F. CULTURAL RESOURCES

The Cultural Resources section includes a discussion of potential paleontological, pre-historic (prior to European settlement), and historic resources that would potentially be impacted by the proposed project. The analysis in this section is based on the *Archaeological and Paleontological Evaluation of the Cold Canyon Landfill Expansion, San Luis Obispo County, California* prepared by Cogstone Resource Management Inc. (April, 2008).

Because of the sensitive nature of cultural resources, the background document has not been included in the Appendix D of this EIR, although it is on file at the County Department of Planning and Building and available for review by qualified persons. The report includes information from record searches at the Natural History Museum of Los Angeles County, Museum of Paleontology at the University of California at Berkeley and online databases, background research, surveys, and previous monitoring reports from the Cold Canyon Landfill.

1. Paleontological Resources

This section analyzes the potential for paleontological discoveries within the project site. Paleontological resources or fossils are physical remnants of ancient life. Typical resources are fossilized bones, teeth, shells, leaves, and wood. Sometimes footprints, burrows, or other indicators are also found.

a. Existing Conditions

The Landfill is mapped as the mid-to-late Miocene (14-8.5 million years old) diatomaceous sub-unit of the Monterey Formation and as the late Miocene to middle Pliocene (8.5-4 million years old) Edna Member of the Pismo Formation. Along the seasonal drainage there is Quaternary younger alluvium (10,000 years old to present) that is too young to contain fossils.

1) Monterey Formation

The Monterey Formation is known to paleontologists for the numerous marine fossils that have been recovered from it. Originally named from exposures near Monterey, California, the formation is known from northern California to San Diego County. In San Luis Obispo County, the formation has produced fossil kelp; brittlestars; sharks; bony fishes including tuna, mackerel, scad, rockfish, and pipefishes; birds such as the blue-footed booby and a new species of shearwater; sea lions; sea hippos; dolphins; and, whales. Locally, diatomite dominates the upper beds of the formation and is estimated to be approximately 1,500 feet (490 meters) thick out of 4,500-5,000 feet (1480-1640 meters) for the entire formation.

2) Pismo Formation, Edna Member

The Edna Member of the Pismo Formation consists of sandstone with tar residues variably present. This member is widely present in the local area. The Edna Member of the Pismo Formation has produced fossil vertebrates, including a baleen whale and a new species of fur seal, in addition to invertebrates during the excavation of existing Module 8 at the Landfill.

b. Regulatory Setting

This section includes a description of regulations as they related to paleontological resources. Unlike with other resources, there aren't specific agencies responsible for overseeing the preservation and permitting of projects that would affect paleontological resources (as the California Department of Fish and Game does for biological resources, for example). Therefore the regulations are based on CEQA legal requirements and guidelines prepared by State and local agencies.

1) State Policies and Regulations

CEQA states that it is state policy to "take all action necessary to provide the people of this state with... historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

CEQA includes historic and archaeological resources as integral features of the environment. If paleontological resources are identified as being within the proposed project site, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

2) Local Policies and Regulations

In 2007, the County of San Luis Obispo requested that all consultants include the following elements in assessment reports:

1. Use of the State Historic Preservation Office's (SHPO) *Archaeological Resources Management Report Recommended Content and Format* as a guideline for content.

2. Required appendices with record search letters from the Central California Information Center (CCIC) and paleontology museums.

3. Any reports recommending or reporting collection of artifacts are now required to include language specifying the exact professional facility that will curate the significant materials and specify that the project proponent is responsible for all costs associated with meeting the curation standards and for the curation fees.

4. Detailed mitigation plans must be provided using the county format and must include a research design or research questions to be answered by the proposed mitigation. Research designs should utilize SHPO's *Archaeological Research Designs* whenever possible.

c. Thresholds of Significance

Paleontological resources are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;

2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;

3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;

4. The fossils demonstrate unusual or spectacular circumstances in the history of life; and,

5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

d. Impact Assessment and Methodology

The impact assessment focuses on identifying potential project-related impacts to paleontological resources based on information obtained through the archival records search and the paleontological surface survey.

