Appendix D4: Nursery Products Hawes Composting Facility Highway 58 and Hawes Airport Road, Hinkley, CA

Environmental Topic	Impact(s)	Mitigation	Conclusion
Aesthetics	 PROJECT SPECIFIC: The Project site is located off State Route 58, which has been designated by California Department of Transportation (Caltrans) as an Eligible State Scenic Highway although not formally adopted as Designated. There are no trees, rock outcroppings or buildings are located in the vicinity that would be affected by the Project. The Project area is comprised of relatively undisturbed natural areas, and none of the area has been characterized by the San Bernardino County General Plan as "scenic". The Project may create new sources of light and/or glare as necessary for project safety. The proposed lighting associated with the project will be shielded to preclude light pollution or light trespass on adjacent property in conformance with this the County Night Sky ordinance, the County General Plan, and the updated Development Code. Although the appearance of the site would change, the viewer response to this change is considered less than significant. Overall impacts to visual character are considered less than significant. CUMULATIVE: The proposed modification to the visual characteristics of either the Project site, Reduced Capacity Alternative, or the Fort Cady Alternative Site would result in an incremental impact to these rural sites. However, the open space view is essentially conserved by the RC zoning that allows one residence per 40 acres. At "build-out" either of the sites would still remain rural; therefore, no cumulative impact would result. 	None.	Less than significant.
Agricultural	 PROJECT SPECIFIC: Both the proposed Project site and the Fort Cady site are located in rural desert areas and have not been used for irrigated agricultural production. The sites are not known to contain soils that have been designated as prime or unique agricultural soils and agricultural activities have not historically occurred at these sites. The Project would not adversely impact prime or locally important agriculture as none occur within the Project area. The Project site is not under a Williamson Act contract. Therefore, impacts to agricultural resources would be less than significant. CUMULATIVE: Neither the Hawes or Fort Cady site is being utilized for agricultural uses. The rural type of zoning would allow agricultural uses in either vicinity with only a minimal loss of land that could be used for agriculture. The loss of this amount of land (78 to 160 acres) is not a cumulatively considerable impact to agricultural resources. 	None.	Less than significant.
Air Quality -	PROJECT SPECIFIC: The Project has the potential to generate offensive	AQ-1: The applicant shall	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
Construction	odors. Although long-term operation of the Project would not, by itself, exceed the SCAQMD's PM10 threshold, these emissions are based on watering the road to minimize dust generation. Without watering (or paving) the access road to reduce dust, the Project would result in significant dust impacts. Consequently, dust control mitigation measures are included. CUMULATIVE : The proposed Project, Reduced Capacity Alternative and Fort Cady Site Alternative would be located several miles from any other appreciable stationary source of air pollutants. The facility's impacts to air quality are expected to occur in the near vicinity of the project site, where impacts of the nearest other sources would be small. However, as described previously, each of these alternatives would introduce significant unmitigable emissions ozone precursors (VOCs), which will contribute to regional nonattainment conditions. Given these circumstances, the proposed Project, Reduced Capacity Alternative and Fort Cady Site Alternative air quality impacts are all considered to be significant.	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 prior to facility operation, the applicant shall prepare an Odor Impact Minimization Plan (OIMP) to reduce potential odor impacts during operation of the compost facility. The OIMP shall be prepared pursuant to the requirements established by the CIWMB (14 CCR 17863.4) and would act as the overall program document for odor control at the compost facility. The OIMP shall include written procedures for reducing odors due to feedstock receipt, processing and handling and for compost processing. The OIMP shall be submitted to the Local Enforcement Agency, prior to operation. OIMP will include: a)Odor- Screening and Load-Checking Procedures b) Feedstock Storage and Processing Measures c) Windrow Management Measures d) Good Housekeeping Procedures e) Odor Complaint Response System 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		shall be sprayed with water to prevent	
		visible dust during windy conditions.	
