel have been reported within 5 miles of the Project site, there is the potential for this species to be present onsite. However, since the Mohave ground squirrel is a diurnal species and because an ecologically similar species was observed utilizing the site, and no Mohave ground squirrel were observed, it is concluded that the Mohave ground squirrel is not present onsite. The closest documented location of Mohave ground squirrel is greater than 5 miles from the Project site, which precludes the requirement for protocol surveys for this species. Sign of desert tortoise was detected throughout the Project site, including inactive burrows, carapace remains, and dried and fresh tortoise scat. Two live desert tortoises and their burrows were detected within 600 feet of the southeastern property boundary during the focused survey conducted in April 2006 (Figure 4.4-2). Rare plants were not detected during three site visits conducted by URS botanists in spring 2006, which included focused surveys for desert cymopterus and Barstow woolly star as well as other special status plants.

No evidence of burrowing owl was detected during any of the biological surveys conducted on the site. Burrowing owls inhabit open areas such as grasslands, pastures, open scrub, and the edges of agriculture fields (Unit 2004), and use rodent burrows throughout the year for shelter from weather and predators. No burrows large enough to support burrowing owls were detected during the surveys. Suitable habitat for burrowing owl is not present on the Project site.

**Impacts on fish or wildlife population to drop below self-sustaining levels and threaten elimination of a plant or animal community:** The proposed Project would remove 160 acres of saltbush desert scrub and associated native biological resources, including habitat utilized by the federally threatened desert tortoise, as well as habitat used by northern harrier and California horned lark, which are California Species of Special Concern. The Project site comprises a total of 160 acres that is located within the approximately 9.3 million acre planning area of the proposed WMP. Of this planning area, there are approximately 3.3 million acres of public lands in the area of the Project site that are focused on desert tortoise conservation. The proposed Project is also not expected to decrease the overall potential carrying capacity for sensitive or other resident wildlife species in the Project area, or eliminate a plant or animal community.

Section 4, page 4-35

**Substantial affect, reduce the number, or restrict the range of unique, rare, or endangered species of animal or plant, or substantially diminish the habitat of the species:** Loss of 160 acres of potential Mohave ground squirrel habitat would be considered adverse but not significant due to the lack of occupation by this sensitive species onsite. As a condition of approval and
consistent with CDFG guidelines, additional trapping surveys for Mohave ground squirrel are required to confirm the absence of this species. If Mohave ground squirrel is subsequently detected, the Project proponent will be required to obtain a take authorization from CDFG prior to construction. Loss of 160 acres of habitat that supports the desert tortoise and two CSSC species that were detected on the site would be considered adverse but not significant because the habitat surrounding the project site is suitable and is connected to the approximately 9.3 million-acre planning area of the proposed WMP. Of this planning area, there are approximately 3.3 million acres of public lands in the area of the Project site that are focused on desert tortoise conservation, which will in turn conserve habitat for the CSSC species (California horned lark, northern harrier) that use or are found in the same habitat. No impacts to burrowing owls, Barstow woolly sunflower, or desert cymopterus, which are located approximately 6 miles northeast of the Project site, are expected.

Section 4, page 4-36

**Deteriorate existing fish or wildlife habitat:** Potential indirect impacts include the increased risk to desert tortoise of metal toxicity from air-borne particulate matter that may be carried by the wind from the windrows on the Project site to desert tortoise habitat. Heavy metals, including cadmium, mercury, lead, molybdenum, arsenic, selenium, chromium, and nickel, have been found in the livers and kidneys of ill tortoises, and are linked to upper respiratory tract disease, shell lesions, and other serious illnesses. It is unknown whether compost can cause such high levels of airborne metals or other pathogens such as rusts, molds and bacteria that may affect desert tortoise and other wildlife through the food chain or wind. Literature on the effect of compost use on heavy metal levels in the soil environment indicate that it varies according to soil type, plant species, and compost composition. It has also been reported that the metals in compost are important in minimizing metal absorption in plants, which could indirectly minimize heavy metals absorption in desert tortoise. Since tortoise will be removed from the site prior to construction, a permanent fence will be installed around the perimeter and the windrows will not be turned during high wind situations, desert tortoise are not expected to be exposed to increased levels of heavy metals from the composting site.

