STATUS OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF OCTOBER 22,2004

Prepared on September 13, 2004

ITEM: 17

SUBJECT: STATUS REPORT ON LANDFILLS IN SANTA BARBARA COUNTY

SUMMARY:

This report provides a review and status update on five active and several inactive and/or closed landfills located in Santa Barbara County with regard to water quality-related issues. Figure 1 depicts the five active landfills and most significant inactive and/or closed landfills in Santa Barbara County.

DISCUSSION:

There are five active permitted landfills in Santa Barbara County. However, one of these landfills (Foxen Canyon Landfill) recently ceased waste disposal operations and now serves as only a transfer station. There are approximately twenty inactive sites that are classified as permitted and closed, un-permitted and closed, or simply as historic dumpsites. Regional Board staff member Hector Hernandez currently oversees most of the landfill sites in Santa Barbara County. As he transitions to a combination of oilfield cleanup and landfill work over the next few months, staff member Dan Niles, currently working on the Casmalia Hazardous Waste facility, will assume oversight responsibilities for several landfill sites in Santa Barbara County.

Region 3's landfill program currently has the equivalent of approximately 2.5 staff (Personnel Years or P.Y.s) working on landfill sites, although this work is spread over four individuals. This fiscal year, the landfill program receives funding for approximately 3.0 P.Y.s.

Historically, all active landfills in Santa Barbara County have filled over unlined areas and have documented impacts to groundwater. Presently, the site posing the greatest threat and impact to water quality is the City of Santa Maria Landfill (largest unlined area, least favorable siting conditions relative to groundwater resources, largest off-site plume by area). This Landfill completed construction of a 36-acre lined landfill unit (Cell I) in June 2003. The City is on track to close all unlined areas over the next four years (per Order No. R3-2001-0041).

The next largest site (by footprint and tipping volume), Tajiguas landfill, received a revised permit in early 2003. The revised permit authorizes a vertical and horizontal expansion and requires closure of all unlined areas as soon as final elevation is reached.

The third active site, Lompoc, also received a revised permit in early 2003 (Order No. R3-2003-0014). The fourth active site, Vandenberg AFB, is scheduled for permit revision in December 2004. The final active site, Foxen Canyon Landfill, suspended waste disposal operations as of July 2004, and is presently functioning as a transfer station. Permit revision will be scheduled as soon as the County completes final Landfill closure design.

A varying amount of information is available for the inactive landfill/dump sites. The Former Casmalia site continues to receive priority attention and funding to oversee ongoing investigation, remediation, and closure. At some of the smaller dumpsites, we only know proximate locations.

Water quality impacts associated with landfills in Santa Barbara County are similar to what we see Region-wide. Plumes tend to be low concentration ["trace" to tens of parts per billion (ppb) volatile organic compounds (VOC)] and spatially constrained (quarter mile or less). Historically, the highest total VOC concentration in a groundwater

sample has reached 97.5 ppb at Santa Maria Landfill (2002 data). The farthest distance off-site a plume has been measured is 2200 feet, again at Santa Maria Landfill (2002 data). In all Santa Barbara County landfills where water quality impacts have been detected, the plumes appear stable or contracting.

Landfill contaminants are carried out of waste and into groundwater by leachate and landfill gas. Leachate and gas production are both directly proportional to the volume of moisture in waste. In lined waste units, migration of leachate and landfill gas is greatly reduced by the presence of the liner barrier; however, migration is never considered eliminated.

Region-wide at both active and inactive sites, our focus is on minimizing infiltration of water, and removing landfill gas and leachate to remove the waste contaminant's concentration gradient. At all sites, Regional Board staff work closely with Santa Barbara County Public Heath Department staff who, as the Local Enforcement Agent for the California Integrated Waste Board, implement a substantial portion of the State's landfill regulations (California Code of Regulations, Title 27).

