CALIFORNIA COASTAL COMMISSION
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

Th13a

Filed:	9/16/2011
49th Day:	11/4/2011
180th Day:	3/14/2012
Staff:	Charles Posner - LB
Staff Report:	2/23/2012
Hearing Date:	March 8, 2012
Commission Action:	

STAFF REPORT: MATERIAL AMENDMENT

APPLICATION NUMBER: A-5-LOB-10-015-A1

APPLICANT: Loynes, LLC **AGENT:** Schmitz & Associates, Inc.

PROJECT LOCATION: 6400 E. Loynes Drive (SEADIP Subarea 23), City of Long Beach.

DESCRIPTION OF PROJECT ORIGINALLY APPROVED ON NOVEMBER 19, 2010:

Import of 1,000 cubic yards of soil to re-establish and maintain cap over an existing landfill on a vacant 9.38-acre site (in response to Coastal Commission Emergency Permit 5-09-068-G). Special Condition One of the permit requires the applicant to construct an impermeable cap on the dump to prevent water from infiltrating the landfill and to re-create the site's pre-disturbance topography and seasonal pools that existed on the site prior to grading. The disturbed area shall be re-vegetated with Southern California native plants appropriate to the site's hydrology and historical ecology (alkali meadows and transitional grassland/coastal scrub).

DESCRIPTION OF PERMIT AMENDMENT REQUEST:

A revised site restoration and re-vegetation plan required by Special Condition One of the underlying permit. The revised plan does not include a new dump cap or seasonal pools.

SUMMARY OF STAFF RECOMMENDATION

On November 19, 2010, the Commission approved Coastal Development Permit A-5-LOB-10-015 with conditions that require the applicant to re-create the site's pre-disturbance topography and to create seasonal pools that allegedly had existed on the site prior to the unpermitted grading that occurred in March 2009. To prevent water from infiltrating the abandoned landfill that exists beneath the site, a new engineered impermeable dump cap is required to be constructed over the abandoned landfill. [Note: The Commission modified Special Condition One at the November 2010 hearing, changing staff's habitat restoration recommendation to one that required the applicant to install the impermeable dump cap and to contour the site to encourage the restoration of seasonal pools in certain portions of the disturbed site. This change to Special Condition One required the Commission to adopt revised findings. The Commission approved the revised findings on May 12, 2011.]

The applicant has requested this permit amendment to delete the requirement for the installation of an impermeable cap over the dump as part of the re-vegetation plan because the installation of such a cap would cause lateral gas migration and necessitate the construction of methane gas collection system with extensive re-grading of the property and the installation of numerous gas extraction wells, pipelines and a gas-burning plant (Exhibit #6). Therefore, the underlying permit must be amended to either: a) revise the re-vegetation plan to reflect the

deletion of the impermeable dump cap and pools, or b) revise the project to include the construction of the methane gas collection system that would be required by the California Regional Water Quality Control Board and County if an impermeable cap is constructed over the abandoned landfill.

Staff is recommending that the Commission **APPROVE** the permit amendment request for a revised re-vegetation plan with the deletion of the impermeable dump cap and seasonal pools because it is the alternative with the least significant adverse effects on the environment. Approval of the permit amendment with conditions will require the applicant to re-vegetate the disturbed area on the landfill with Southern California native plants appropriate to the site's condition as an abandoned landfill. The previously imposed provisions for monitoring and future maintenance of the site are unchanged by the amendment. **See Page Three for the motion to adopt the staff recommendation.**

SUBSTANTIVE FILE DOCUMENTS:

