Impact. The proposed project will generate about 41 additional employees, and expand its services to attract more users of the facility. This is considered a relatively small amount of additional traffic that is likely to be mostly generated during off-peak periods. It is not expected to result in a significant change to the existing road service levels. However, as previously mentioned, while the proposed entrance would be considered an improvement over the existing entrance, traffic safety will need further analysis to determine potential impacts and appropriate mitigation measures.

Undesirable bird attraction will remain a part of the proposed expansion. The bird control aspect will need to be further evaluated, including but not necessarily limited to: effectiveness of the falconry program and if there are any secondary effects (e.g., are scavenging birds being pushed into the flight path of incoming or outgoing aircraft. Additional analysis may consider other feasible alternatives that would be effective for bird control (e.g., tenting active disposal area, etc.).

Mitigation/Action Required. Due to the potential for significant traffic and air safety impacts, additional analysis is needed to be performed by a registered Engineer with expertise in traffic, and shall include, but not be limited to, the following:

1. Consultation with the California Department of Transportation and the County Public Works Department.
2. Identification of the existing traffic capacity and load of the following roads:
   a. Highway 227
3. Identification and evaluation of existing traffic safety issues, with special attention to the following locations:
   a. Proposed new entrance @ Highway 227.
   b. Any other access points onto Highway 227.
4. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to traffic capacity or traffic safety.
5. Identification and effectiveness of all litter and disease vectors, and any significant adverse secondary effects from the use of such controls as they relate to air safety.

13. WASTEWATER - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	☐	☒	☐	☐
b) Change the quality of surface or ground water (e.g., nitrogen-loading, daylighting)?	☐	☒	☐	☐
c) Adversely affect community wastewater service provider?	☐	☐	☐	☒
d) Other: _____	☐	☐	☐	☐

Setting. As described in the NRCS Soil Survey (see Agriculture section for soil types and

descriptions), the main limitations for on-site wastewater systems relates to: poor filtering characteristics, slow percolation, steep slopes, shallow depth to bedrock. These limitations are summarized as follows:

Poor Filtering Characteristics – due to the very permeable soil; without special engineering, larger separations will be required between the leach lines and the groundwater basin to provide adequate filtering of the effluent; to achieve compliance with the Central Coast Basin Plan, depth to groundwater information will need to be provided at the building permit stage.

Shallow Depth to Bedrock – indicates that there may not be sufficient soil depth to provide adequate soil filtering of effluent before reaching bedrock. Once effluent reaches bedrock, chances increase for the effluent to infiltrate cracks that could lead directly to groundwater sources or near wells without adequate filtering, or allow effluent to daylight where bedrock is exposed to the earth's surface. To comply with the Central Coast Basin Plan, additional information is needed prior to issuance of a building permit, such as borings at leach line locations, to show that there will be adequate separation between leach line and bedrock.

Steep Slopes – where portions of the soil unit contain slopes steep enough to result in potential daylighting of wastewater effluent (no system is allowed on greater than 30% slopes). To comply with the Central Coast Basin Plan, additional information is needed prior to issuance of a building permit, such as slope comparison with leach line depths, to show that there is no potential of effluent "daylighting" to the ground surface.

Slow Percolation – is where fluid percolates too slowly through the soil for the natural processes to effectively break down the effluent into harmless components. The Basin Plan identifies the percolation rate should be less than 120 minutes per inch. To achieve compliance with the Central Coast Basin Plan, additional information will be needed prior to issuance of a building permit that shows the leach area can adequately percolate to achieve this threshold.

Impact. The project proposes to use an on-site system as its means to dispose of wastewater. Based on the proposed project, adequate area appears available for an on-site system. See Water Section for landfill's potential impact to groundwater and surface water quality.

Mitigation/Conclusion. Future leach lines shall be located at least 100 feet from any private well and at least 200 from any community/public well. Prior to building permit issuance, the septic system will be evaluated in greater detail to insure compliance with the Central Coast Basin Plan for any constraints listed above, and will not be approved if Basin Plan criteria cannot be met.