Air Quality - Operational	PROJECT SPECIFIC: The Mojave Desert Air Basin does not meet the	AQ-1: The applicant shall	Significant and
	State and Federal ambient air quality standard for ozone (O3) and PM10.	development of an Odor Impact	unmitigable
	The Project would exceed the Mojave Desert Air Quality Management	Minimization Plan (OIMP) that will	
	District's MDAQMD's VOC emissions thresholds during Project	outline self-imposed operating	
	operations. These emissions constitute cumulative and Project-level	requirements that will avoid or mitigate	
	impacts, as they contribute towards the creation of basin-wide O3 levels.	significant odor impacts result in odor	
		control and reduction. The OIMP shall	
	The Project has the potential to generate offensive odors.	be submitted to the Local Enforcement	
		Agency (LEA) for review and approval	
	Although long-term operation of the Project would not, by itself, exceed the	prior to operation. Specific mitigative	
	SCAQMD's PM10 threshold, these emissions are based on watering the	actions prior to facility operation, the	
	road to minimize dust generation. Without watering (or paving) the access	applicant shall prepare an Odor Impact	
	road to reduce dust, the Project would result in significant dust impacts.	Minimization Plan (OIMP) to reduce	
	Consequently, dust control mitigation measures are included.	potential odor impacts during operation	
		of the compost facility. The OIMP shall	
	Heavy metals may be transferred off-site from turning during episodes of	be prepared pursuant to the	
	high wind speeds (30 miles per hour or higher) impacting desert tortoises.	requirements established by the	
	Heavy-duty vehicles generate combustion emissions which add to	CIWMB (14 CCR 17863.4) and would	
	significant VOC and PM10 operational emissions.	act as the overall program document for	
		odor control at the compost facility.	
	CUMULATIVE : The proposed Nursery Products facility will introduce	The OIMP shall include written	
	significant emissions of dust and ozone precursors (NOx and VOCs), which	procedures for reducing odors due to	
	will contribute to regional nonattainment conditions for ozone and PM10.	feedstock receipt, processing and	
		handling and for compost processing. The OIMP shall be submitted to the	
		Local Enforcement Agency, prior to	
		operation. OIMP will include: a)Odor-	
		Screening and Load-Checking	
		Procedures b) Feedstock Storage and	
		Processing Measures c) Windrow Management Measures d) Good	
		Housekeeping Procedures e) Odor	
		Complaint Response System	
		AQ-2: All unpaved on-site and access	
		road shall be sprayed with water	
		frequently enough to minimize the	
		generation of visible dust.	
		generation of visible dust.	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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. All mitigation measures identified in the Air Quality Mitigation measures would also apply to the cumulative	
Biological Resources -	PROJECT SPECIFIC: The Project would indirectly impact the desert	impacts. B-1: The Project shall be phased, with	Less than significant.
Construction	tortoise (an endangered species) by loss of habitat (160 acres) and by potentially attracting ravens (tortoise predator).	the initial phase not to exceed 80 acres in size. Prior to developing any subsequent phase, the Applicant shall	
	Construction activities and vehicle traffic from the Project could directly harm the desert tortoise and possible burrowing owl.	provide, and the County shall review and approve, an operating plan demonstrating the need for such	
	Construction activities may harm Mohave ground squirrel.	subsequent phase. B-2: Prior to commencing any ground-	
	CUMULATIVE: The site is located on private property, and there is a large patchwork of state-and federal-owned lands in the surrounding area.	disturbing activity, the Applicant shall mitigate and/or avoid impacts to	

Environmental Topic	Impact(s)	Mitigation	Conclusion
	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.	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. 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. The program shall be administered by the Authorized Biologist. It may be given in the field, 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 ground disturbing activities. Once the fence is installed, clearance surveys for desert tortoise shall be conducted by	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		qualified biologists to locate and	
		remove any tortoises and close their	
		burrows within the Project 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 Vegetation clearing activities shall occur when tortoises are least	
		likely to be active, including, but not	
		limited to, the period between	
		November 1 5 6 and February 14 5. .	
		B-7 Cross-country (off-road)	
		vehicle use shall be is 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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.	