At active landfills, staff's direction is to transition facilities to lined units and close unlined units, consistent with landfill regulations and provide the impetus for continual review and improvement of water quality protection efforts. At closed sites staff focuses on identifying and characterizing groundwater impacts, applying and/or stabilizing final cover, and documenting the existence of the site in property records. Depending on the condition of waste (stable or decomposing) and magnitude of groundwater impacts, control systems such as gas or groundwater extraction are required.

On February 6, 2004, the Regional Board adopted a General Closure Order that covers non-hazardous solid waste landfill sites, which were closed, abandoned, or became inactive (CAI Landfills) on or before November 27, 1984. The General Order establishes minimum standards for post-closure maintenance and monitoring, provides guidance for achieving compliance with necessary assessment and monitoring requirements, and requires a deed recording. The General Closure

Order addresses CAI Landfills, which are suspected or believed to present a significant threat to water quality. CAI Landfills sites in Santa Barbara County covered by the General Closure Order include Santa Ynez Airport Landfill, Ballard Canyon Landfill, City of Carpinteria Burn Dump, Santa Maria Airport Dump, Elings Park (formerly Las Positas Park) Landfill, Santa Barbara City Dump, Cathedral Oaks Dump, and Lompoc Burn Dump.

SITE SPECIFIC SUMMARIES:

Following are site-by-site summaries for the active and more significant CAI Landfills in Santa Barbara County.

City of Santa Maria Landfill

The City of Santa Maria Landfill serves the City of Santa Maria and surrounding communities. The 290-acre landfill site is located in northern Santa Barbara County along the Santa Maria River levee, northeast of the City in a regional groundwater recharge area. The landfill is divided into three basic areas: An older fill area comprised of 68acres of the western-most portion of the site; the now inactive. 118-acre unlined area located in the central portion of the site; and a 36-acre landfill expansion area (Cell 1) located on the southeast portion of the site. Cell 1 is the first of a two-cell expansion of the existing 186-acre landfill, and was completed on June 30, 2003. Cell I is equipped with a double composite base liner system. The expansion area (Cell I and proposed Cell II) is expected to provide an additional 10 to 15 years of landfill life.

As previously mentioned, this facility is the most challenging site, County- and possibly Regionwide. As such, the site has received staff's top priority for permit review and re-issuance, implementation of phased final closure of the 118-acre unlined landfill areas, and shifting all MSW disposal operations into the composite lined expansion area.

Historically, several off site wells located down gradient from the unlined area have yielded chronic low-concentration (below maximum contaminant levels) VOC detections. Seasonally high groundwater elevations at the site reach waste in portions of the unlined landfill areas. The

general groundwater gradient throughout the Santa Maria basin trends toward the west-southwest.

Corrective Measures:

Enhanced landfill gas recovery, installation of a final cover system over the unlined landfill areas, and construction of a composite lined expansion area (Cell I) should decrease ongoing groundwater impacts. Landfill gas recovery system activation has yielded decrease in VOC concentrations at both on- and off-site wells.

Recent Milestones:

- The construction of a 36-acre, double composite lined unit by June 30, 2003. This is a significant accomplishment in that allowed the City to shift all MSW disposal operations from unlined areas to the composite lined area.
- The final cover completion for an approximately 45-acre landfill area within the 118-acre unlined landfill area (24-acres in 2000, 4-acres in 2003 and 17-acres in 2004).
- Continuing expedited implementation of the City's 2002 "Rolling Closure Plan" for the final closure for the remaining 73-acres of the 118-acre unlined landfill area. According to the Rolling Closure Plan, a large landfill area will be provided with a final cover system on a yearly basis, with rolling closure completion by 2008. The final cover configuration for the remaining unlined landfill area will include a thick foundation layer consisting of non-hazardous hydrocarbon impacted soil (NHIS) material, as detailed below.
- Development of plans for a recreational facility on the closed 68-acre older fill area on the western-most portion of the site.
- Approval of petroleum impacted soils (NHIS) acceptance plan. The plan provides for utilizing historic oil field sump materials from throughout the Santa Maria valley, as foundation layer within the final cover system. The project will serve to provide a single monitored disposal location for oil field waste, which are currently encountered throughout and surrounding the valley areas. Additionally, the project provides large quantities of low permeability, structurally sound material (impacted soils and drill muds) for cover construction. The impacted soils will be underlain by a liner system (high density poly-ethylene (HDPE) and leachate collection and removal system (LCRS)) and over-lain by a synthetic final cover system