1. City of Long Beach Local Coastal Program (LCP), 7/22/1980.
2. California Integrated Waste Management Board, Inspection Report, File No. 19-AK-5003, 3/26/2009.
3. California Integrated Waste Management Board, Inspection Reports dated: 7/23/2010, 4/6/2010, 1/5/2010, 10/21/2009, 10/7/2009, 7/21/2009, 5/1/2009, 4/29/2009, 4/15/2009, 3/26/2009, 1/6/2009 & 10/9/2008.
4. South Coast Air Quality Management District, Notice to Comply No. D-18289, 4/3/2009.
5. Coastal Commission Emergency Permit 5-09-068-G, 4/7/2009 (Exhibit #3).
6. Biological Resources Evaluation and Jurisdictional Waters Delineation for APN 7237017006, by Ty M. Garrison, SWCA Environmental Consultants, 5/28/2009.
7. Peer Review of the Biological Resources Evaluation and Jurisdictional Waters Delineation for APN 7237017006, by PCR Services Corporation (PCR), 9/9/2009.
8. Comments on Illegal Development and Retroactive Permit to Remediate at 6400 Loynes Drive, Long Beach, by Travis Longcore, Ph.D. and Catherine Rich, J.D., M.A., Land Protection Partners, 10/8/2009 (Exhibit #12).
9. City of Long Beach Local Coastal Development Permit No. 0904-15, 12/3/2009.
10. Coastal Commission Substantial Issue Staff Report (Appeal A-5-LOB-10-015), 2/24/2010.
11. Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., September 2010.
12. Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., Revised September 2011 (Exhibit #8).
13. Biological Review for Coastal Development Permit Appeal A-5-LOB-10-015 – 6400 E. Loynes Drive, Long Beach, by LSA Associates, Inc., 11/15/2010.
14. Supplement to Biological Review for Coastal Development Permit Appeal A-5-LOB-10-015 – 6400 E. Loynes Drive, Long Beach, by LSA Associates, Inc., 11/16/2010.
15. Memo to Coastal Commission regarding Hitchcock Property, 6400 Loynes Drive, Long Beach, by Travis Longcore, Ph.D., Land Protection Partners, 11/17/2010 (Exhibit #14).
16. Delineation of Wetlands and Waters subject to Corps of Engineers Jurisdiction Under Section 404 of the Clean water Act and/or Section 10 of the Rivers and Harbors Act, Bixby Ranch, Los Cerritos Wetlands, Long Beach, California, by LSA Associates, Inc., 1/17/1997.
17. Biological Setting of the Bixby Ranch Company Oil Field Property in the Los Cerritos Wetland, Long Beach, California, by LSA Associates, Inc., Revised 7/8/1998.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution to **APPROVE** the permit amendment request with special conditions:

MOTION: *"I move that the Commission approve with special conditions the proposed amendment to Coastal Development Permit A-5-LOB-10-015 per the staff recommendation."*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

I. Resolution to Approve a Permit Amendment

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended, will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

II. Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions of Permit A-5-LOB-10-015 as Amended

Staff Note: The Special Conditions below are the conditions of the underlying permit as modified and approved by the Commission on November 19, 2010, and adopted in revised findings by the Commission on May 12, 2011. The changes recommended by staff pursuant to this permit amendment are identified by strike-out for ~~deleted words~~ and **bold underlined text** for added text.

1. Site Restoration, Re-vegetation and Monitoring Plan

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and written approval of the Executive Director, a revised re-vegetation and monitoring plan for the portions of the project site that were disturbed by prior grading on March 19 and 20, 2009 (as shown on Exhibit #4 of the Staff Report dated November 3, 2010 **and Exhibit #3 of the Staff Report dated February 23, 2012**), and including the area covered with the fill imported pursuant to Emergency Permit 5-09-068-G. The revised re-vegetation and monitoring plan shall be prepared by a qualified Resource Specialist in consultation with the California Department of Fish and Game, the County of Los Angeles Department of Public Health (Environmental Health Solid Waste Management Program), and the South Coast Air Quality Management District (AQMD).