Section 4, page 4-36

**B-1** The Project shall be phased, with the initial phase not to exceed 80 acres in size. Prior to developing any subsequent phase, the Applicant shall provide, and the County shall review and approve, an operating plan demonstrating the need for such subsequent phase. An operational plan shall be provided for the County’s review and approval outlining the conditions that would demonstrate the need for each subsequent phase.

**B-2** Prior to commencing any ground-disturbing activity, the Applicant shall mitigate and/or avoid impacts to federally- and state-protected species by obtaining required incidental take permits from the United States Fish and Wildlife Service and the California Department of Fish and Game, and by complying with the terms of those permits, including, without limitation, the purchase and conservation of such habitat as required, the preparation and approval of an adequate Habitat Conservation Plan, and the installation of permanent tortoise fencing along roads as required. Purchase of offsite
conserved habitat shall be based upon the requirements of the CDFG and USFWS, and follow the WMP if in effect at the time.

B-3 All employees, subcontractors, construction personnel, and other individuals who work on-site shall participate in an awareness program covering addressing desert tortoise, burrowing owl, Mohave Ground Squirrel, and other federally- and state-protected species at the Hawes site prior to ground-disturbing activities with educational materials provided by the West Mojave Implementation Team. The program shall be administered by the Authorized Biologist or Environmental Monitor. The program may be given in the field prior to initiation of construction activities, and shall include truck drivers, delivery personnel, and other Project-related personnel occasionally entering the work site. Wallet-sized certification cards shall be provided to personnel who have attended the training, and personnel shall carry those cards when working on site.

B-4 A permanent tortoise-proof fence shall be installed around the perimeter of the Project impact area prior to grading of the site. Once the fence is installed, clearance surveys for desert tortoise shall be conducted by qualified biologists to locate and remove any tortoises and close their burrows within the Project site impact area. An authorized biological monitor shall be present during construction to ensure that tortoises do not re-enter the construction area and to remove or rescue any individuals that may be injured. Mortality of any tortoise shall be reported to wildlife agency staff.

B-5 Between February 15 and November 15, the tortoise clearance survey shall occur within 48 hours prior to ground disturbance. Between November 16 and February 14, the survey may be performed several days or weeks prior to ground disturbance, unless ground disturbance will occur during a rain event. Ground disturbance shall not occur during a rain event, unless a clearance survey has occurred within the previous 48 hours.

B-6 Where practicable, vegetation clearing activities shall occur when tortoises are least likely to be active, including, but not limited to, the period between generally between November 16 and February 14.

B-7 Cross-country (off-road) vehicle use shall be prohibited and signs shall be posted.

B-8 Except on paved roads with posted speed limits, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat. This speed limit shall be posted along all access routes associated with the Project. Drivers shall take all feasible steps to avoid tortoises encountered on the roads, including, but not limited to, any tortoises encountered on the roads shall be avoided by drivers where feasible (i.e. driver will stopping and waiting for tortoises to cross the road).

B-9 All trash and discarded food items generated by construction and operation activities shall be promptly contained and regularly removed from the Project site to reduce the attractiveness of the area to ravens and other potential desert tortoise predators. Prior to ground disturbing activities, the applicant shall submit, and the County and CDFG shall approve, a raven management plan designed to minimize tortoise predation as part of the
Incidental take permit or permits required under Mitigation Measure B-2. Additionally, all artificial water sources must be covered or otherwise made inaccessible to wildlife.

B-10 Prior to commencing ground disturbing activities, the Applicant shall submit, and the County shall review and approve, evidence of financial ability to properly manage conserved habitat and to monitor the impact of the Project on surrounding habitat as defined by permit conditions and the Implementing Agreement associated with the permit, adequate funding must be set aside to manage the conserved habitat and to monitor the effects of the Project on the surrounding habitat.

B-11 The Project proponent shall prepare an HCP and obtain an incidental take permit/authorization from the wildlife agencies prior to Project implementation. In order to avoid incidental take of birds protected under the Migratory Bird Treaty Act, grading and brush removal of any undisturbed habitat shall be scheduled outside the breeding season of most migratory birds (i.e., grading shall not take place from March through July unless surveys for nesting birds are conducted and no impacts are likely).