Records searches were conducted for the project area (and ten mile radius around it) at the Natural History Museum of Los Angeles County in the Vertebrate Paleontology and the Invertebrate Paleontology Departments, the Museum of Paleontology at University of California Berkeley and in online databases. Fifty-two fossil localities were identified locally in the Monterey Formation. Five fossil localities were identified from the Edna Member of the Pismo Formation; all from previous monitoring at the Landfill.

A paleontological survey of the proposed site was performed by Kim Scott and Sherri Gust of Cogstone Resource Management Inc. on January 22, 2008. All outcrops and ground exposures in the undisturbed portions of the expansion area were examined during field inspections.

e. Project-specific Impacts and Mitigation Measures

This section focuses on identifying potential project-related impacts associated with implementation of the proposed project, and is based on construction methods described in detail within the Project Description of this EIR. Potential impacts are expected to occur where proposed construction activities such as trenching, boring, grading, and excavation would result in the disturbance of a significant paleontological resource. Where potential project-related impacts to sensitive geologic formations have been identified, measures for avoiding or minimizing adverse effects to paleontological resources have been recommended.

The Edna Member of the Pismo Formation has a high potential to produce significant paleontological resources. These sediments would be impacted by proposed new cut areas for modules 10 through 16; the two new westerly detention basins; a portion of the northern detention basin; a portion of the proposed changes to the Materials Recovery Facility (MRF); the

construction of the new entrance, scalehouse, and other access roads; and, installation of proposed landscaping along the southwestern and southern property boundaries.

The upper (diatomaceous) Monterey Formation has a high potential to produce significant paleontological resources. These sediments would be impacted by the proposed new Resource Recovery Park (RRP), changes to the MRF, new northern detention basin, and proposed landscaping along the southeastern property boundary of the Landfill.

In some cases disturbance of these sediments involves relatively minimal disturbance of native materials. Based on Figure III-9, this is true of grading for the MRF, which would involve mostly fill, construction of the entrance, and the proposed landscaping. In addition, it appears that construction of the new detention basins would require cut slopes of less than ten feet. In these cases, given the small amount of disturbance of native materials, the discovery of significant resources is less likely. In other cases, such as for development of the RRP and the detention basin, cut slopes into native material are more substantial and mitigation is required.

The following mitigation measures have been developed to reduce the adverse impacts of project construction on paleontological resources to a less than significant level. The measures are derived from the guidelines of the Society of Vertebrate Paleontologists, the County of San Luis Obispo, and the requirements of CEQA. These mitigation measures have been demonstrated to be successful in protecting paleontological resources while allowing timely completion of construction.

PR Impact 1 **Disturbance of native materials associated with construction of the RRP and excavation of Modules 10 through 16, have the potential to impact significant paleontological resources.**

PR/mm-1 **Prior to issuance of the initial Notice to Proceed**, the applicant shall submit for the review and approval by the Department of Planning and Building, a Paleontological Monitoring and Recovery Plan (PRMP). The plan shall include the following, at minimum:

a. List of personnel involved in the monitoring activities;
b. Clear identification of what portions of the project (e.g. phases, areas of the site, types of activities) require monitoring;
c. Description of how the monitoring shall occur;
d. Description of frequency of monitoring (e.g. full-time, part-time, spot checking);
e. Description of what resources are expected to be encountered;
f. Description of circumstances that would result in the “work diversion” at the project site;
g. Description of procedures for diverting work on the site and notification procedures;
h. Description of monitoring reporting procedures;
i. Disposition of collected materials;

j. Proposed analysis of results of data recovery and collected materials, including timeline of final analysis results; and,
k. Description of the applicant's responsibilities. The project proponent is responsible to bear all costs associated with this mitigation plan including preparation of specimens to the curation standards of the repository and curation fees, as applicable.

PR/mm-2 **During all applicable ground disturbing construction activities**, the applicant shall implement the PMRP measures as delineated in the PMRP.

PR/mm-3 **Upon completion of each Module, 10 through 16, and upon completion of excavation associated with the RRP,** the County-approved paleontologist shall submit a report to the Department of Planning and Building summarizing all monitoring/mitigation activities, confirming that all recommended mitigation measures have been met, and including analysis of all discoveries per the PMRP. In the event that any of the grading/excavation activities occur concurrently, completion reports can be combined.