comprised of a geomembrane and a three-foot-thick vegetative layer.

Staff Direction:

- Implement the approved Rolling Closure Plan.
- Track NHIS program, filling operations within the lined area, and the construction of all closure construction projects.
- Review monitoring and reporting program and improve as necessary.

Tajiguas Landfill

Tajiguas Landfill is operated by the County of Santa Barbara Resource Recovery & Waste Management Division and serves all of southern Santa Barbara County. The landfill was sited in 1967 and is located west of the City of Santa Barbara in a 450-acre coastal canyon watershed along the Gaviota Coast. The 78-acre landfill is mostly unlined however; it does include a small lined area contiguous with unlined waste areas. Through the years, various concerned and involved local citizens and citizen groups have kept environmental issues at Tajiguas at the top of staff priorities.

Revised waste discharge requirements (WDRs) were issued for the Tajiguas landfill on March 27, 2003 (Order No. R3-2003-0011). The revised WDRs allow an approximate 66-acre expansion consisting of a new 40-acre horizontal composite lined landfill and a 26-acre, 120-foot thick vertical expansion over existing waste. Based on present projections, the existing landfill and proposed expansion are anticipated to reach capacity in 2022. The WDR revision also updated the existing monitoring and reporting program.

Site groundwater has been monitored continuously since 1988. Historically, VOCs have been detected in several down gradient wells. Leachate was suspected of being the source of VOC detections. Groundwater impacts are measured through both on- and off-site wells at this landfill. Corrective action control measures include: Gas extraction, groundwater interceptor trench, leachate collection and extraction from unlined area, up-canyon groundwater extraction, and leachate collection (over lined area).

In response to Corrective Action, the total VOC concentrations and the number of detected compounds have declined. Recent data from down gradient wells indicate total VOC concentrations

have declined to levels ranging between ND to below maximum contaminant levels. Groundwater impacts beyond the down gradient landfill boundary (landfill toe) have not been detected.

As required by the revised WDRs, the County installed six additional groundwater-monitoring points (installed, developed, and fully operational) by May 15, 2004. The objective of these monitoring points is to monitor groundwater conditions and confirm groundwater gradients in the vicinity of the landfill toe. During the December 5, 2003 Regional Board meeting, the County agreed to monitor all of the new monitoring points as soon as practicable after they were constructed. As agreed, the analytical and water level results were made available to Regional Board staff as soon as they became available (early June 2004). The monitoring results (water level and analytical data), were then summarized and submitted along with the July 31, 2004 Semiannual Monitoring Report. According to the semiannual report, the water elevation data confirmed these wells effectively groundwater gradients west, south and east of the Landfill Groundwater Leachate Collection Trench (GLCRS) at the toe of the Landfill. Groundwater gradients have been confirmed to flow directly towards the Leachate Collection Trench and no VOCs were detected in any of the samples from the new wells. Staff will continue to monitor water quality data from these monitoring points and will inform the Regional Board if there are any significant changes.

Recent Milestones:

- Approval by the Regional Board and Integrated Waste Management Board to construct a 40-acre horizontal composite lined expansion area.
- Increased storage capacity for the groundwater interceptor trench system allowing for improved wet-weather operation of the system.
- Investigation of leachate levels in the waste mass. This investigation will help determine whether existing landfill dewatering efforts are effective and if alternative/additional dewatering is necessary.
- Completion of DNA bacteria study of nearby surface waters. This study confirmed the primary source of bacteria to nearby surface waters is avian, not the Landfill.

