H. HAZARDS AND HAZARDOUS MATERIALS

The Hazards and Hazardous Materials section describes existing and potential sources of environmental hazards and hazardous materials associated with the proposed project. Hazards considered include those associated with construction activities, the collection and storage of household hazardous waste, airport compatibility, and the spread of pathogens and disease. Also considered in this section is fugitive trash. State regulations intended to reduce hazards associated with landfills is described, and, when necessary, additional mitigation has been developed to reduce potential impacts to a less than significant level.

1. Existing Conditions

The Landfill is located six miles south of the City of San Luis Obispo on Highway 227. The site slopes southwest, with a main unnamed drainage and associated swales/drainage ditches, conveying seasonal runoff from the site to a tributary of Pismo Creek.

The Landfill is a Class III landfill which means that it accepts materials that are not required to be disposed of in a Class I or II landfill. This material is collectively referred to as "trash." Typical items include furniture, construction debris, roofing material, wood, carpet, and vegetative debris. There are a variety of items that are prohibited from disposal in the Class III landfill, such as whole tires, automotive batteries, and appliances containing refrigerant or combustible gas, such as propane. Liquid and solid hazardous wastes, such as petroleum or chemically contaminated soils, nuclear waste, and medical wastes, are not accepted at the Landfill either. The Landfill currently ensures that prohibited materials are not disposed of in the permanent disposal area through:

1. Checking tarped loads and questioning public customers that enter the Landfill,
2. Identifying prohibited materials during sorting of waste in the RRP,
3. Using onsite staff to identify prohibited items inadvertently dumped into the permanent disposal area by commercial haulers, and
4. Providing specific locations onsite to dropoff household hazardous wastes so that they are not disposed of in the permanent disposal area.

In addition there are monitoring wells to evaluate water quality, including the presence of constituents that could present health hazards. To date, based on the information in the Water Resources section, any previous improper disposal of prohibited materials that may have occurred has not affected groundwater quality.

a. Household, Electronic, and Universal Hazardous Wastes

Hazardous waste is not accepted at the Landfill, with the exception of household hazardous wastes, electronic hazardous waste (E-waste), and Universal waste (U-waste), which is accepted for processing, but not permanent disposal. These wastes are collected separately from others, hazardous materials are removed, and recyclable materials recovered. Separate collection of hazardous household waste, E-waste, and U-waste decreases the frequency of these materials being disposed in the Landfill or unlawfully offsite. Different drop-off procedures and processing occur for each type of waste. Currently, San Luis Obispo County residents may drop off household hazardous wastes, including paints, oils, pesticides, household chemicals, etc., on

Friday and Saturday, 11:00 a.m. to 3:00 p.m., at the Household Hazardous Waste Collection Facility. Here materials are processed and packaged for reuse, recycling, or proper off-site disposal.

E-waste and U-waste can be dropped-off at the Electronic Waste Processing Area and Recovery Facility during specified hours. Examples of E-waste include, but are not limited to, televisions and computer monitors that contain cathode ray tubes, LCD desktop monitors, laptop computers with LCD displays, LCD televisions, and plasma televisions. U-waste includes batteries, compact fluorescent lamps (CFLs), and mercury thermostats. U-wastes are only temporarily stored onsite until being transported off-site. Typical transportation of U-waste includes shrink wrapping pallets to minimize breakage during collection and hauling to an authorized recycler, followed by storage of pallets within bins, boxes, or other containers.

b. Compost Collection

The Landfill's Compost Operation (CO) is located east of the currently permitted landfill. The CO is permitted to accept 300 tons per day. Composted materials include yard trimmings, untreated wood waste, natural fiber products, construction and demolition wood waste, and agricultural material (primarily grape pomace during the crush season). Compost is turned and watered until the process is complete. Wood waste is processed separately (i.e., chipped using a portable grinder) and transported off site for use as cogeneration fuel, or other off-site use.

c. Fire Risk

The project is located in a moderate wildland fire hazard zone, due to vegetation and climate conditions (2000 SLO Datafinder), Fire risk within the Landfill comes from the site's moderate fire hazard potential as well as onsite fuel tanks, storage of hazardous wastes, composting procedure, and landfill gas. Three aboveground fuel tanks are located on site. These 6,000, 10,000, and 12,000 gallon tanks each provide fuel for Landfill equipment and waste collection trucks.

Landfill gas (LFG) results from the anaerobic decomposition of organic waste deposited in the Landfill. It consists mostly of methane and carbon dioxide, though testing often includes oxygen and nitrogen as well. Methane is of concern in this EIR because concentrations in the range of five to 15 percent by volume in the air create a potential hazard for fire or explosion. It is lighter than air and rises above ground if not covered with a rain-saturated cover soil, impermeable synthetic membrane, or low permeability clay soil.