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

f. Cumulative Impacts

Cumulative impacts on paleontological resources result when rock units become unavailable for study and observation by scientists and/or when significant disturbance in sensitive geologic formations is not monitored for fossil/resource identification. The destruction of fossils has a significant cumulative impact as it makes biological records of ancient life unavailable for study by scientists. Given the prevalence of the Monterey and Pismo Formations in the State, and the number of construction activities that involve excavation into these formations that are not regulated, it is likely that significant paleontological resources are often not identified and are permanently lost. However for the proposed project the applicant is required to implement mitigation measures that would ensure protection and documentation of significant resources, if present. Implementation of this measure would ensure that the cumulative impacts to paleontological resources as a result of this project would be *less than significant* (Class III). No additional mitigation is required.

2. Pre-historic and Historic Resources

This section analyzes the potential for cultural resources discoveries resulting from the proposed project. Cultural resources include places, objects, and settlements that reflect group or individual archaeological, architectural, or religious activities. The analysis in this section is based on the *Archaeological and Paleontological Evaluation of the Cold Canyon Landfill Expansion, San Luis Obispo County, California* prepared by Cogstone Resource Management Inc. (April, 2008).

a. Existing Conditions

The Landfill is within the traditional territory of the Obispeño Chumash. Most settlements by pre-historic peoples are near permanent sources of water, none of which exist at the Landfill. The Landfill property was part of Mission San Luis Obispo ranch lands from 1772 until the 1830s. Thereafter the land was owned by the Mexican government who disbursed it as land grants. Corral de Piedra (corral of stone, includes the project area) was granted by Governor Juan Alvarado in 1841 to Jose Maria Teodoro Villavicencio when he retired as captain of the militia at Monterey. Jose Maria Teodoro was the second son of Rafael de Jesus Villavicencio (a soldier and member of the Portola expedition) and his Salinan Indian wife, Maria Ildefonsa Berges.

In 1866, Villavicencio sold the rancho to the Steele Brothers. The Steeles were successful dairymen from San Mateo County and stocked the lands with more than 600 head of milk cows. In 1876, local resident John Patchett purchased a large tract of the Steele land. He continued to ranch on the lands. In the 1870's, the Landfill was the site of the Pacific Coast narrow gauge railroad.

Bertha Mable Patchett, John's daughter, and Casper Weir, her husband, purchased the expansion area from John Patchett in 1903; the Patchetts and Weirs are San Miguel farming families who have been in San Luis Obispo County since at least the 1860's. Generations of the Weir family built three houses, a barn, an airplane hangar, a landing strip, and other improvements in the expansion area. They sold the property in 1994 to the Landfill owners. Standing structures were demolished over the next decade and the landing strip was converted to an internal roadway.

b. Regulatory Setting

This section includes a description of regulations as they related to historic and pre-historic resources. As with paleontological resources there aren't specific agencies responsible for overseeing the preservation and permitting of projects that would affect pre-historic and historic resources. The regulations are based on CEQA legal requirements and guidelines prepared by state and local agencies.

1) State Policies and Regulations

(a) California Environmental Quality Act (CEQA)

CEQA (Public Resources Code 21000 et seq.) requires lead agencies to consider the potential effects of a project on significant historical and archaeological resources. Significant impacts on such resources are to be avoided or mitigated to less than significant levels. Other state laws govern actions affecting cemeteries and human remains.

State historic preservation regulations affecting this project include the statutes and guidelines contained in CEQA (Public Resources Code Sections 21083.2 and 21084.1 and Section 15064.5 of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources.

An "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant (Public

Resources Code Section 5020.1). Section 15064.5 of the CEQA Guidelines specifies criteria for evaluating the importance of cultural resources, replacing Appendix G of the CEQA Guidelines. Evaluation criteria include the following:

1. The resource is associated with events that have made a contribution to the broad patterns of California history;

2. The resource is associated with the lives of important persons from our past;

3. The resource embodies the distinctive characteristics of a type, period, region or method construction, or represents the work of an important individual or possesses high artistic values; or,

4. The resource has yielded, or may be likely to yield, important information in prehistory or history.

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to, museums, historical commissions, associations, and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (California Health and Safety Code Section 7050.5, California Public Resources Code Sections 5097.94 et seq.).