B-12 Prior to commencing ground disturbing activities, Mohave Ground Squirrel trapping surveys shall be conducted to confirm that the species is not present at the Hawes site. Mohave ground squirrel trapping surveys shall be conducted prior to construction of the Project to determine this species presence within the Project area. If the surveys determine that the Mohave Ground Squirrel is present, the applicant shall avoid or mitigate environmental impacts by obtaining required incidental take permits from the United States Fish and Wildlife Service and/or the California Department of Fish and Game, and by complying with the terms of those permits, including, without limitation, the purchase and conservation of such habitat as required and the preparation and approval of an adequate Habitat Conservation Plan.

B-13 Baseline studies Post construction surveys for invasive plants shall be done in the fire break of the property, as well as at the Hawes site and within a 500-foot buffer outside the fire break, shall be conducted and submitted to the County no later than 30 days after the facility opens. The County shall review and approve the surveys before the facility opens. If feasible, these surveys should be conducted in early spring 2007 if the facility will open later that year. All plant species that are present shall be identified and this area monitored annually (early spring) to detect any invasive species that may be present. If an invasive species is detected, an herbicide that is appropriate to the species, as determined by the County and BLM, shall be applied to prevent dispersal of exotic or invasive plant species onto BLM property and adjacent habitat. The monitoring frequency of surveys may be reduced to once every four years if no invasive are detected during the first five years of monitoring.

B-14 The Project site must maintain an adequate water supply and delivery capacity as well as clear aisles between windrows for easy access in case of fire. The Applicant shall submit, and the County shall review and approve, evidence of adequate water supply and plans demonstrating adequate windrow spacing prior to commencing shall operations.
B-15 All deliveries of green material to the project shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to invasive species and damage to habitat. The Applicant shall not accept deliveries of green material in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.

B-16 All deliveries of biosolids to the project shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to damage to habitat, airborne transmission of pathogens and soil contamination. The Applicant shall not accept deliveries of biosolids in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.

Section 4, page 4-42

CR-1 Monitoring by a qualified archaeologist shall occur during grubbing, grading or any construction excavation that disturbs native soils. In the event that an unanticipated find is discovered during construction activities, the construction crew will stop work in the immediate vicinity of the discovery. Nursery Products The Applicant will report the discovery to the San Bernardino County Museum and the Land Use Services Department (LUSD). A qualified archaeologist will be required to assess the integrity and significance of any discovery prior to work proceeding in the area. Should human remains be encountered, work in the vicinity must be terminated and the County Coroner will be notified immediately pursuant to Section 7050.5 of the Health and Safety Code, Section 7050.5 (c). If the coroner recognizes the remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she will contact the Native American Heritage Commission. LUSD may require Nursery Products to take reasonable measures to avoid or minimize impacts to the resource if the resource is determined to be significant, i.e., eligible for the CRHR.

Section 4, page 4-50

HM-1 The Project design includes guidelines for fuel transfer operations to minimize impacts associated with fueling areas and fuel transfer sites. Prior to commencement of operations, the Project proponent Applicant shall submit, and the County shall review and approve an Emergency Contingency Plan will be prepared and adopted for the composting facility. The Plan will provide information such as emergency contact persons and numbers, the types of hazardous materials stored on-site, the correct emergency responders to contact for specific emergencies, and evacuation procedures and routes to use during an emergency event.

HM-3 The operator shall provide fire prevention, protection and control measures, including, but not limited to, temperature monitoring of windrows and piles, adequate water supply for fire suppression, and the isolation of potential ignition sources from combustible materials. A strip of sufficient width of cleared land must be maintained along the perimeter of site operations to act as a fire barrier or break. The applicant will consult
with the local fire agency to determine the size of the fire break. Prior to construction, the Applicant shall and submit, and the County shall review and approve, a plan setting out fire prevention, protection and control measures and evidence of consultation with the local fire agency. Obtain approval prior to construction. Fires within the operational area of the facility will be limited to the area within the boundaries of the property with this mitigation measure and the impacts would be less than significant.

HM-8 Employees engaged in moving or turning compost piles should be equipped with protective clothing, gloves, and face mask. Training programs shall be instituted to instruct employees on the necessity of wearing protective gear.