- Installation and monitoring of all required monitoring points for the unlined landfill area.
- Complete re-design and improved operational procedures of the site's various water and leachate control systems.

Staff Direction:

- Review design reports concerning final closure of unlined areas and the composite lined expansion area, as the reports are generated.
- Review monitoring and reporting program and improve as necessary.

Vandenberg Air Force Base Landfill

Vandenberg Air Force Base Landfill is operated by the United States Air Force exclusively for the Air Force. The Landfill site originally served as an Army tank and artillery training area for the U.S. Army's Camp Cook and was operated by the U.S. Army from 1941 to 1958. The Air Force acquired Camp Cook in 1957, established Vandenberg AFB and assumed the operation of the Landfill in 1958. The Regional Board has regulated the Landfill since April 14, 1978. The Landfill is not open to the public and receives non-hazardous solid waste from Vandenberg AFB, the U.S. Penitentiary, and the Lompoc Correctional Facility only. This 172acre canyon site is located on the north side of the Santa Ynez River valley. The site has a 46-acre unlined waste footprint (Subtitle D Footprint) and an estimated 78 years of remaining capacity in its current configuration.

Regional Board staff is in the process of revising and intends to submit the Vandenberg WDRs for adoption at the December 3, 2004 Regional Board meeting. The revised WDRs will address six recently identified locations where buried refuse exists within the permitted landfill property, but outside of the Subtitle D Footprint. These unlined refuse cells became inactive/abandoned prior to the promulgation of Title 27 requirements (November 27, 1984) and encompass an aggregate area of approximately 10-acres. The Discharger has agreed to provide the cells with an Executive Officer-approved final cover system and has already provided an acceptable closure plan and implementation schedule.

Historically, groundwater impacts are measured on-site at this landfill. Volatile organic compounds (VOC) have been detected in several upgradient monitoring well locations, since 1984.

Detected concentrations range from trace to above the constituent's established maximum contaminant levels (MCLs). However, since the impacted wells are located at up gradient landfill locations and were specifically installed to monitor groundwater entering the landfill from up gradient locations, the source of the VOC impacts is suspected to be Installation Restoration Program (IRP) Site 3, located northwest of the landfill, on Burton Mesa. no evidence of groundwater contamination from the landfill has been detected in detection monitoring wells at the landfill toe south of the slurry wall. Presently, there is no evidence to indicate that contaminated groundwater is leaving the landfill via unmonitored flow paths.

During certain times of the year (recharge events), alluvial groundwater may rise to a level that contacts buried waste in portions of the active disposal area. Thus, the landfill does not meet the five-foot separation requirement, pursuant to CCR Title 27, Section 20080(c) at all times. To achieve compliance with the five-foot separation requirement, the Discharger is implementing leachate controls to dewater the saturated alluvium and lower the groundwater level far below buried waste levels. Ongoing implementation of appropriate leachate controls (groundwater/leachate extraction at the landfill toe and surface water diversion projects) is expected to effectively control groundwater and migration pathways, and ensure the five-foot separation requirement is maintained at all times.

As part of its dewatering efforts, in 2003, the Air Force consultant completed a major source control project that is designed to intercept and divert 46.7 percent of the current watershed area runoff from approximately 175 acres to the north, east, and west of the landfill, and redirect the discharge around the landfill. Pending approval and availability of funds, the Air Force plans to evaluate the feasibility of diverting all remaining surface water run-on by 2005.

Corrective Action Measures:

The Air Force has installed a groundwater interceptor trench and cutoff wall and continues to extract leachate, and control/divert surface water run-off and run-on away from landfill areas. These leachate control measures have helped to ensure groundwater level remains far below the buried waste levels. The Air Force is continually

evaluating and optimizing environmental control systems and engineered alternatives.