(b) State Code Regulations

California Health and Safety Code Section 7050.5 regulates the procedure in the event of human remains discovery. Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the County Coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are determined to be Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC). The NAHC is responsible for contacting the most likely Native American descendent, who will consult with the applicant regarding how to proceed with the remains.

Public Resources Code Section 5097.991 states that "it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated." Public Resources Code Section 5097.5 indicates it is a misdemeanor for a person to knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historical or pre-historic ruins, burial grounds, archaeological, or vertebrate paleontological site situated on public lands, except when expressed permission of the public agency having jurisdiction over such lands. As used in this section, the term "Public Lands" refers to land owned by, or under the jurisdiction of, the State or any city, county, district, authority, or public corporations, or any agency thereof.

2) Local Policies and Regulations

(a) San Luis Obispo County Land Use Ordinance (Title 22)

The County has a vital interest in preserving its many older buildings, and pre-historic and historic sites, which not only represent the heritage of San Luis Obispo County, but also help define the character of the region today. In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:

- Construction activities shall cease, and the County Department of Planning and Building shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.

In 2007, the County requested that all consultants include the following elements in assessment reports:

1. Use of SHPO's *Archaeological Resources Management Report Recommended Content and Format* as a guideline for content.

2. Required appendices with record search letters from CCIC and paleontology museums.

3. Any reports recommending or reporting collection of artifacts are now required to include language specifying the exact professional facility that will curate the significant materials and specify that the project proponent is responsible for all costs associated with meeting the curation standards and for the curation fees.

4. Detailed mitigation plans must be provided using the county format and must include a research design or research questions to be answered by the proposed mitigation. Research designs should utilize SHPO's *Archaeological Research Designs* whenever possible.

c. Thresholds of Significance

CEQA Guidelines indicate that impacts from the project would be considered significant if the project would:

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

Generally, intact cultural and historic deposits are considered significant. Severely disturbed or mixed deposits often are not considered significant but may have educational value. Human remains and associated goods are afforded special consideration, even when fragmentary, and are considered significant.

d. Impact Assessment and Methodology

The impact assessment focuses on identifying potential project-related impacts to archaeological resources based on information obtained through the following archival records search, archaeological surface survey, and research.

1) Records Search

Prior to the field inspection, a records search was conducted with the Central Coast Archaeological Information Center located at the University of California, Santa Barbara, to identify areas previously surveyed and identify known cultural resources present within or in close proximity to the project area. The records search included inventories for the State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Historic Places, National Register of Determined Eligible Properties, California Historic Landmarks, California Points of Historic Interest, California Office of Historic Preservation Archaeological Determinations of Eligibility, and Caltrans State and Local Bridge Surveys.

No pre-historic resources are recorded within the project boundaries or a half-mile radius around them. There are a total of 19 archaeological sites within a one-mile radius of the Landfill. Of these sites, 13 are pre-historic archaeological sites and six are historic archaeological sites. Most of the pre-historic sites are in Price Canyon, to the west of the Landfill.

There are five recorded historical archaeological sites within the proposed expansion area. In addition, there are three recorded historic resources within a one-mile radius of the project boundaries. These resources include two houses and a gate, and would not be impacted by the proposed project.

2) Native American Consultation

A sacred lands record search was requested from the Native American Heritage Commission on January 4, 2008. On January 7, the Commission replied that there were no known sacred lands within the project boundaries. The Commission recommended further consultation with eight contacts including tribes and individuals. Letters requesting information on any heritage sites were sent to all contacts.

John Burch of the Salinan Tribe of Monterey, San Luis Obispo and San Benito Counties responded by phone and email. He expressed concern about possible pre-historic cultural resources along the small creek that runs just inside the southeastern boundary of the Cold Canyon property and requested that earthmoving in the vicinity of the creek be monitored. In addition, he stated that 19th century owners of the property were members of the Salinan Tribe and thus he considers it to be a traditional tribal cultural property. The research performed by the consultant shows that the first 19th century owner, Jose Villavicencio, was granted the land by the Mexican government. He was the son of Rafael Villavicencio, a Spaniard, and Maria Berges, a Salinan. The ranch was then sold to the Steeles and then the Patchetts, who were not of Salinan descent.