Section 4, page 4-51

HM-11 The Applicant shall ensure that employees are trained in procedures to prevent, detect, and remedied fly breeding areas.

Section 4, page 4-61

W-1 The retention basin(s), designed and sized to contain the entire runoff from the windrow and compost storage area during a 24-hour, 100-year storm event is essential to protect surface water and the public from runoff that could be contaminated with pathogens. The retention basin(s) must be included in any modification or redesign of the facility. Prior to any modification or redesign of the facility, the Applicant shall submit, and the County and the RWQCB shall approve, plans demonstrating that the facility, as modified or redesigned, will have a retention basin or retention basins designed and sized to contain the entire runoff from the windrow and compost storage area during a 24-hour, 100-year storm event.

W-2 Prior to beginning operations at the site, in order to establish baseline soil conditions, the Applicant shall perform a post-construction soil survey. The survey shall include collection of at least ten samples shall be collected in the portion of the Phase 1 area that would be most frequently used for windrows. Two additional samples shall be collected from the lowest area of the retention basin after construction of the retention basin is complete. Samples shall be collected at each location using a drive sampler to a depth of approximately 1.5 feet. The samples shall be analyzed by an independent laboratory and results submitted to the County and the RWQCB for review, analysis, and approval. Samples collected at 0.5 and 1 foot shall be analyzed for nitrate, phosphate, chloride, arsenic, copper, lead, mercury, molybdenum, nickel, selenium and zinc. The same sampling program shall be conducted in Phase 2 prior to commencing operations in the Phase 2 area. Results shall be submitted to the Lahontan RWQCB, the LEA, and LUSD for review and approval.

W-3 Soil beneath the retention basin and the composting pad shall be sampled annually to confirm that the migration of constituents into subsurface soil is not limited. Soil sampling shall be conducted at six different locations on the most frequently used portion of the composting pad. Two soil samples shall be collected at least 100 feet apart
at the lowest area of each retention basin. Samples will be collected at each location using a drive sampler to a depth of approximately 1.5 feet. Samples collected at 0.5 and 1 foot will be analyzed. Samples shall be collected by the Applicant and sent to an independent laboratory, and analytical results submitted to the County and the RWQCB for review, analysis, and approval. The results will be compared to the levels listed in 40 CFR 503.13, Table 1 that specifies the ceiling metals concentrations at which the application of biosolids to land is not allowed. These ceiling concentrations currently are 85 mg/kg arsenic, 4,300 mg/kg copper, 840 mg/kg lead, 57 mg/kg mercury, 75 mg/kg molybdenum, 420 mg/kg nickel, 100 mg/kg selenium and 7,500 mg/kg zinc. These ceiling concentrations will be used as an indicator that further action is necessary. There are no ceiling concentrations for nitrate and phosphorous, therefore the analytical results for the site will be compared to those from the background location. Results shall be submitted to the Lahontan RWQCB, the LEA, and LUSD for review and approval.

If the sample results indicate that the limits in 40 CFR 503.13 have been exceeded or if the levels show a significant increase compared to the background conditions, the Applicant, operator shall meet with the RWQCB, and the LEA shall develop and implement to discuss an appropriate action plan that will ensure no substantial adverse impact on groundwater resources. Specific elements of the action plan shall be tailored to actual conditions. Plan elements may include, but need not be limited to: additional action could include but are not limited to: removal of soil and replacement of compacted clean soil on the pad and/or retention basin, or lining the pads or basin with an appropriate liner.

If there are no significant exceedances of the constituent concentrations after five years of monitoring, the operator, applicant may request, and the County may grant, approval for either a reduction in the sampling frequency or to eliminate the monitoring program altogether. Upon closure of the facility, sampling will be conducted and affected soil will be handled in accordance with applicable cleanup criteria.

W-4 The Applicant shall avoid and/or mitigate potentially significant impacts on water quality by obtaining coverage under the state-wide general construction storm water permit prior to clearing and grading of the Project site, the applicant shall prepare a SWPPP to obtain coverage under the State-wide general construction storm water National Pollutant Discharge Elimination System (NPDES) permit prior to any ground disturbing activities, and by complying with the terms of that permit. As part of this mitigation measure, the Applicant shall prepare a SWPPP and implement the BMPs outlined in the SWPPP shall be implemented.