The revised re-vegetation and monitoring plan shall include all of the provisions contained in the plan entitled, Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., September **2011** ~~2010~~ and shall also include the following provisions:

A. Native Plant List. All plants shall be Southern California native plants appropriate to the site's hydrology and historical ecology (~~alkali meadows and~~ transitional grassland/coastal scrub ~~– salt marsh to uplands~~). Appropriate native plants include, but are not limited to: **coastal sage bush, buckwheat, coast goldenbush, shining pepper grass, salt grass, bunch grass and annuals (e.g., lupine and yellowray goldfields).** ~~*Sesuvium verrucosum, Isocoma menziesii* ssp. *Vernonioides, Lasthenia glabrata* ssp. *Coulteri, Ambrosia acanthicarpa, Centromadia parryi* ssp. *Australis, Heliotropium Curassavicum, Lepidium nitidum, Suaeda taxifolia, Cressa truxillensis. Croton californicus, Frankenia salina, Malvella leprosa, and Distichlis spicata [Longcore LPP Memo, Table 1, 17 November 2010].~~ All seeds and cuttings employed shall be from local sources in the Los Angeles and Orange County coastal areas. Prior to the first planting cycle, the permittee shall provide the Executive Director with the quantities and sources of all plants to be used in the project.

B. Native Plant Coverage. The re-vegetation plan shall indicate the location, number and distribution of native plants to be installed. At the end of five years, a minimum of eighty percent (80%) of the disturbed area shall be covered with native plants. No more than five percent (5%) of the disturbed area shall be covered with non-native plants at any time.

C. ~~Dump Cap/Topography/~~Additional Fill. ~~An impermeable cap, sufficient to re-create seasonal pools, shall be provided (with additional soil and/or a liner) on the dump. The impermeable dump cap shall be designed in compliance with the specifications and requirements of the California Integrated Waste Management~~

~~Board, the Los Angeles Department of Public Health (Environmental Health Solid Waste Management Program), the Regional Water Quality Control Board (Los Angeles RWQCB), and the South Coast Air Quality Management District (AQMD). The topography of the site shall be restored to its pre-disturbance conditions with depressions between bumps for seasonal pools. Creation of the seasonal pools and installation of the plants shall not adversely affect the impermeable dump cap or result in the exposure of trash or other materials from the underlying landfill.~~ Additional soil shall be imported to create a minimum six-inch thick layer of soil for the new plants. **Installation of the plants shall not result in the exposure of trash or other materials from the underlying landfill.**

D. The storage or stockpiling of soil, silt, and other organic or earthen materials shall not occur where such materials could pass into coastal waters.

E. Timing of Re-vegetation. Re-vegetation shall commence as soon as possible following removal of non-native plants and preparation of the soil. Installation of the native plants shall commence at the project site no later than ninety (90) days from the date of Commission approval of **Permit Amendment A-5-LOB-10-015-A1** ~~this permit~~, or within such additional time as the Executive Director may grant for good cause. The initial planting shall be completed no later than six weeks from the commencement of planting, in compliance with the re-vegetation and monitoring plan approved by the Executive Director.

F. Removal of Non-native Plants. Prior to the installation of the native plants, the non-native weeds and grasses shall be removed from the area to be re-vegetated. Areas where Southern Tarplant exists shall not be disturbed. Prior to the removal of non-native vegetation, a qualified Resource Specialist shall survey the project site and identify with flags all areas of existing native vegetation**, including Southern Tarplant**. The permittee shall ensure that the areas of existing native vegetation are protected from disturbance during the implementation of the approved project.

G. No grading or scraping is permitted. No heavy machinery may be used. Smaller mechanized vehicles (e.g. Bobcats) may be used to transport heavy loads between paved roads and work areas. No dead plants shall be left on site and no persistent chemicals shall be employed.

H. No bird nests shall be disturbed at any time. Removal of non-native weeds, grasses and trees shall be done in compliance with the requirements of Special Condition Two of this permit.

I. Irrigation. A temporary irrigation system may be installed in order to provide enough water to keep the native plants healthy. No runoff shall leave the project site. The irrigation system shall be removed from the project site at the completion of the required monitoring and/or certification by the applicant's Resource Specialist that the required re-vegetation plan has become successful.

J. Invasive Plants. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic Pest Plant Council, or as may be identified from time to time by the State of California shall be employed on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property.

K. Erosion Control. Prior to removing the non-native plants and preparation of the soil, the permittee shall employ Best Management Practices (BMPs) to ensure that erosion does not occur.