The existing Gas Collection and Control System (GCCS) consists of 36 vertical gas collection wells and ten horizontal collectors. Collector header piping carries the gas either to the Price Canyon Oilfield steam generation plant or the Landfill flare facility. The oilfield steam generation plant is located approximately 7,500 feet from the Landfill in Price Canyon. If delivery were disrupted, the Landfill has a stand-by blower and combustion flare. This system would be expanded as necessary for the proposed project. During preparation of this EIR, the San Luis Obispo Air Pollution Control District (SLOAPCD) and the California Integrated Waste Management Board (CIWMB) reviewed the proposed project. Both agencies consider the GCCS in compliance with applicable regulations (Hackett, 2008; Carlson, 2008)

d. Disease Vectors

A vector is defined as an organism that does not cause disease itself, but which spreads infection by conveying pathogens from one host to another. In a landfill setting, vectors can spread disease by carrying waste containing bacteria, viruses, and other organisms off-site, or by becoming infected themselves and coming into contact with humans and animals in surrounding areas. Potential vectors include, but are not limited to, beetles, flies, rats, vermin, and birds. The Landfill is required to set traps (fly grills, rat traps, sticky tape, etc) for potential vectors regularly. The results of the trapping activities are made available to the CIWMB on demand, per Title 27 Subchapter 4, Section 20695. Based on conversations with the CIWMB, there are no reported problems of disease vectors at the Landfill other than a persistent gull population (Hackett, 2008).

Concern was expressed at the May 2007 scoping meeting regarding the transmission of Pine Pitch Canker to trees located on properties neighboring the Landfill. Pine Pitch Canker is a fungal disease that infects many species of pine trees and is transmitted via spores transported by insects, primarily beetles. Trees found in 18 coastal and adjacent counties from San Diego to Mendocino have been infected. In general the California Pitch Canker Task Force recommends composting potentially infected trees through chipping onsite or by delivery to a landfill where they can be composted. (Pitch Canker Task Force, 2001).

e. Birds

Gulls remain a persistent problem for both disease vector and because of their potential impact to airport safety. The Federal Aviation Administration (FAA) believes locating landfills in proximity to airports increases the risk of collisions between birds and aircraft. The 1991 EIR concluded that due to the lack of bird strikes and complaints by pilots, the bird population does not significantly impact airport safety. Since completion of the 1991 EIR, the Landfill has begun maintaining a daily cover of either six inches of compacted soil or alternative daily cover at the end of the operating day, which limits scavenging at night. The Landfill has also established a falcon program to assist in minimizing the number of scavenging gulls at the property. The falcon program has been relatively successful. Other methods currently utilized to address the presence of gulls includes firing whistles.

f. Fugitive Trash

Litter on surrounding properties and along Highway 227 continues to be a common complaint of residents, as described in the 1991 EIR and discussed at the scoping meeting for this EIR held in 2007. Litter can blow from the Landfill disposal area, escape from delivery trucks, or be illegally dumped outside of the Landfill during times when it is closed.

The Landfill has established a litter control program to reduce potential litter-related nuisances. The Landfill, along with the California Highway Patrol (CHP), enforce tarping regulations, that require all loads to be covered with a tarp or other material to prevent trash from blowing out of delivery vehicles during transport. To prevent fugitive trash from leaving the disposal area, the Landfill compacts waste immediately after disposal, implements a tarping/cover program, and minimizes the size of the active working face. To prevent wind blown litter, portable and stationary litter control fences are utilized near the disposal area working face, and manual

pickup occurs. The Landfill also participates in the California Department of Transportation (Caltrans) adopt-a-highway program, and is responsible for patrolling Highway 227 near the Landfill entrance and one mile north and south. According to the Landfill, they also respond to complaints from neighbors when trash accumulates offsite.

Based on comments received during the EIR scoping meeting, fugitive trash is a persistent problem for the landfill. Some neighbors of the Landfill did recognize that the Landfill was somewhat responsive to their calls, although it was obvious from the comments that the problem was substantial and that existing efforts made by the Landfill were not considered adequate to address the problem. During field visits to the site and neighboring area by the EIR consultant, some fugitive trash was evident near the Landfill entrance, in the Highway 227 right of way, and on neighboring properties. Plastic bags and paper debris, which is easily carried by the wind, were most common. The drainage was relatively free of debris.