3) Previous Surface Surveys

The applicant submitted a Phase One surface survey of the proposed expansion area prepared by John Parker of Parker & Associates Archaeological Research (2006); the report was submitted by the applicant. It noted a number of potentially historic resources onsite. No pre-historic resources were observed.

e. Project-specific Impacts and Mitigation Measures

The cultural resources survey prepared for this EIR identified four areas where pre-historic or historic resources may exist. A brief description and approximate location of each are provided below:

Area 1 is located along the banks of the ephemeral drainage on the eastern edge of the proposed disposal area. No specific resources were identified in this area during surface surveys; however, personal communication with former landowners indicates that significant archaeological resources have been discovered in the area. Because of this, and because of the strong associations between water sources and pre-historic occupation, this area has been identified as an area where significant pre-historic resources may exist.

Area 2 is associated with the location of the first Weir residence built on the site, in 1903. It included a stacked foundation, the remnants of which still exist. This site, because of its age and association with known persons, is considered significant. It is located near the proposed new entrance.

Area 3 is associated with Bertha and Casper Weir's 1916 residence. This was a long time residence for the family and artifacts discovered would meet CEQA significance criteria because of its age and association with known persons. Area 3 is located in the oak woodland and found on Module 12.

Area 4 is associated with a barn also built in 1916. The barn and adjacent area is the location of a large trash deposit and may have been the ranch dump for the first part of the 20th century. Artifacts recovered from this area would meet CEQA significance criteria because of its age and association with known persons. Area 4 is located on the northern bank of the existing drainage within Module 14.

Excavation of Modules 14, 15, and 16 would potentially result in impacts to Area 1. Proposed new grading for a new entrance will destroy foundations and possible subsurface historic archaeological features associated with Area 2. Excavation of Modules 12 and 14 would potentially impact known historic archaeological resources and probable subsurface historic archaeological resources associated with Area 3. The proposed new cut area for Module 14 would create impacts to known historic archaeological resources and probable subsurface historic archaeological resources associated with Area 4.

AR Impact 1 **Earthwork and other ground-disturbing activities associated with construction of the new entrance road and Modules 12, 14, 15, and 16 may impact Areas 1 through 4, potentially impacting subsurface pre-historic or historical archaeological resources.**

AR/mm-1 **Prior to issuance of the Notice to Proceed**, the applicant shall submit for the review and approval by the Department of Planning and Building, an Archaeological Monitoring and Recovery Plan (AMRP). The plan shall include, at minimum:

a. List of personnel involved in the monitoring activities;
b. Clear identification of what portions of the project (e.g., phases, areas of the site, types of activities);
c. Description of how the monitoring shall occur;
d. Description of monitoring frequency;
e. Description of what resources are expected to be encountered;
f. Description of circumstances that would result in the "work diversion" at the project site;
g. Description of procedures for diverting work on the site and notification procedures;
h. Description of monitoring reporting procedures;
i. Disposition of collected materials;
j. Proposed analysis of results of data recovery and collected materials, including timeline of final analysis results; and,
k. Project proponent's responsibilities (the project proponent is responsible for all costs associated with this mitigation plan including preparation of specimens and curation fees).

AR/mm-2 **During all applicable ground disturbing construction activities**, the applicant shall implement the AMRP measures.

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

f. Cumulative Impacts

Implementation of the proposed project would contribute to the cumulative degradation of significant archaeological resources in the County. The destruction of archaeological resources has a significant cumulative impact as they are inherently important to the descendants of native peoples and make the study of pre-historic and historic life unavailable for study by scientists. Given the prevalence of cultural resource sites in San Luis Obispo, and the number of construction activities that involve disturbance of archaeologically sensitive areas that are not regulated, it is likely that significant pre-historic and historic resources are often not identified and are permanently lost. For the proposed project, impacts to known potential subsurface pre-historic archaeological resources would be avoided, and impacts to historic archaeological resources would be mitigated by implementation of data recovery and monitoring. Based on implementation of mitigation measures recommended in this EIR, potential cumulative impacts resulting from the proposed project are considered *less than significant (Class III).* No additional mitigation is required.

This page intentionally left blank.