Recent Milestones:

- Discontinued off-site spray field application of trench water.
- Improved surface water run on/off controls.
- Improved erosion controls.
- Identification of buried waste cells.

Staff Direction:

- Issue a revised permit by December 2004.
- Review and approve final cover construction plans for the six recently identified unlined landfill cells.
- Review monitoring and reporting program and improve as necessary.

City of Lompoc Landfill

City of Lompoc Landfill is operated by the City for the exclusive use of the City. The 115-acre facility was sited in 1961 and is located in a canyon site on the south side of the Santa Ynez River valley, west of Lompoc. Waste filling occurs over a 40-acre unlined area. The Lompoc landfill has the most remaining space (8 million cubic yards) of any site in Santa Barbara County and an estimated 45 years of remaining capacity.

WDRs were reissued for the Lompoc Landfill permit on March 27, 2003 (Order No. R3-2003-0014). This is one of two active sites in the County, and one of the few in the Region, with no off-site groundwater impacts detected. Impacts to groundwater within the site boundary have been measured. A landfill gas collection system, installed in 1986, was removed in 1992 due to the low volume of methane gas being produced. Currently, the Landfill has no control measures in place.

Staff Direction:

Review monitoring and reporting program and improve as necessary.

Foxen Canyon Road Landfill

The Foxen Canyon Road Landfill is operated by the County of Santa Barbara Resource Recovery & Waste Management Division and serves northern Santa Barbara County. The 35-acre facility was sited in 1970 and is located north of Los Olivos on Foxen Canyon Road. The Foxen Canyon site has limited remaining capacity (75,000 cubic yards). As of July 2004, the County ceased all MSW

disposal operations and began using the site as a transfer station only. Final closure is pending a decision by the County of Santa Barbara Board of Supervisors to consolidate waste that may be excavated from a proposed "clean closure" project at the Santa Ynez Airport Landfill. As soon as a decision concerning the clean closure project is made, the County will proceed with its plans for permanent final closure of the Foxen Canyon Landfill. In the interim, the County has been working closely with Regional Board staff to develop a final cover system design for the Landfill.

Historically, groundwater impacts at this site have been at low to non-detect levels. However, the Foxen Canyon Landfill has an integrated gas collection and removal system, which has effectively reduced landfill gas migration to underlying groundwater, resulting in a significant decline in detected pollutants. The most recent groundwater monitoring report indicates no detections of VOCs in groundwater samples.

Staff Direction:

- Work with the County to expedite final closure.
- Oversee all refuse consolidation activities.
- Oversee all final landfill closure construction activities.
- Review Final Closure Plan and Final Cover Design Report.
- Schedule the review and issuance of final closure WDRs.
- Review monitoring and reporting program and improve as necessary.

Former Casmalia Hazardous Waste Facility

The 252-acre Casmalia facility will be discussed in detail in the Staff Report accompanying the proposed NPDES permit re-issuance for the site, which is currently scheduled for review as part of the December 2004 agenda. For this reason, discussion of the site is not included here.

New Cuvama Landfill

The New Cuyama Landfill is the only individually permitted (Order No. 97-018) closed site in Santa Barbara County. The County of Santa Barbara Resource Recovery & Waste Management Division is responsible for the landfill. The 7.3-acre facility is located in the eastern foothills of the

Sierra Madre Mountains, approximately seven miles west of New Cuyama and the Cuyama River.

The Cuyama site was closed in 1995. In 1998 the County re-opened the landfill and incorporated waste from the "clean-closure" project at the nearby Ventucopa Landfill. The Ventucopa site was adjacent to the Cuyama River and considered unstable in regards to cover protection and surface water inflow. Following the project the New Cuyama site was permanently closed.

Historically, groundwater impacts have been measured in on-site wells.