2. Regulatory Setting

Hazards and hazardous material management is subject to multiple laws, policies, and regulations at all levels of government. The agencies responsible for enforcing applicable laws and regulations develop and enforce standards for the handling and cleanup of specific materials determined to pose a risk to human health or the environment. The enforcing agency at the local level for the proposed project area is San Luis Obispo County Health Agency, Division of Environmental Health. At landfills, the CIWMB is the agency that synthesizes the various federal and state enforcement agencies (such as the Environmental Protection Agency [EPA] and the Regional Water Quality Control Board [RWQCB]) into a more cohesive set of regulations (Title 27). These agencies and regulations are provided below.

a. Federal Policies and Regulations

1) Federal Occupational Safety and Health Administration (OSHA)

OSHA regulates a Process Safety Management Standard (29 CFR 1910.119) with requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Some of the requirements of this standard include: all information pertaining to the hazardous chemicals shall be available to the employees; employees shall be given training on the operation of equipment with hazardous materials; and, the employer is required to perform a process hazard analysis.

2) U.S. Department of Transportation

The U.S. Department of Transportation regulates hazardous materials transportation between states under Title 49, Chapter 1, Part 100-185 of the Code of Federal Regulations. Within California, Caltrans and the CHP enforce federal law. Together, these agencies determine driver training requirements, load labeling procedures, and specifications for container types to be used.

b. State Policies and Regulations

1) California Integrated Waste Management Board Title 27, Chapter 3

CIWMB Title 27, Chapter 3 (Criteria for all Waste Management Units, Facilities, and Disposal Sites) ensures liner system and leachate management system are designed and constructed to substantially reduce the potential for release of leachate. That chapter also outlines procedures that shall be followed for fire control (subchapter 4, Article 5), gas monitoring (subchapter 4, Article 6), and vector control (subchapter 4, Article 2).

2) California Occupational Safety and Health Agency

Worker health and safety in California is regulated by the Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA). Cal/OSHA standards and practices for workers dealing with hazardous materials are contained in Title 8 of the CCR, and include Division 1, Chapter 4, Subchapter 7 (General Industry Safety Orders) and Section 5192 (Hazardous Waste Operations and Emergency Response). General construction regulations are found in Division 1, Chapter 4, subchapter 4 (Construction Safety Orders). Cal/OSHA offers on site evaluations and issues notices of violation to enforce necessary improvements to on site health and safety practices to achieve compliance with regulations.

3) Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

4) Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including EPA, CHP, regional water quality control boards, air quality management districts, and county disaster response offices.

5) Electronic Waste Recycling Act

The Electronic Waste Recycling Act, SB 20 was signed into law on September 24, 2003, and amended by SB 50 (Stats. 2004, ch. 863) on September 29, 2004. The Act requires a specific collection and recycling of certain E-wastes, separate from general landfill procedures.

6) California Universal Waste Law

Implemented February 8, 2006, the California Universal Waste Law requires households and small businesses dispose of U-waste at a household hazardous waste collection facility. Universal Waste comprises items that contain low levels of hazardous materials, and includes

fluorescent lights, household batteries and certain types of electronic waste (televisions, computer monitors, and related computer peripherals).

c. Local Policies and Regulations

1) San Luis Obispo County Air Pollution Control District

The federal and state Clean Air Acts are enforced locally by the San Luis Obispo County Air Pollution Control District (SLOAPCD). The SLOAPCD regulates potential discharges of criteria air pollutants (including organic compounds that contribute to ozone formation) and toxic air contaminants. Refer to Section V.C., Air Quality, 5.a.1 and 5.a.3 for more information.

2) San Luis Obispo County Health Agency

Pursuant to state law and local ordinance, the Division of Environmental Health of the San Luis Obispo County Health Agency conducts inspections to ensure proper handling, storage, and disposal of hazardous materials and proper remediation of contaminated sites. In addition, the Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act, [i.e., Chapter 6.95 of Division 20 of the California Health and Safety Code]) requires that any business that handles or stores hazardous materials prepare a Hazardous Materials Business Plan. Under this law, businesses are required to submit inventories of on site hazardous materials and wastes and the locations where these materials are stored and handled. This information is collected and certified by San Luis Obispo County Environmental Health Department for emergency response purposes. There are no cities within San Luis Obispo County that have adopted and implemented their own hazardous materials programs in lieu of the County program; however, the City of San Luis Obispo Fire Department is a participating agency with San Luis Obispo County.