W-5 The Applicant shall avoid or mitigate potentially significant impacts on water quality by obtaining coverage under the State-wide general storm water NPDES permit for industrial facilities or by obtaining an individual facility storm water NPDES permit prior to commencing operations, and by complying with all terms and requirements of the permit.
W-6 If a groundwater well is installed to provide water for the site, the Applicant shall perform a groundwater survey prior to well installation to provide water for the site. The Project proponent shall collect a sample quarterly for the first year. Samples shall be analyzed by an independent laboratory and results submitted to the County and RWQCB for review, analysis, and approval. Samples shall be collected and analyzed for the constituents listed in Mitigation Measure W-2 (at a minimum) to establish baseline groundwater conditions at the site. Results shall be submitted to the Lahontan RWQCB, the LEA, and LUSD for review and approval. If the thresholds set forth in Mitigation Measure W-3 have been exceeded, or if there is a significant increase over time in the concentration of constituents listed in Mitigation Measure W-2, the Applicant, the County, and the RWQCB shall develop and implement an action plan that will ensure no substantial adverse change in groundwater resources. Specific elements of the action plan shall be tailored to actual conditions. Elements of the action plan may include, but are not limited to, lining composting pads and/or the retention basin with an appropriate liner.

Section 7, page 7-1

Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the EIR. The mitigation monitoring table below to be included in the Final EIR lists those mitigation measures that may be included as conditions of approval for the project. These measures correspond to those outlined in the Executive Summary and discussed in Section 4. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The applicant will have the responsibility for implementing the measures, and the various County of San Bernardino departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.
APPENDIX C

Section 2, page 2-1

Special-status species in the project vicinity include desert tortoise, Mohave ground squirrel, and Barstow woolly sunflower, which have been previously documented in the vicinity of the property. Burrowing owl (*Athene cunicularia*) and desert cymopterus (*Cymopterus deserticola*) have also been reported in the vicinity, approximately 6 miles northeast of the Project site.

Section 3, page 3-1

On May 4, 2006, URS botanists conducted a follow-up rare plant survey of the project site. This survey was conducted to increase the chances of finding a late-blooming species. The plant species that were surveyed for included the rare plants Barstow wooly sunflower, desert cymopterus, and sensitive cactus species. Additional late season rains occurred between the end of April and within the first week of May, 2006, which may have increased chances of locating such rare plants as the Barstow woolly sunflower.

Section 3, page 3-3

A total of three special-status species were identified during the surveys, one federal-and state-listed species and three two CA Species Special of Concern; desert tortoise, northern harrier, *sage sparrow*, and California horned lark. *Sage sparrow* was detected but it was not the sensitive subspecies. While the desert tortoise is federal and state listed as threatened, the northern harrier, *sage sparrow* and California horned lark are California Species of Special Concern, with no federal status.

Mohave ground squirrel were not detected during a total of 4.5 spring season survey days, although white-tailed antelope squirrel, a similar species, were commonly detected. Because the Mohave ground squirrel is a diurnal species and because an ecologically similar species was observed utilizing the site, it is assumed that the Mohave ground squirrel is not present onsite. The closest documented location of Mohave ground squirrel is greater than located within 5 miles from the project site, which precludes the requirement for protocol surveys for this species. Because of the proximity of the documented Mohave ground squirrel to the Project site, CDFG guidelines require protocol trapping surveys be conducted prior to implementation of the proposed Project.

The following species accounts are provided for the three two special-status species detected during the focused surveys, as well as for those special-status species that are reported within the vicinity but not detected during the 2006 surveys (Mohave ground squirrel, burrowing owl, desert cymopterus and Barstow woolly sunflower).
Bell's Sage Sparrow (*Amphispiza belli*)

USFWS: None; BLM: None; CDFG: Species of Special Concern

The sage sparrow is a common but inconspicuous bird of sagebrush and chaparral in the arid western United States. The subspecies *belli* is a species of special concern in California. Sage sparrow can be found in chaparral, sage scrub and low desert scrub of saltbush, bitterbrush, big sagebrush and shadscale, and generally prefers semi-open habitats with evenly spaced shrubs 1-2 m high (Chase and Carlson 2002) foraging mainly on the ground among shrubs. They nest in low dense shrubs and form small feeding flocks during the non-breeding season. Sage sparrow is believed to migrate southward in winter from northern portions of its range, and moves down-slope into deserts in winter in southern CA.