14. WATER - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Violate any water quality standards?	☒	☐	☐	☐
b) Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?	☒	☐	☐	☐
c) Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?	☒	☐	☐	☐

14. WATER - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) Change the quantity or movement of available surface or ground water?	☒	☐	☐	☐
e) Adversely affect community water service provider?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☐

Setting. The Cold Canyon Landfill is located on the Pismo and Monterey geologic formations, on the northeastern flank of the Pismo Syncline. The Indian Knob Fault runs through the property. The project is approximately ½ mile from the Upper Pismo groundwater basin. Groundwater monitoring and production wells previously installed show that water-bearing formations exist below the project site. The shallow groundwater surface area is found between 185 and 275 feet above mean sea level (or depth to water is between approximately 20 and 180 feet below the surface), that generally follow under the original land contours. The Landfill Expansion EIR (1991) evaluated ground and surface water quality and identified several constituents exceeding "maximum containment levels" for groundwater, which were also found for wells surveyed up to a mile from the subject property. Water quality testing has been conducted on a regular basis and monitored by the Regional Water Quality Control Board through their permit process. Trace levels of volatile organic compounds are present in the groundwater tested from the monitoring wells. The EIR completed a 20-year drawdown analysis for the currently approved landfill (evaluated at 10,000 gpd usage), and determined the following drawdown effects to surrounding wells could occur: at 0.25 miles – 23.07 feet; at 1.0 mile – 7.74 feet; at 1.5 miles – 5.46 feet. The applicant has stated current usage ranges from a few hundred gallons a day (winter) to 60,000 gpd (summer).

A leachate collection and removal system (high density polyethylene geomembrane liner and drain pipes to collection sumps) has been installed for the previously approved expansion area. The original landfill did not include such a system. Currently, there are 11 monitoring wells. Stormwater is sampled at four locations. Results from these monitoring efforts are submitted to RWQCB.

The topography of the project is nearly level to steeply sloping. The closest creek (an unnamed stream) from the proposed development is approximately 0.05 miles away. As described in the NRCS Soil Survey, the soil surface is considered to have low erodibility.

Projects involving more than one acre of disturbance are subject to preparing a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. When work is done in the rainy season, the County Ordinance requires that temporary sedimentation and erosion control measures be installed during the rainy season. The project will be subject to these requirements.

Impact. The project proposes to use two on-site wells as its water source. The applicant has stated that up to 60,000 gpd of water are used for the existing operation during hot periods during the summer months.

The proposed operation changes and increases could result in contamination of the groundwater aquifers below the subject development, as well as surface water quality from potential runoff.

Regarding surface water quality, as proposed, the project will result in the disturbance of approximately __ square feet. The project is not within close proximity to surface water sources.

Mitigation/ Action Required - Water Quality. Due to potentially significant water quality impacts associated with the expansion, analysis is necessary by a certified hydrogeologist and shall include, but not be limited to, the following:

1. Consultation with the Regional Water Quality Control Board, Environmental Health Division, County Agricultural Commissioner's Office, California Department of Fish & Game, and U.S. Fish & Wildlife Service (if steelhead stream is identified, should include National Marine Fisheries Service).
2. Evaluation and discussion of past and present potable water quality in the area of the project site. "Area" will need to be defined as a "study area" by the consultant, and should include groundwater basins supplying adjacent properties as well as municipal water users.
3. Identification and discussion of the potential for potable water contamination (in addition to items 5 through 14 below) to occur as a result of:
    a. Surface water runoff – need to evaluate surface water quality/runoff into surrounding waterways as it might significantly affect native vegetation (including sensitive vegetation such as riparian and wetland habitats), freshwater and terrestrial wildlife, off-site groundwater recharge and downstream surface water bodies. The analysis should evaluate all surface water monitoring data collected to determine potential for potential adverse impacts or trends;
    b. Over drafting of aquifer(s);
    c. Intensification of agricultural uses;
    d. Topographical alteration;
    e. Development.
4. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to water quality.

In addition, based on the landfill's location and proximity of domestic water use within the same groundwater basin, the following items need to be addressed relating to water quality:

5. Will the landfill expansion design (cap, liner, leachate collection-removal system, etc.) prevent leachate from being formed in the landfill, and prevent leachate's leaving the landfill through the liner system for as long as the wastes in the landfill represent a threat to groundwater quality?
6. How much leachate will be generated annually in the landfill over the period during which the wastes represent a threat to groundwater quality?
7. How will desiccation-cracks and differential-settling cracks in the cap of the landfill be detected and remediated?
8. What will be the costs, and how and by whom will the costs be paid, for cap maintenance for as long as the wastes represent a potential threat to groundwater quality?
9. What will be the rate of leachate transport (gallons/acre/year) through the landfill liner and out of the leachate collection and removal system at the time of construction? How will the leakage rates change over the time that the wastes in the landfill represent a threat to groundwater quality? What is the potential impact of such leakage on groundwater quality in the vicinity of the landfill?
10. If the landfill proposes incorporation of a composite liner, what will be the potential impact of desiccation-cracking of the soil-clay layer of the composite on the rate of leachate transport? What is the anticipated area of the liner in which contact between the flexible membrane liners (FML) and the soil-clay layer will not be achieved? What will be the impact on the rate of leachate transport of not achieving contact between the FML and the soil-clay layer over that area?
11. What is the expected composition of the leachate? What is the potential for each of the

components to pollute groundwater in the vicinity of the landfill, rendering it unusable or impaired for use as a domestic water supply?