3) San Luis Obispo County Conditions of Approval for the Materials Recovery Facility (D960246D)

Condition #38 of the Conditions of Approval, which is currently in effect, prohibits the applicant from accepting any medical or hazardous materials at the Materials Recovery Facility. This condition would be voided by the proposed new Conditional Use Permit; however, the applicant is not proposing to accept medical or hazardous waste, other than the E- and U-wastes discussed previously.

3. Thresholds of Significance

Appendix G of the CEQA *Guidelines* states that a project would normally have significant impacts if it would create a potential health hazard or involve use, production, or disposal of materials that pose a hazard to people, animal, or plant populations in the area affected. For the purposes of this analysis, an impact would be considered significant if the project would:

- Create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials;

- Create a significant hazard to the public or the environment reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or planned school; or,

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will create a significant hazard to the public or the environment.

- Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses.

4. Impact Assessment and Methodology

The EIR impact analysis focuses on potential health risks associated with the proposed project, particularly from surrounding land uses where the potential for hazardous material release could be encountered and affect the project site and surrounding area. Methodology for assessing the proposed project includes a review of existing regulatory plans and policies to determine the proposed project's consistency with these documents. A number of hazards specific to landfills, such as gas production and vector control have been evaluated based on state guidelines and the historical record of compliance at the site. Field inspections of the existing facility were performed a number of times by the EIR consultant. Material acceptance procedures, sorting, bird control, litter removal, the application of alternative daily cover, dust control and litter control fencing, among other activities was observed.

5. Project-specific Impacts and Mitigation Measures

a. Construction Activities

Accidental releases of hazardous materials (i.e., fuels or lubricants) during construction have the potential to adversely affect onsite workers, public health, and/or the environment. Spillage of fuels or chemicals could result in a threat of fire or explosion or other situations that may pose a threat to human health and/or the environment. Releases could occur as a result of vehicular accidents, equipment malfunction, or improper storage. Cal/OSHA requires construction projects to implement safe hazardous material handling and storage, transfer (e.g., refueling), and maintenance (e.g., oil changes, washing). Title 27 of the California Code of Regulations also requires that personnel at the site be trained in subjects pertinent to the site operation and maintenance, with emphasis on safety, health, environmental controls and emergency procedures. It also requires that records of the training be kept. Occupational safety is a training topic for all employees of the Landfill. Based on discussions with the CIWMB staff, the Landfill is in compliance with applicable regulations (Hackett, 2008).

Projects are required to have designated staging/maintenance areas, standard operating procedures, and emergency response planning. Compliance with Cal/OSHA and Title 27

requirements would reduce any potential impacts to *a less than significant level* (Class III). No additional mitigation is required.

b. Household, Electronic, and Universal Hazardous Waste Collection & Storage

The severity of potential impacts related to the accidental release of hazardous materials depends on the quantity (and/or concentration) and type of the material and its storage method, the location where it is stored and used, the toxicity or other hazardous characteristics of the material, whether it is transported, stored, and used in a solid, liquid, or gaseous form. The risk of the material's exposure to the environment and possible impact is a result of the interaction of these characteristics.

Increases in population in the Landfill service area would likely result in an increase in the amount of hazardous waste, E-waste, and U-waste accepted at the Landfill, potentially creating significant hazards associated with improper storage and handling. The proposed project would, however, include moving collection to an 80-foot by 30-foot metal building to store and process U-waste and E-waste, and to better receive customers and conduct operations. This change would aid in isolating these materials from other portions of the facility.

CIWMB Title 27 Section 20870 (Hazardous Wastes), requires operators of all Municipal Solid Waste Landfill Facilities (MSWLF) to implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes, as defined in 40 CFR Part 261, and polychlorinated biphenyls wastes, as defined in 40 CFR Part 761, in landfills that are not permitted to accept them, such as Cold Canyon Landfill. The Landfill currently randomly checks tarped loads at the entrance and has personnel monitoring both the RRP and the disposal areas for hazardous materials. During field visits by the EIR consultant no tarped loads were inspected at the entrance; however, Landfill staff was observed throughout the RRP directing the public to the appropriate recovery bins, and sorting materials. Compliance with Title 27, Section 20870 would reduce impacts associated with handling, storage, and safe transport of household hazardous, E-waste, and U-waste at the landfill to a *less than significant level* (Class III).

Based on comments received at the public scoping meeting for this EIR, there are times that waste is illegally dumped outside the entrance to the Landfill on neighboring driveways and property because the Landfill was not open when the load was being delivered. This illegal dumping may be reduced due to the proposed increase in operating hours at the Landfill; however, it is still considered a potentially significant impact requiring mitigation.