		B-11: 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-15: All deliveries of green material	
		to the project shall be made in covered	
		or enclosed vehicles in order to avoid	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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-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. 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. All mitigation measures identified in the Biology Mitigation Measures would also apply to the cumulative impacts.	
Biological Resources - Operation	 PROJECT SPECIFIC: The Project would indirectly impact the desert tortoise (an endangered species) by loss of habitat (160 acres) and by potentially attracting ravens (tortoise predator). Construction activities and vehicle traffic from the Project could directly harm the desert tortoise and possible burrowing owl. The Project may introduce invasive plants into adjacent natural habitat. 	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.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	The Project may cause a fire on adjacent property that would degrade existing desert tortoise habitat.	B-2: Prior to commencing any ground- disturbing activity, the Applicant shall mitigate and/or avoid impacts to	
	<i>Fort Cady Site Alternative only</i> – Loss of honey mesquite bosque habitat would be considered significant due to the threatened status of this habitat in California.	federally- and state-protected species by obtaining required incidental take permits from the United States Fish and	
	CUMULATIVE: The site is located on private property, and there is a large patchwork of state-and federal-owned lands in the surrounding area. 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.	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. 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.	
		The program shall be administered by the Authorized Biologist. It may be given in the field, 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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 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 Vegetation clearing activities	
		shall occur when tortoises are least	
		likely to be active, including, but not	
		limited to, the period between	
		November 156 and February 145.	
		B-7 Cross-country (off-road) vehicle use shall be is 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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).	
		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.	
		B-11: 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).	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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-13: Post construction surveys for	
		invasive plants 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 before the facility opens. The	
		County shall review and approve the	
		sureveys 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. The frequency of surveys may	
		be reduced to once every four years if	
		no invasive are detected during the first	
		five years of monitoring.	
		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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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.	
		All mitigation measures identified in	
		the Biology Mitigation Measures would	
		also apply to the cumulative impacts.	
Cultural Resources and	PROJECT SPECIFIC: Previously unidentified cultural resources may be discovered during Project and ing(augustion)	CR-1: Monitoring by a qualified	Less than significant.
Paleontology	discovered during Project grading/excavation. Significant non-renewable paleontological resources may be discovered	archaeologist shall occur during grubbing, grading or any construction	
	and damaged during Project grading/excavation.	excavation that disturbs native soils. In	
	Fort Cady Site Alternative only –Possibility of the site to eligible for the	the event that an unanticipated find is	
	California Register of Historical Places (CRHR) criteria	discovered during construction	
		activities, the construction crew will	

Environmental Topic	Impact(s)	Mitigation	Conclusion
	Impact(s) CUMULATIVE: The Project will not result in significant impacts as no cultural resources eligible for CRHR listing are known on site. While there are cultural resources could be conserved by the collection and curation of any resources that might be encountered during site preparations. Therefore, the impact to cultural resources would not result in a significant cumulative impact.	Mitigation 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, he or she will contact the Native American Heritage Commission. LUSD may shall 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. CR-2 : Monitoring of excavation in areas identified as likely to contain paleontological resources by a qualified	Conclusion
		paleontological monitor is required for all excavation into undisturbed sediments of Pleistocene older alluvium	
		(or the Lake Manix Formation for the Fort Cady Site Alternative), both at the surface and in the subsurface. Paleontological monitors must be equipped to salvage fossils as they are	
		unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		small fossil invertebrates and	
		vertebrates. Monitors must be	
		empowered to temporarily halt or	
		divert equipment to allow removal of	
		abundant or large specimens. CR-3:	
		Any recovered specimens shall be	
		prepared and stabilized to a point of	
		identification and permanent	
		preservation, including washing of	
		sediments to recover small	
		invertebrates. CR-4: Any small	
		specimens collected shall be identified	
		and curated into an established,	
		accredited museum repository with	
		permanent retrievable paleontological	
		storage (e.g., SBCM). These	
		procedures are also essential steps in	
		effective paleontological mitigation	
		(Scott and others, 2004) and CEQA	
		compliance (Scott and Springer, 2003).	
		The paleontologist must have a written repository agreement in hand prior to	
		the initiation of mitigation activities.	