Burrowing Owl (*Athene cunicularia hypugaea*)

USFWS: None; BLM: None; CDFG: Species of Special Concern

The breeding range of the North American subspecies of burrowing owl extends south from southern Canada into the western half of the United States and down into Baja California and central Mexico (Johnsgard 1988). Burrowing owl inhabit open areas such as grasslands, pastures, open scrub, and the edges of agriculture fields (Unitt 2004). Burrowing owls use rodent burrows throughout the year for shelter from weather and predators, and in Southern California the most commonly used rodent burrow is that of the California ground squirrel (*Spermophilus beecheyi*) (Unitt 2004). The burrowing owl nesting distribution is strongly correlated to local burrow distribution. Burrowing owls have declined through much of their range because of habitat loss due to urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978). Although burrowing owls are relatively tolerant of lower levels of human activity, there are human related impacts such as shooting and the introduction of non-native predators which are also causes of their decline (Zarn 1974). Burrowing owl was not detected during the field surveys.

Desert Cymopterus (*Cymopterus deserticola*)

USFWS: None; BLM: Species of Special Concern; CNPS: List 1B

Desert cymopterus is an early-spring flowering herbaceous perennial in the carrot family (Apiaceae), and is known to occur in deep, loose, well drained, fine to coarse sandy soils of alluvial fans and basins, often in swales or stabilized low sand dune areas and occasionally on sandy slopes. The known elevation range of this species is 2060-3060 ft (692-933 m) (Bagley, 1995; CDFG, 1997). It occurs in Mojave creosote bush scrub, desert saltbush scrub, and Joshua tree woodland with creosote bush scrub or desert saltbush scrub understory (Holland 1986). Common perennial associates growing with desert cymopterus include creosote bush (Larrea tridentata), Joshua tree (Yucca brevifolia), saltbush (Atriplex polycarpa, A. canescens, A. spinifera, A. confertifolia), and burro bush (Ambrosia dumosa). Desert cymopterus plants
Section 4, page 4-1

Would the proposed project cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community (CEQA Guidelines, Section 15065 (a))? The proposed project would remove 160 acres of saltbush desert scrub and associated native biological resources, including habitat utilized by the threatened desert tortoise as well as habitat used by northern harrier and California horned lark, which are California Species of Special Concern. The project site comprises a total of 160 acres that is located within the approximately 9.3 million acre planning area of the proposed WMP. Of this planning area, there are approximately 3.3 million acres of public lands in the area of the project site that are focused on desert tortoise conservation. The proposed project is also not expected to substantially decrease the overall potential carrying capacity for wildlife species in the project area or eliminate a plant or animal community. Mortality of desert tortoise may occur indirectly through habitat loss and degradation; however, it is not likely given the recommended BMPs.

No impacts are expected to Barstow woolly sunflower, burrowing owl or desert cymopterus.

Section 4, page 4-2

- Loss of 160 acres of potential Mohave ground squirrel habitat would be considered adverse but not significant due to the lack of occupation by this sensitive species onsite. As a condition of approval and consistent with CDFG guidelines, additional trapping surveys for Mohave ground squirrel are required to confirm the absence of this species. If Mohave ground squirrel is subsequently detected, the Project proponent will be required to obtain a take authorization from CDFG prior to project implementation. Loss of 160 acres of habitat that supports the two CSSC species that were detected on the site would be considered adverse but not significant because the habitat surrounding the project site is suitable and is connected to the approximately 9.3 million-acre planning area of the proposed WMP. Within this planning area, there are approximately 3.3 million acres of public lands in the area of the Project site that are focused on desert tortoise conservation, which will in turn conserve habitat for the CSSC species that use the same habitat. However, significant adverse impacts to desert tortoise will occur as a result of this project, and include: Loss of 160 acres of desert tortoise habitat that is located within the Fremont-Kramer DWMA and ACEC, and BLM Category I desert tortoise habitat. No direct mortality of tortoise is expected;
Would the proposed project deteriorate existing fish or wildlife habitat (CEQA Guidelines, Appendix I (II.5.d)):