HAZ Impact 1 **The improper disposal of hazardous waste in areas outside of the Landfill has the potential to result in injuries to refuse haulers and neighboring residents.**

HAZ/mm-1 To encourage legal disposal of waste material, **prior to relocation of the household hazardous waste, E-waste, and U-waste facility**, the applicant shall notify users of the facility of the change, via the phone system, internet and through onsite signage, which materials may be accepted at the new facility, and when the new facility will be open to accept them.

HAZ/mm-2 **Prior to issuance of the Notice to Proceed**, the applicant shall submit to the Department of Planning and Building, an updated litter control plan. The plan shall be approved by the Department of Planning and Building and the CIWMB, and be posted on the Landfill website. The plan shall include at a minimum:

a. Descriptions of current litter control practices;
b. Provisions for bi-monthly trash pick-up on neighboring properties. Residents within one mile of the landfill shall be contacted annually and provided the dates of scheduled fugitive trash pick-up for the coming year. The phone number of the litter control staff at the Landfill shall be provided. Neighbors shall be able to contact the Landfill within one week of the scheduled date, to request pick-up of fugitive trash on their property.
c. Requirements for litter control fences to be installed around the downwind perimeter of the Landfill that are a minimum of six feet tall.
d. Requirements for portable litter control fences installed near working faces to be a minimum of ten feet tall.
e. Descriptions of the litter barrier proposal (permanent and temporary) for construction of each proposed new module. Barriers and working face should be oriented to address prevailing winds.
f. Contact information so that the public can reach agency staff (CIWMB, County Code Enforcement, CHP, Sheriff) in the event that the Landfill does not comply with control measures or to report illegal dumping.
g. Require fencing along the proposed drainage that restricts trash from entering the drainage from the Landfill and entrance road, but allows for the passage of wildlife, as necessary.

Residual Impact With implementation of this measure, the impact would be mitigated to a *level of insignificance (Class II)*. No additional mitigation is required.

c. Fugitive Trash

During the EIR scoping process, the public has expressed numerous concerns regarding fugitive trash in surrounding residential areas and along road systems used by haulers to reach the Landfill. Many complaints were that litter had blown from the Landfill site, escaped from delivery trucks, or had been dumped by County residents outside of the Landfill property. Additionally, the onsite natural drainage in the expansion area has the potential to carry trash off site.

In 1989, the applicant established a litter control program to reduce potential litter-related nuisances. To prevent fugitive trash, the Landfill compacts waste immediately after disposal in modules, implements a tarping/cover program, and minimizes the size of the working face of the disposal area. To prevent wind blown litter, portable and stationary metal and plastic litter control fences are located downwind and near the disposal area working face. These fences are generally four to six feet, but may be as high as ten feet. Manual pickup also occurs. The

Landfill is also responsible for patrolling Highway 227 near the entrance and one mile on either side.

During inspections of the Landfill disposal area by the EIR consultant, litter control fences were observed in place. The fences varied in height and material. Those directly downwind of the working disposal area faces were catching blowing debris, although given that they need to be far enough away from the working face to allow vehicles to enter the area and heavy equipment to move and compact the waste, it was obvious that trash that was easily lifted by the wind, such as plastic bags and lighter paper products mixed with debris, were easily carried up and over containment fencing. In some cases this debris came to rest on the property boundary fence or in trees onsite. In other cases the trash was blown offsite. Given that the expanded disposal area would move closer to the "downwind" property line, it is less likely that windblown material would come to rest on the Landfill property and may instead migrate to adjacent properties.

New legislation requires that all incoming loads to the Landfill be covered with tarps or other secure materials. Those that arrive at the Landfill without their loads covered are assessed an additional fee. The CHP will also ticket vehicles that are transporting material to the Landfill uncovered. Signage at the Landfill entrance notifies the public of the new law and associated fines. The Landfill does fine members of the public that enter the landfill with uncovered loads.

Noise mitigation, which would require the construction of an earthen berm along the southeastern boundary of the site (refer to Section V.I., Noise), and implementation of the proposed landscaping plan (refer to Section V.A., Aesthetic Resources) may also assist in controlling blowing debris from the site, as winds generally blow from the north and west. Having a landscaped berm in place may act as a barrier, preventing some trash from leaving the site, as blowing debris is sometimes caught in trees. This can be seen currently in trees located south of the MRF. However, even with these measures, and the litter control program, fugitive trash is expected to be a continuing problem for neighbors of the Landfill. Plastic bags and illegal dumping are the issues of most concern, to neighbors of the Landfill, discussed at project scoping meetings, and are the two things which may be most difficult for the applicant to control.