12. What is the potential for trichloroethylene (TCE) and other chlorinated solvents in the proposed landfill to pollute groundwater with known human carcinogens?
13. What is the ability of the groundwater monitoring system proposed to detect leakage from the landfill liner before widespread groundwater contamination occurs?
14. Should the municipal solid waste leachate contaminate the aquifer, can it be "cleaned up" to the point at which the groundwater and the aquifer could be used again for domestic water supply purposes? What would be the estimated range of the total cost of the groundwater aquifer clean-up should such an effort be needed? Who would pay those costs and by what means?

Water availability. Due to potentially significant impacts on water resources, a complete hydro-geologic analysis shall be prepared by a certified engineering geologist and shall include, but not be limited to, the following:

1. Consultation with the County Public Works Department and/or appropriate County Environmental Health Division, and/or appropriate nearby mutual, private, or public water companies.
2. Current and future projections of water demand for the project based on the various uses making up the proposed project's water demands.
3. Is there a hydraulic connection between the landfill or aquifer potentially affected by the landfill and groundwaters beneath adjacent properties that could, at any time in the future, be used for domestic water supply purposes?
4. Evaluation and discussion of on-site water availability, including:
    a. Feasibility of individual on site wells for the lifespan of the project
    b. Sustained pumping capacities of existing on site wells.
    c. Investigation of draw down (if any) of other wells on site and wells on neighboring properties.
5. Evaluation and discussion of the long-term capability of the ground water basin(s) to provide adequate quantities of water, and the potential for subsidence.
6. Analysis of potential water quality impacts as a result of increased pumping.
7. Evaluation and discussion of potential impacts on neighboring wells as a result of on site water requirements. This analysis should take into account the cumulative impacts associated with water availability impacts.
8. Discussion of the potential water availability impacts that could occur as a result of increased water use by neighboring properties.
9. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to groundwater availability.

15. LAND USE - *Will the project:*	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	☐	☒	☐	☐
b) Be potentially inconsistent with any habitat or community conservation plan?	☐	☐	☐	☒
c) Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	☐	☒	☐	☐
d) Be potentially incompatible with surrounding land uses?	☐	☒	☐	☐
e) Other: _____	☐	☐	☐	☐

Link to: Things to consider Alt.-Sample Language

Setting/Impact. As described in other sections of this Initial Study, this project is subject to numerous local, state and federal regulations to minimize conflict with surrounding land uses. As far as it is known by the County, the applicant has made all efforts to comply with the required permits and regulations. A Notice of Preparation will also be sent to all applicable agencies to verify compliance, as well as solicit any additional requirements applicable to the proposed expansion.

The project is not within or adjacent to a Habitat Conservation Plan area.

Mitigation/Action Required. While no land use inconsistencies have been identified to date, an analysis should be accomplished by a qualified land use planner and include, but not be limited to, the following:

1. Consultation with the County Planning and Building Department.
2. Evaluation and discussion of the proposed project as it relates to all applicable elements of the County General Plan including, but not limited to:
   a. Framework for Planning
   b. Land Use Ordinance
   c. San Luis Obispo Area Plan
   d. Other pertinent local, state and federal regulations and policies relating to land use that are not discussed in other sections of the Initial Study.

16. MANDATORY FINDINGS OF SIGNIFICANCE - *Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☒	☐	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

For further information on CEQA or the county's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental", or the California Environmental Resources Evaluation System at: "http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/" for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning or Environmental Division have contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
☒	County Public Works Department	**Not Applicable**
☒	County Environmental Health Division	**Not Applicable**
☒	County Agricultural Commissioner's Office	**Not Applicable**
☐	County Airport Manager	**Not Applicable**
☐	Airport Land Use Commission	**Not Applicable**
☒	Air Pollution Control District	**Not Applicable**
☒	County Sheriff's Department	**Not Applicable**
☒	Regional Water Quality Control Board	**Not Applicable**
☐	CA Coastal Commission	**Not Applicable**
☐	CA Department of Fish and Game	**Not Applicable**
☐	CA Department of Forestry	**Not Applicable**
☐	CA Department of Transportation	**Not Applicable**
☐	Community Service District	**Not Applicable**
☐	Other _____	**Not Applicable**
☐	Other _____	**Not Applicable**

*** "No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File for the Subject Application

County documents

- ☒ Airport Land Use Plans
- ☒ Annual Resource Summary Report
- ☒ Building and Construction Ordinance
- ☐ Coastal Policies
- ☒ Framework for Planning (Coastal & Inland)
- ☒ General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include:
  - ☒ Agriculture & Open Space Element
  - ☒ Energy Element
  - ☒ Environment Plan (Conservation, Historic and Esthetic Elements)
  - ☒ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element
  - ☒ Safety Element
- ☒ Land Use Ordinance
- ☐ Real Property Division Ordinance
- ☒ Trails Plan
- ☒ Solid Waste Management Plan
- ☒ San Luis Obispo Area Plan and Update EIR
- ☐ Circulation Study