Potential indirect impacts include the increased risk to desert tortoise of metal toxicity from air-borne particulate matter that may be carried by the wind from the windrows on the project site to desert tortoise habitat. Heavy metals, including cadmium, mercury, lead, molybdenum, arsenic, selenium, chromium, and nickel, have been found in the livers and kidneys of ill tortoises, and are linked to upper respiratory tract disease, shell lesions, and other serious illnesses. It is unknown whether compost can cause such high levels of airborne metals or pathogens such as rusts, molds and bacteria that may affect desert tortoise and other wildlife through the food chain. Literature on the effect of compost use on heavy metal levels in the soil environment indicate that it varies according to soil type, plant species, and compost composition. It has also been reported that the metals in compost are important in minimizing metal absorption in plants, which could indirectly minimize heavy metals absorption in desert tortoise. No relationship between tortoise health condition and composting facilities have been documented. Since tortoise will be removed from the site prior to construction, a permanent fence will be installed around the perimeter and the windrows will not be turned during high wind situations, desert tortoise are not expected to be exposed to increased levels of heavy metals from the composting site.

An incremental reduction in desert scrub vegetation and loss of native biological resources will occur as a result of the proposed project. However, the Hawes site is a relatively small area within a large block of habitat proposed for conservation within the Fremont-Kramer DWMA and ACEC and the much larger proposed conservation area of the WMP. The site is located on private property, and there is a large patchwork of state-and federal-owned lands in the surrounding area. The proposed Project represents 0.08% of private lands within the Fremont-Kramer Desert Wildlife Management Area. This is well below the Allowable Ground Disturbance threshold permitted by the proposed WMP (see page 2-32 of the WMP FEIS). Adverse cumulative impacts include the potential opportunity to develop other private lands in the project vicinity. A regional HCP, if approved, would address potentially significant cumulative impacts to biological resources in the project vicinity.

1. The Project shall be phased, with the initial phase not to exceed 80 acres in size. Prior to developing any subsequent phase, the Applicant shall provide, and the County shall review and approve, an operating plan demonstrating the need for such subsequent phase. An operational plan shall be provided for the County’s review and approval outlining the conditions that would demonstrate the need for each subsequent phase.

2. Prior to commencing any ground-disturbing activity, the Applicant shall mitigate and/or avoid impacts to federally- and state-protected species by obtaining required incidental take permits from the United States Fish and Wildlife Service and the California Department of Fish and Game, and by complying with the terms of those permits.
including, without limitation, the purchase and conservation of such habitat as required, the preparation and approval of an adequate Habitat Conservation Plan, and the installation of permanent tortoise fencing along roads as required. Purchase of habitat conserved at a compensation ratio of 5:1 (800 acres), as recommended in the proposed WMP for projects within the boundaries of DWMAs. Purchase of lands within the project vicinity that would conserve east-west habitat continuity would be preferred if available and practicable.

2.3 All employees, subcontractors, construction personnel, and other individuals who work on-site shall participate in an desert tortoise awareness program covering addressing desert tortoise, burrowing owl, Mohave Ground Squirrel, and other federally- and state-protected species at the Hawes site prior to ground-disturbing activities, with educational materials provided by the West Mojave Implementation Team. The program shall be administered by the Authorized Biologist or Environmental Monitor. The program may be given in the field prior to initiation of construction activities, and shall include truck drivers, delivery personnel, and other Project-related personnel occasionally entering the work site. Wallet-sized certification cards shall be provided to personnel who have attended the training, and personnel shall carry those cards when working on site.

3.4 A permanent tortoise-proof fence shall be installed around the perimeter of the Project impact area prior to grading of the site ground disturbing activities. Once the fence is installed, clearance surveys for desert tortoise shall be conducted by qualified biologists to locate and remove any tortoises and close their burrows within the Project site impact area. An authorized biological monitor shall be present during construction to ensure that tortoises do not re-enter the construction area and to remove or rescue any individuals that may be injured. Mortality of any tortoise shall be reported to wildlife agency staff.

4.5 Between February 15 and November 15, the tortoise clearance survey shall occur within 48 hours prior to ground disturbance. Between November 16 and February 14, the survey may be performed several days or weeks prior to ground disturbance, unless ground disturbance will occur during a rain event. Ground disturbance shall not occur during a rain event, unless a clearance survey has occurred within the previous 48 hours.