HAZ Impact 2 **The increased Landfill capacities would potentially increase the amount of fugitive trash outside of the Landfill property due to collection trucks, windblown materials, illegal dumping, and flowing water.**

Implement HAZ/mm-1 and 2.

HAZ/mm-3 The applicant shall update the litter control program, at minimum, every five years, unless more frequent updates are required by the Department of Planning and Building or the CIWMB, to address any continued deficiencies.

Residual Impact With implementation of this measure, the impact would be mitigated to a *level of insignificance (Class II)*. No additional mitigation is required.

d. Compost, Pathogens, and Noxious Weeds

The practice of composting yard trimmings, untreated wood waste, natural fiber products, construction and demolition wood waste, and agricultural material has the potential to transfer vegetative and arboreal diseases. Residents voiced concern during the EIR scoping process that Pitch canker would spread to pines surrounding the Landfill property. Pitch canker affects many native pines in California, including Monterey pine, Bishop pine, knobcone pine, gray (=foothill) pine, coulter pine, Torrey pine, ponderosa pine, and shore pines. Pitch canker is caused by a fungus called *Fusarium circinatum*, which produces airborne spores that can be spread by wind and carried by native insects. Long-distance spread is more likely to result when people transport insect or pathogen-infested logs, nursery stock, seeds, or soil. Composting wood chips and green waste should greatly reduce or eliminate the potential for disease spread (Pitch Canker Task Force 2001). It does appear that pine trees on the Landfill property and on some adjacent properties are currently dying or are dead. They also appear to be exhibiting symptoms similar to those created by Pitch canker, including resinous discharges, yellow and brown needles, and dying limbs. Based on experiences with a former greenwaste and compost operation in San Simeon, Pitch canker can be spread during the processing of infected materials. It is unclear whether or not the process used to create the compost at the San Simeon site was similar to the one used at the Landfill, however it was clear that the processing led to the spread of the disease in San Simeon (Trinidade, 2008).

Another disease of potential concern in San Luis Obispo County is Sudden Oak Death (SOD). SOD was, first detected in 1995 and affects three oak species, including coast live oak, California black oak and Shreve oak. Additional species affected include rhododendron, madrone California huckleberry California bay laurel California buckeye big-leaf maple, toyon, and manzanita. The infectious agent is the pathogen *Phytophthora ramorum*. The disease is currently known to exist in the coastal ranges in California, between Big Sur in Monterey County and southern Mendocino County. Sudden oak death has been confirmed in Alameda, Marin, Mendocino, Monterey, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties (UCD IPM, 2008). It has not yet been confirmed in San Luis Obispo County. There is no known "cure" for tree infected with SOD, although solarizing infected material (i.e. covering with clear plastic and exposing it to the sun), may kill it and keep it from spreading. One of the major mechanisms of dispersal is rainwater splashing spores onto other susceptible plants (Davidson, 2001),

The existing CO would be moved to the top deck of the Landfill (refer to Figure III-8). During this transition process, the CO may have operations both the existing and proposed location. However, noise mitigation measure NS/mm-3 (Section V.I., Noise), would require that the CO be moved within one year. Additional feedstocks may be accepted, including biosolids, food scraps, gypsum, and non-recovered/non-recycled paper. This analysis assumes that they would be accepted and composted or used as cover.

The CIWMB requires landfill operators to regularly test composted material for concentrations of metals and pathogens. Operators who also accept biosolids for composting are required to perform more rigorous testing. Allowable metal concentrations and pathogen concentrations are described in CIWMB Title 14, Chapter 3.1, Article 7.

Composted material has been tested regularly and no significant levels of metals or pathogens have been detected (Hackett, 2008). The Landfill also tests for salmonella, which is not required by law.

Much of the greenwaste entering the Landfill is delivered via enclosed commercial trucks, which reduces the threat of spreading diseased material during transport. Required tarping of incoming greenwaste loads further reduces the threat. Once at the facility, material is contained during processing through dust control (watering). Once composted, the material is free from monitored pathogens. Continued compliance with CIWMB compost testing regulations would help verify the success of the CO to eliminate disease from greenwaste material.

The biological reports prepared for the proposed project did note that there are a number of introduced plant species located at the Landfill; however, no populations of common but invasive species in the county, including pampas grass, tree tobacco, yellow star thistle, or giant arundo, were identified onsite, although significant populations of pampas grass and tree tobacco do exist south (downwind) and west of the site, in Price Canyon, at the surface mine south of the Landfill, and near Noyes Road. It does not appear therefore that the CO is responsible for the spread of noxious plants.