Ballard Canyon Landfill

The landfill is located east of the city of Buellton, and northwest of the city of Solvang in central Santa Barbara County. Access to the landfill is by proceeding east on Ballard Canyon Road from its intersection with State Highway 246 near the town of Buellton. The landfill is located on two separate parcels at 940 and 942 Ballard Canyon Road.

Ballard Canyon Landfill was operated on leased property by Santa Barbara County between 1949 and 1969. The landfill occupies an area of approximately eight acres on the two parcels. The two parcels have a combined area of 18.79 acres, and an estimated in-place volume of 254,000 cubic yards of material.

Subsequent to operation, homes were built adjacent to the landfill site. In recent years, impact to local private supply wells and litigation issues has focused Regional Board staff attention on this site.

The County has effectively implemented a required long-term cleanup plan at the landfill, in accordance with Cleanup or Abatement Order No. 99-12. The cleanup plan included the implementation of extensive site assessment activities, the construction of a landfill final cover system, and the installation and operation of a gas extraction system. To help expedite groundwater cleanup, the County voluntarily installed a groundwater extraction, treatment, and re-injection System.

Project Milestones:

• Successful completion of all required site assessment activities including ground

penetrating radar and trenching activities, health risk assessment and multiple gas surveys, installation of several groundwater and gas monitoring points, and waste consolidation activities.

- Litigation and settlement with several adjacent landowners.
- Formation of a Mutual Water Company to provide long-term replacement water for all affected adjacent landowners.
- Construction of a final cover system, and installation of a gas collection system and a groundwater treatment and re-injection system.
- Deed Recording of the Landfill property.

Staff Direction:

- Continue working with County to ensure successful operation of the gas and groundwater systems.
- Address all public concerns pertaining to water quality.
- Rescind existing Cleanup Order.
- Review monitoring and reporting program and improve as necessary.

Santa Ynez Airport Landfill

The Santa Ynez Airport Landfill (landfill) was operated by Santa Barbara County as a municipal solid waste landfill and accepted waste material generated in the Santa Ynez Valley during an approximately 11-month period, between 1969 and 1970. Land disposal operations at the landfill began upon closure of the Ballard Canyon Landfill and ceased when land disposal operations were shifted to the Foxen Canyon Landfill. Thus, it can be reasonably assumed that these three landfill sites accepted similar waste material (i.e., municipal solid waste). The landfill became inactive prior to the promulgation of the Title 27 landfill regulations and has never been issued individual WDRs by the Regional Board.

The landfill is located approximately one mile southeast of the community of Santa Ynez in an undeveloped, open space setting approximately 500 feet south of State Highway 246, on land leased and operated by the Santa Ynez Airport Authority. The landfill site is comprised of three separate waste filled trenches, occupies a total area of approximately 1.6 acres, and is estimated to contain up to 55,000 cubic yards of waste material. Considering its relatively small size, staff believes

that "clean-closure" can be accomplished within a relatively short time, causing minimal disturbance to the surrounding community.

The principal aquifer beneath the site is unconfined. Groundwater has been measured between 52 and 79 feet below ground surface in monitoring wells around the landfill. Monitoring of groundwater elevations in site wells indicates a relatively consistent flow direction to the north to northwest.

Groundwater Monitoring, Degradation and Remediation:

Groundwater-monitoring requirements were established through the issuance of a Monitoring and Reporting Program (MRP) in April 2003. The present water quality monitoring system consists of eight groundwater-monitoring wells, which are sampled on a semi-annual basis.

Historically, groundwater impacts are measured off-site at this landfill. VOCs have been detected in down-gradient and side-gradient monitoring wells. Down-gradient impacts were first identified in 1998, when groundwater monitoring was first implemented. Concentrations of VOCs detected range from trace to above the constituents' established maximum contaminant levels (MCLs). existing groundwater plume extends approximately 500 feet beyond the northern-most boundary of the waste trenches. There are no known water supply or irrigation wells directly down gradient from the landfill. groundwater pollution is attributed to landfill gas migration and/or the infiltration of leachate to underlying groundwater.