		Mitigation of adverse impacts to	
		significant paleontological resources is	
		not complete until such curation into an	
		established museum repository has	
		been fully completed and documented.	
		CR-5: If any paleontological resources	
		are found during excavation, a report of	
		findings with an appended itemized	
		inventory of specimens, shall be	
		prepared and submitted to the County	
		Museum and LUSD.	
		CR-1, and: CR-6: If site CA-SBR-	
		11998 cannot be avoided, an	
		archaeological, excavation testing	
		program shall be developed and	
		implemented by a qualified	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		archeologist. CR-7: A qualified vertebrate paleontologist shall conduct a field assessment of the study area and monitor excavation in any surface and subsurface sediments.	
Geology and Soils	 PROJECT SPECIFIC: The proposed Project site is located within the Centro Subarea of the Mojave River Basin which is generally flat with a very slight gradient towards the north. The Centro Subarea is part of a desert basin that is filled with alluvium sporadically interrupted by remnants of old ridges. No special hazard zones (active earthquake fault zones) delineated by the 1972 Alquist-Priolo Special Studies Zone Act are located within the proposed Project site. Since no mapped active or potentially active faults are known to pass through the site, the potential risk from fault rupture is considered very low. The proposed Project site is not within a liquefaction seismic hazard zone and, in general the site contains soils with a moderate to slight potential for erosion. The soils within the Project site have low potential for expansion and therefore present a less than significant potential impact. 	None.	Less than significant.
Hazards and Hazardous Materials	 PROJECT SPECIFIC: Hazardous materials or fuel could spill during transfer or fueling activities, as a result of an accident or as a result of a leaking container. Combustion of the windrows or other onsite combustible materials. Exposure to pathogens, common fungus known as Aspergillus fumigatus, entotoxins, or other allergens. Biosolids/windrows can potentially harbor vectors, such as flies, mosquitoes, and fleas. CUMULATIVE: Not provided. 	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-Applicant shall submit, and the County shall review and approve an Emergency Contingency Plan 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-2: A Spill Prevention, Control, and Countermeasure Plan (SPCC) shall be prepared and certified prior to the	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
		commencement of on-site operations.	
		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	
		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.	
		HM-4: Following each storm event or	
		surface water discharge, no standing water shall be retained in the	
		impoundment basin for more than 30	
		days. Water from the basin may be	
		used for process water or for dust	
		control on windrows. HM-5: Compost	
		leachate shall be captured and may be	
		reused to maintain compost moisture	
		levels. HM-6: Perform misting or	
		spraying of compost piles when mixing	
		to control airborne spore movement.	
		HM-7: Wash down vehicles and	
		equipment at regular intervals to reduce	
		dust and spore levels.	
		HM-8: Employees engaged in moving	
		or turning compost piles shall be	
		equipped with protective clothing,	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		 gloves, and face mask. Training programs shall be instituted to instruct employees on the necessity of wearing protective gear. HM-9: Muscadine, or other suitable bait materials shall be distributed along the external Project boundaries of the composting pad if the LEA determines that periodic fly problems become an area nuisance. HM-10: Biosolids shall be mixed with suitable bulking agents within 4 hours after arrival. HM-11: The Applicant shall ensure that employees are-trained in procedures to prevent, detect, and remedied fly breeding areas . 	
Hydrology and Water Quality – Construction	 PROJECT SPECIFIC: Grading of the storage and treatment areas would expose soils to erosion and may result in the transportation of sediment into local drainages. Fuel spilled during re-fueling of heavy equipment during construction or operation of the facility could degrade water quality. CUMULATIVE: The County's regional flood control plans have considered future growth. Because the scale of the Project and its alternatives do not exceed allowed types of land uses, the Project or alternatives would not result in a cumulative impact to hydrology and water quality with the implementation of project-specific mitigation measures. 	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 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. 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 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	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
		shall prepare a SWPPP and implement the BMPs outlined in the SWPPP. 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.	