Given the lack of pathogens discovered in composted material, required testing of material, tarping of incoming loads, and lack of noxious weeds located at the Landfill downwind of the CO, the potential for the spread of noxious weeds as a result of the CO is considered *less than significant (Class III)*. No additional mitigation is required.

Based on the experience with compost operations in the north coast of San Luis Obispo County and the apparent effect that the existing operation has had on pine trees located downwind of the Landfill, the proposed project would potentially result in the localized spread of harmful disease such as Pine pitch canker to adjacent properties downwind of the operation. This would be considered a significant impact. Current greenwaste and compost management practices such as requiring loads to be tarped and using dust control to minimize the amount of airborne dust that leaves the site would reduce this impact.

As SOD has not been identified in the service area of the Landfill, the threat that the CO may result in the spread of the disease is reduced. However, the disease may be transported by commercial haulers or members of the public to the facility. In addition, as was the case with odors, elevating the compost operation may allow for greater dispersal of infected material as it may be more easily entrained in the wind and carried offsite.

HAZ Impact 3 **Increasing greenwaste and compost processing would result in the potential increased local distribution of Pine pitch canker to adjacent, downwind properties and the spread of Sudden Oak Death.**

Implement AQ/mm 2, 3, 4, and 7.

HAZ/mm-4 **Prior to Issuance of the Notice to Proceed**, the applicant shall develop educational materials regarding Pine pitch Canker and SOD for public and

private customers dropping off greenwaste at the Landfill. The information shall include descriptions of the distribution of the diseases, how to identify it, management practices for dealing with infected trees, and disposal guidelines. Material shall be produced in coordination with the County Agriculture Department.

Residual Impact Given the amount of processing (unloading, moving, shredding, chipping, hauling, screening) that must occur to prepare greenwaste to be composted, it is considered infeasible to completely control the spread of Pine pitch canker. It should be noted however, that the composted material no longer poses a threat, and in that sense, the proposed project would be providing a countywide beneficial service because it is providing a designated location where contaminated material can be disposed of properly. AQ/mm-7 would also reduce the potential spread as it requires covering the composting material once the material accepted exceeds 300tpd. Ultimately, however, given the infeasibility of trying to control and/or identifying affected greenwaste upon arrival at the Landfill, the impact to local trees susceptible to the disease is considered *significant and unavoidable (Class I).*

e. Disease Vectors

The proposed project would include an increase of daily tons of solid waste and compost materials, and begin collection of biosolids and food scraps. The increasing capacity could attract additional vectors such as flies, rodents, and birds that can spread infectious diseases to humans. The increase of accepted tonnage would require additional collection vehicles or more frequent trips, which may act as a transport of vectors into the Landfill.

Preventative measures are currently applied to decrease or eliminate accessibility of Landfill materials to vectors. These measures include covering the active work face and frequent compaction of trash. No vector problems, other than birds, were noted by neighbors of the Landfill during scoping meetings, or by regulatory agencies including the CIWMB (Hackett, 2008).

Compliance with IWMB Title 27, Section 20810, would be adequate to control or prevent the propagation, harborage, or attraction of flies, rodents, or other vectors. There is no indication that measures other than these are necessary to control vectors. Impacts associated with disease vectors would be considered *less than significant* (Class III). No additional mitigation is required.

f. Birds and the San Luis Obispo Airport

The proposed increase of waste and addition of accepted materials is expected to be an attractant to gulls and other birds. *The San Luis Obispo Airport Land Use Plan* identifies uses which attract birds and create bird strike zones as a hazard to air navigation creating safety hazards to passengers, employees, and aircraft. The concern is that birds may impact the windshields, engines, or propellers of the aircraft, making them partially or completely inoperable. However, there have been no reported bird strikes on aircraft since the previous EIR was completed.

The project would not necessarily result in larger or additional exposed working faces within the Landfill modules. Consistent with CIWMB regulations, preventative measures are currently applied to decrease or eliminate accessibility of landfill materials to birds, including covering the active work face and frequent compaction of trash. Various preventative methods include noise detractors, projectiles, distress calls, predatory birds, and operational practices. Currently, falcons are used as a method to discourage birds from roosting and feeding at the Landfill. These practices have been active during multiple site visits by the consultant. These measures reduce the potential number of birds at the Landfill and subsequently reduce the potential that the birds would spread disease away from the Landfill during use of other properties and contact with other animals. It also reduces the risk that birds would affect aircraft.