5.6 Where practicable, vegetation clearing activities shall occur when tortoises are least likely to be active, including, but not limited to, the period between generally between November 15 and February 14.

6.7 Cross-country (off-road) vehicle use shall be prohibited and signs shall be posted.

2.8 Except on paved roads with posted speed limits, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat. This speed limit shall be posted along all access routes associated with the Project. Drivers shall take all feasible steps to avoid tortoises encountered on the roads, including, but not limited to, stopping and waiting for tortoises to cross the road.
All trash and discarded food items generated by construction and operation activities shall be promptly contained and regularly removed from the Project site to reduce the attractiveness of the area to ravens and other potential desert tortoise predators. Prior to ground disturbing activities, the applicant shall submit, and the County and CDFG shall approve, a raven management plan designed to minimize tortoise predation as part of the Incidental take permit or permits required under Mitigation Measure B-2. Additionally, all artificial water sources must be covered or otherwise made inaccessible to wildlife.

The Project proponent shall prepare an HCP and obtain an incidental take permit/authorization from the wildlife agencies prior to Project implementation. In order to avoid incidental take of birds protected under the Migratory Bird Treaty Act, grading and brush removal of any undisturbed habitat shall be scheduled outside the breeding season of most migratory birds (i.e., grading shall not take place from March through July unless surveys for nesting birds are conducted and no impacts are likely).

Prior to commencing ground disturbing activities, the Applicant shall submit, and the County shall review and approve, evidence of financial ability to properly manage conserved habitat and to monitor the impact of the Project on surrounding habitat as defined by permit conditions and the Implementing Agreement associated with the permit. Adequate funding must be set aside to manage the conserved habitat and to monitor the effects of the Project on the surrounding habitat.

Prior to commencing ground disturbing activities, Mohave Ground Squirrel trapping surveys shall be conducted to confirm that the species is not present at the Hawes site. Mohave ground squirrel trapping surveys shall be conducted prior to construction of the Project to determine this species presence within the Project area. If the surveys determine that the Mohave Ground Squirrel is present, the applicant shall avoid or mitigate environmental impacts by obtaining required incidental take permits from the United States Fish and Wildlife Service and/or the California Department of Fish and Game, and by complying with the terms of those permits, including, without limitation, the purchase and conservation of such habitat as required and the preparation and approval of an adequate Habitat Conservation Plan.

Baseline studies for invasive plants shall be conducted in the firebreak of the property, as well as at the Hawes site and within a 500-foot buffer outside the fire break, shall be conducted and submitted to the County no later than 30 days after the facility opens. The County shall review and approve the surveys before the facility opens. If feasible, these surveys should be conducted in early spring 2007 if the facility will open later that year. All plant species that are present shall be identified and this area monitored annually (early spring) to detect any invasive species that may be present. If an invasive species is detected, an herbicide that is appropriate to the species, as determined by the County and BLM, shall be applied to prevent dispersal of exotic or invasive plant species onto BLM property and adjacent habitat. The monitoring frequency of surveys may be reduced to once every four years if no invasive are detected during the first five years of monitoring.
14. The Project site must maintain an adequate water supply and delivery capacity as well as clear aisles between windrows for easy access in case of fire. The Applicant shall submit, and the County shall review and approve, evidence of adequate water supply and plans demonstrating adequate windrow spacing prior to commencing shall operations.

15. All deliveries of green material to the project shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to invasive species and damage to habitat. The Applicant shall not accept deliveries of green material in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.

16. All deliveries of biosolids to the project shall be made in covered or enclosed vehicles in order to avoid or mitigate the potential for significant environmental impacts related to damage to habitat, airborne transmission of pathogens and soil contamination. The Applicant shall not accept deliveries of biosolids in uncovered vehicles, and shall post a sign at the entrance to the composting facility notifying drivers of that policy.

References:


California Department of Fish and Game (CDFG). April 2006. Natural diversity data base RareFind element occurrence reports. CDFG Natural Heritage Division, Sacramento, California.


Remsen, V. 1978. The species of special concern list: an annotated list of declining or vulnerable birds in California. Western Field Ornithologist, Museum of Vertebrate Zoology, University of California, Berkeley.