Hydrology and Water Quality - Operational	 PROJECT SPECIFIC: Runoff from biosolids windrows contains pathogens and sediment that could contaminate surface waters. The runoff also may contain constituents in concentrations that could exceed limits to be specified in Waste Discharge Requirements (WDRs) expected to be issued by the Regional Water Quality Control Board (RWQCB). Fuel spilled during re-fueling of heavy equipment during construction or operation of the facility could degrade water quality. CUMULATIVE: The County's regional flood control plans have considered future growth. Because the scale of the Project and its alternatives do not exceed allowed types of land uses, the Project or alternatives would not result in a cumulative impact to hydrology and water quality with the implementation of project-specific mitigation measures. 	W-1: Prior to any modification or redesign of the facility, the Applicant shall submit, and the County and the RWQCB shall approve, plans demonstration 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, 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 analzed by an	Less than significant

Environmental Topic	Impact(s)	Mitigation	Conclusion
		independent laboratory and results	
		submitted to the County and the RWQCB for review 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.	
		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 significant. 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 Applicant and sent to an	
		independent laboratory, and analytical	
		results submitted to the County and the	
		RWQCB for review 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	
		copper, oto mg/kg icau, 57 mg/kg	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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.	
		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	
		the RWQCB, and the LEA shall	
		develop and implement 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: 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 a reduction in	
		the sampling frequency. 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		on water quality by obtaining coverage	
		under the state-wide general construction storm 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.	
		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. 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, and	
		approval. Samples shall be analyzed for	
		the constituents listed in Mitigation	
		Measure W-2 (at a minimum) to	
		establish baseline groundwater	
		conditions at the site. 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	

Environmental Topic	Impact(s)	Mitigation	Conclusion
		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.	
Land Use	 PROJECT SPECIFIC: The project site is located in the Desert Region of the County of San Bernardino. Surrounding land uses to the project site include predominantly vacant desert with a single residence located over approximately 1.5 miles east of the project site. There are no residential communities for a distance of at least five miles to the north, west and south. Use of the site for composting operations will not conflict with existing surrounding land uses and there are no environmental justice issues as the surrounding land uses and there are no environmental justice issues as the surrounding land use district subject to review and approval of a Conditional Use Permit application under the Additional Uses section of the development code. The Project would be developed consistent with the General Plan land use goals and policies and no significant land use impacts will occur. CUMULATIVE The County's zoning allows rural land uses in the vicinity of the Hawes and Fort Cady sites. Because the proposed Project is considered an Additional Use that may be permitted through the Conditional Use Permit process, the Project or alternatives would not result in a cumulative impact to land use. 	None.	Less than significant.
Mineral Resources	PROJECT SPECIFIC: The proposed Project and Fort Cady Alternative sites are not within an area designated by the State for locally important mineral resources and neither lies within the County of San Bernardino's Mineral Resource Zone. No impacts to mineral resources would occur at either the Project site or the Fort Cady site as a result . The Reduced Capacity Alternative is a virtually identical operation at the same (Hawes) site and would also have no impacts.	None.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
	CUMULATIVE Neither the Hawes or Fort Cady sites contain significant mineral resources, so the Project or alternatives do not contribute to a cumulative impact to mineral resources.		
Noise	 PROJECT SPECIFIC: The proposed Project site, the Fort Cady Alternative site and adjacent area to both sites are undeveloped vacant land. No persons would be exposed to and noise levels would not be generated in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The proposed facility operations at either site would be in compliance with the County Noise Ordinance for stationary noise sources and the County Noise Element regarding residential land uses. Noise impacts would be less than significant. The Reduced Capacity Alternative is a virtually identical operation at the same (Hawes) site and would also have less than significant impacts. CUMULATIVE Not provided. 	None.	Less than significant.
Population and Housing	 PROJECT SPECIFIC: There are no residents living on or in the immediate vicinity or either the Project or Fort Cady Alternative sites. The Project will employ approximately eight staff members from the local area. Implementation of the Project or Fort Cady Alternative would not induce growth directly or indirectly. There would be no displacement of existing housing or people. There would be no impacts to population and housing. CUMULATIVE The Project would employ approximately eight people. Adequate housing exists in the area to accommodate the employees. Therefore the Project or alternatives do not contribute to a cumulative impact to population and housing. 	None.	Less than significant.