HAZ Impact 4 **Increasing waste disposal has the potential to attract birds, increasing potential hazard to San Luis Obispo Airport.**

HAZ/mm-5 **During all future operation of the Landfill**, the applicant shall continue the falcon program unless another, more effective measure is implemented after approval by the County Department of Planning and Building.

Residual Impact With implementation of this measure, the impact would be mitigated to a *level of insignificance (Class II)*. No additional mitigation is required.

g. Fire

A fire at the Landfill would result in smoke, odors, structural damage, injury, and the release of potentially toxic fumes. The Landfill is located in a moderate fire hazard zone due to surrounding vegetation and local climate. The proposed landfill expansion is not expected to alter this ranking nor affect emergency response from local services, which has been estimated to be between five and ten minutes by the California Department of Forestry and Fire Protection (CAL FIRE). The following is a list of potential fire hazards at the landfill and the existing regulations that mitigate them, when applicable.

1. Composted material can present a fire hazard if moisture content of the vegetation becomes too low; the proposed project would increase the amount of daily accepted compost material from 300 tons to 450 tons. Collected and temporary storage of household hazard wastes, E-wastes, and U-wastes will increase following construction of expanded facilities.

CIWMB Regulations Title 14, Chapter 3.1, Article 6 requires landfill operators to "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. Firelanes shall be provided to allow fire control equipment access to all operation areas." These activities are currently occurring at the Landfill and would continue with the expansion.

2. Uncontrolled accumulation of landfill gas increases the potential for explosion and fire hazard. The volume of landfill gas would increase with the proposed increase of accepted waste.

The project includes expanding the Landfill Gas Monitoring Program. The program would include additional monitoring points and collection system. New monitoring probes would be installed every 1,000 feet. Additionally, the Landfill Gas (LFG) Collection System will be expanded. Vertical gas collection wells and collection headers will be connected to a main header pipe. The project description predicts that it may be necessary to increase the size of the existing blowers and standby LFG flare to compensate for the increase in LFG flow resulting from the proposed larger landfill area. CIWMB Title 27 Section 20919.5 (Explosive Gases Control) requires minimum standards for collection of landfill gas. These include ensuring the concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures and that the concentration of methane gas does not exceed the lower explosive limit of methane at the facility property boundary area, among other things. These conditions are verified by the CIWMB and the SLOAPCD. Based on discussions with those agencies, the Landfill is in compliance with applicable landfill gas regulations (Hackett, 2008, Carlson, 2008). Potential hazards related to methane production at the Landfill have been avoided.

3. Construction, continued operation, and use of structures, heavy equipment, and processing facilities, including the E- and U-waste facility, onsite could expose employees and neighboring residences to accidental fire. Three aboveground fuel tanks are located on site and provide fuel for onsite equipment and waste collection trucks. These existing fuel storage tanks and fuel dispenser will be relocated to the vicinity of the new equipment maintenance building. The presence of the three tanks creates a potential for explosion or fire risk, increased by the surrounding CLL expansion construction.

CAL FIRE (formerly CDF) provided comments on the project in May, 2006. Their comments include a list of California regulations applicable to the project. In addition, site specific conditions to address potentially significant fire safety impacts resulting from the proposed project were included. These conditions require specific road widths, water tank size, suppression systems, and the development/amendment of a Fire Prevention, Control, and Mitigation Plan.

HAZ Impact 5 **Construction activities, expansion, and ongoing operation of the Landfill would potentially expose employees and adjacent residents to accidental fire.**

HAZ/mm-6 **Prior to issuance of the Notice to Proceed,** the applicant shall provide verification that a Fire Prevention, Control, and Mitigation Plan has been developed/amended to the satisfaction of CAL FIRE. Prior to final inspection or second notice to proceed, all required elements of this plan shall be installed.

Residual Impact Compliance with applicable CIWMB regulations, the requirements of the California Fire Code, as interpreted by CAL FIRE, and implementation of the mitigation measure would reduce impacts to a *less than significant level (Class II)*. No additional mitigation measures are required.

6. Cumulative Impacts

Cumulative impacts related to hazards and hazardous materials are not expected to increase as a result of this project, with implementation of mitigation measures.

Cumulative development in San Luis Obispo County would result in the increased use and/or transport of household hazardous materials, including E-waste and U-waste, in the area and the potential exposure of an increased population to these materials. Potential hazards and use of hazardous materials are location-specific to the extent that they may result in significant impacts on the localized environment, but they are not "cumulative" in the sense normally applied in CEQA documents. Therefore, cumulative impacts related to these issues and mitigation measures that have been previously identified for the project would apply cumulatively as well. Cumulative impacts would be *less than significant (Class II).* No addition mitigation measures are required.