Corrective Measures:

The County is in the process of evaluating the feasibility of "clean-closing" the Santa Ynez Airport Landfill. The County proposes to remove all of the existing waste material from the landfill trenches, consolidating the excavated waste at the Foxen Canyon Landfill, and equipping the Foxen Canyon Landfill with a final cover system. At this time, the County estimates the earliest date project implementation could occur is approximately mid-2006. In compliance with the California Environmental Quality Act (CEQA), the County prepared and finalized a Negative Declaration addressing the proposed clean closure project. Approval consideration of the proposed Negative Declaration document by the County Board of

Supervisors was scheduled during a September 21, 2004 meeting. However, prior to the scheduled Supervisor's meeting, the County decided to postpone the negative declaration and prepare a full Environmental Impact Report (EIR). By the time of this Regional Board meeting, a notice of preparation (NOP) should have been prepared and sent out for public comment.

If and when the County Board of Supervisors approves the clean closure option, the County must rely on a grant from the Federal Aviation Administration (FAA) to proceed with the estimated 2.5 million dollar clean closure project. The County anticipates most of the clean closure costs would be offset by the FAA grant, resulting in minimal expenses to the County.

If, however, the FAA grant cannot be secured, the County would have to pursue other alternatives (e.g., in-place final closure and groundwater remediation). Although the in-place closure alternative would result in a much lower initial capital expense, the County would likely be responsible for the final cover system construction costs and other long-term expenses including, a gas collection system, groundwater remediation system, long-term monitoring, analysis and staff resources, and long-term maintenance. These expenses would be required for as long as the landfill poses a significant threat to water quality.

The County estimates the long-term savings and environmental benefits associated with the clean closure option far outweigh the high initial capital expenses.

The Regional Board staff's primary goal at this site is to stop or minimize (to the extent feasible) impacts to underlying groundwater. Regional Board staff supports either closure alternative (in-place final closure and clean closure), from a water quality perspective, the clean closure option appears to be the best alternative for water quality protection. Implementation of the clean closure alternative would result in complete removal of all existing waste (source removal), resulting in elimination of landfill gas and leachate sources, and no further contribution pollutants of to underlying groundwater. This project would also result in expedited final closure of the Foxen Canyon

Landfill, providing an overall benefit for water quality and the environment at both locations.

Further, considering the site-specific conditions at both landfill sites, the Foxen Canyon Landfill provides a superior landfill setting. Historically, groundwater impacts at the Foxen Canyon Landfill have been low to non-detect and the depth to groundwater beneath the site is at least one hundred feet deeper than at the Santa Ynez Airport Landfill site. While the in-place closure option would also be acceptable, the "clean-closure" alternative is clearly superior for water quality protection.

Staff Direction:

- Regardless of which corrective measure is selected, staff will continue work closely with the County to evaluate and implement an appropriate groundwater remedial alternative (as necessary) to address remnant groundwater pollutants.
- Staff will work with the County and LEA to ensure to all corrective measures are implemented in accordance with applicable regulations and are protective of water quality and the environment.

Other Inactive Sites and Dumps

The Santa Maria Airport, Carpinteria Burn Dump, Lompoc Burn Dump, and Elings Park (formerly Las Positas Park) Landfill all have some level of ongoing investigation. Vandenberg Air Force Base and the Lompoc Federal Prison (a former Army base) have a number of old landfill sites that are being investigated under the Region's Department of Defense Program. The remaining closed, inactive or abandoned landfill sites including, Santa Barbara City Dump and Cathedral Oaks Dump, have had some level of review by Regional Board Staff and/or the Local Enforcement Agent.

SUMMARY:

Regional Board Land Disposal Unit staff will continue water quality protection efforts at all existing landfill sites in Santa Barbara County and throughout the Region.

ATTACHMENT:

1. Location Map

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