Public Services	 PROJECT SPECIFIC: The proposed Project or the Fort Cady Alternative would not induce growth; therefore no additional public services are required. Existing public services' capacity, such as police and fire, would be adequate to serve the Project or alternative. Impacts to public services are less than significant. The Reduced Capacity Alternative is a virtually identical operation at the same (Hawes) site and would also have less than significant impacts. CUMULATIVE Adequate public services exist in the area to accommodate the 8 employees. Therefore the Project or alternatives do not contribute to a cumulative impact to public services. 	None.	Less than significant.
Public Services (Utilities	PROJECT SPECIFIC: The proposed Project and the Fort Cady Site Alternative would not affect or cause an increased need for additional	None.	Less than significant.

Environmental Topic	Impact(s)	Mitigation	Conclusion
and Service Systems)	public utilities or service systems. A maximum of eight employees are anticipated at any one time, generating a small amount of solid waste that will be transported to the Barstow Sanitary Landfill. Domestic water will be provided by an on-site well or be purchased and stored. Telephone service will be cellular. Electricity will be supplied by solar equipment, with a portable diesel-fueled generator backup. Site run-off from rainfall will be directed into a retention basin and no impacts to storm water drainage facilities is expected. Impacts to public utilities or service systems would be less than significant.		
	CUMULATIVE The Project would not require public water or sewer services. Adequate electrical services exist in the area to accommodate the utility needs. Therefore the Project or alternatives do not contribute to a cumulative impact to utilities.		
Recreation	 PROJECT SPECIFIC: No increase in the demand for recreation facilities will result from either the proposed Project or the Fort Cady Alternative. The area surrounding both sites includes vast amounts of open space and available recreational access. The Project does not propose construction of new recreational facilities or expansion of the existing recreational facilities. No impact to recreational facilities is expected. CUMULATIVE The Project would not require additional recreational opportunities for the 8 employees. Therefore the Project or alternatives do not contribute to a cumulative impact to recreation 	None.	Less than significant.
Traffic Impacts - Construction	PROJECT SPECIFIC: A Traffic Impact Analysis (TIA) was conducted for the proposed Project in accordance with the guidelines set forth in the San Bernardino County Congestion Management Program (CMP) 2003 Update. The TIA conducted for the proposed Project indicates that the proposed Project will not create significant traffic impacts to the surrounding roadway circulation system according to the traffic impact analysis procedures, guidelines and threshold of significance specified by San Bernardino County CMP. Additionally, the proposed Project will have adequate emergency access for both fire and medical emergency vehicles. Very low existing baseline traffic and projected operational traffic volume will not hinder emergency response times. No significant transportation impacts would occur as a result of the proposed Project.	None.	Less than significant.
	CUMULATIVE: There will be cumulatively considerable traffic impacts in the Project area, mainly due to increased truck traffic at various times		

Environmental Topic	Impact(s)	Mitigation	Conclusion
	along SR 58 and local routes parallel to the highway.		
Traffic Impacts - Operational	 PROJECT SPECIFIC: A Traffic Impact Analysis (TIA) was conducted for the proposed Project in accordance with the guidelines set forth in the San Bernardino County Congestion Management Program (CMP) 2003 Update. The TIA conducted for the proposed Project indicates that the proposed Project will not create significant traffic impacts to the surrounding roadway circulation system according to the traffic impact analysis procedures, guidelines and threshold of significance specified by San Bernardino County CMP. Additionally, the proposed Project will have adequate emergency access for both fire and medical emergency vehicles. Very low existing baseline traffic and projected operational traffic volume will not hinder emergency response times. No significant transportation impacts would occur as a result of the proposed Project. CUMULATIVE Traffic Impacts There will be cumulatively considerable traffic impacts in the Project area, mainly due to increased truck traffic at various times along SR 58 and local routes parallel to the highway. 	None.	Less than significant.