Other documents

- ☒ Archaeological Resources Map
- ☒ Area of Critical Concerns Map
- ☒ Areas of Special Biological Importance Map
- ☒ California Natural Species Diversity Database
- ☒ Clean Air Plan
- ☒ Fire Hazard Severity Map
- ☒ Flood Hazard Maps
- ☒ Natural Resources Conservation Service Soil Survey for SLO County
- ☒ Regional Transportation Plan
- ☒ Uniform Fire Code
- ☒ Water Quality Control Plan (Central Coast Basin – Region 3)
- ☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
- ☐ Other ____

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

See applicant's attached list of technical monitoring reports previously prepared.

County References

Aesthetics

Agriculture and Open Space Element of the General Plan
Design Guidelines - - A Community Design Reference Document; November 1998
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)

Agriculture

RULES OF PROCEDURE TO IMPLEMENT THE CALIFORNIA LAND CONSERVATION ACT OF 1965
County Agriculture & Open Space Element
USDA Natural Resource Conservation Service - Soil Surveys of San Luis Obispo County (Coastal Area)
Co. Guidelines on Willamson Act

Air Quality

Clean Air Plan - San Luis Obispo County, and Appendices (2001)
Annual Air Quality Report (2003)
APCD - 2004 Annual Air Quality Report
CEQA Air Quality Handbook (2003)
Annual Resource Summary Report 2005 - Air Quality
San Luis Obispo Area Plan and Update EIR (year)
County of San Luis Obispo - Energy Element (1995)
Title 24, Part 6, 2001 Energy Efficiency Standards for Residential and Non-Residential Buildings
CARB Handout - Naturally-Occurring Asbestos
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)
State and Federal Air Quality standards
APCD - Air Quality & Your Health
APCD - Air quality data
APCD-Monitoring Station information (go to Sitelist by County)
APCD - Emission Inventory

Biological Resources

California Natural Diversity Data Base, California Department of Fish & Game (2005)
Areas of Special Biological Importance Map
California Native Plant Society's Inventory of Rare and Endangered Plants of California; Sixth Edition, 2001
Agriculture and Open Space Element of the General Plan
Endangered Species Act of 1973, as amended ("ESA")
Article 3.5 of Division 3, Chapter 1.5 of the California Fish and Game Code, the California Endangered Species Act ("CESA")
CDFG's Website for Listed Plants
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)

Cultural Resources

Archaeological Resource Maps
County Land Use Ordinance - Inland (Title 22)

County Handout on Archeological Resources
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)

Geology/Soils

Uniform Building Code (1997)
County of San Luis Obispo Safety Element (1999)
County Landslide Risk Map, Coastal and Inland (Envicom, 1974)
County Liquefaction Potential Map, Coastal and Inland (Envicom, 1974)
Guidelines for Analyzing and Mitigating Landslide Hazards (2002)
Guidelines for Analyzing and Mitigating Liquefaction Hazards in California - Special Publication 117 (California Division of Mines and Geology, 1999)
County Land Use Ordinance - Inland (Title 22)
County of San Luis Obispo Framework for Planning (Inland)
Federal Emergency Management Agency flood insurance rate maps for San Luis Obispo County (incorporated and unincorporated areas)

Hazards/Hazardous Material

San Luis Obispo Airport Land Use Plan & Maps (last Amended 2005)
San Luis Obispo Airport Land Use Plan
Uniform Fire Code
County of San Luis Obispo Safety Element (1999)
County Hazardous Waste Management Plan
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)

Land Use

Public Facility Fees (Title 18)
Framework for Planning - Inland

Elements

County Agriculture and Open Space Element (AG Element-Chapter 2)
County Economic Element
Energy Element
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)
Housing Element
Noise Element
Parks & Recreation Element
County of San Luis Obispo Safety Element (1999)
Countywide Settlement Pattern Strategy
Hazardous Waste Management Plan
SLO Co./CDF Fire Protection Plan Master Plan
California Department of Fish & Game Wetlands Resource Policy
Clean Air Plan - San Luis Obispo County, and Appendices (2001) (Transportation & Land Use Mgmt Strategies)
Regional Transportation Plan
Uniform Building Code
Uniform Plumbing Code
Uniform Fire Code
Water Quality Control Plan (Central Coast Basin - Region 3)

Noise

Noise Element
Environment Plan (Conservation Element, Historic Element, Esthetic Element) (1974)