L. Maintenance. Native vegetation shall be maintained in good growing condition throughout the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the re-vegetation plan.

M. Disposal of Plant Matter. All cut plant material shall be disposed of at an appropriate off-site location within ten days of cutting. A separate coastal development permit will be required prior to the placement of any cut plant material in the coastal zone unless the Executive Director determines that no permit is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

N. Monitoring. The permittee shall provide the funding necessary to compensate a third party monitor (approved by the Executive Director) for the completion of the monitoring reports required by this condition. For at least five years following the initial planting, the permittee shall actively monitor the site, remove non-native plants and replant vegetation that has failed. The third party monitor approved by the Executive Director shall monitor and inspect the site no less than once each thirty days during the first year that follows the initial planting. Thereafter, the third party monitor shall monitor the site at least once every ninety days. Each year, for a minimum of five years from the date of permit issuance, the third party monitor shall submit, for the review and approval of the Executive Director, an annual re-vegetation monitoring report prepared by a qualified Resource Specialist which certifies the re-vegetation is in conformance with the approved re-vegetation plan. The annual monitoring report shall include photographic documentation of plant species and plant coverage. At the end of five years, a minimum of eighty percent (80%) of the disturbed area shall be covered with native plants. No more than five percent (5%) of the disturbed area shall be covered with non-native plants at any time. If the annual re-vegetation monitoring report indicates the re-vegetation is not in conformance with or has failed to meet the performance standards specified in the re-vegetation plan approved pursuant to this permit, the permittee shall submit a revised or supplemental re-vegetation plan for the review and approval of the Executive Director. The revised re-vegetation plan must be prepared by a qualified Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. The permittee shall implement the supplemental re-vegetation plan approved by the Executive Director and/or seek an amendment to this permit if required by the Executive Director.

O. Review and Approval by Landfill Regulators. Prior to any re-vegetation or disturbance of the site, the permittee shall file an 1150.1 (Excavation of Landfill Plan) with the South Coast Air Quality Management District. ~~The final plan for the impermeable dump cap shall be reviewed and approved by the County of Los Angeles Department of Public Health (Environmental Health Solid Waste Management Program) and the California Integrated Waste Management Board.~~

The permittee shall implement the re-vegetation plan in accordance with the final plans approved by the Executive Director. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

2. Ongoing Maintenance: Weed Abatement and Tree Trimming

Coastal Development Permit A-5-LOB-10-015 approves weed abatement, tree trimming, non-native tree removal, and ongoing maintenance of the property (6400 E. Loynes Drive) consistent with the terms of this permit. This permit does not authorize the construction of any trails or roads, or the erection of any fence, gate or wall. All weed abatement, tree trimming, ongoing maintenance, and all work carried out pursuant to any City or County issued abatement order, shall comply with the terms of this permit in order to ensure the protection of wildlife habitat and the long-term protection of breeding, roosting, and nesting habitat of state and federally listed bird species, California bird species of special concern, and bird species that play an especially valuable role in the ecosystem.

No bird nests shall be disturbed. Prior to tree trimming and weed abatement, a qualified biologist or ornithologist shall survey the project site to detect bird nests and submit a survey report to the permittee and the Executive Director of the Coastal Commission. The survey report shall include identification of all known nests. The permittee shall maintain a file of survey reports that includes a record of nests that is to be used for future vegetation removal decisions.

All weed abatement, tree trimming, non-native tree removal, and ongoing maintenance of open space areas shall be supervised by a qualified biologist or Wetland Ecologist and shall be undertaken in compliance with all applicable codes or regulations of the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the U.S. Migratory Bird Treaty Act, and shall be conducted in conformance with the following terms of this special condition.

A. Tree Trimming and Non-native Tree Removal

1. Unless otherwise specified by the terms of this permit, tree trimming and non-native tree removal shall take place only outside of bird breeding and nesting season, which is January 1 through September 30.

2. The trimming or removal of any tree that has been used for breeding and nesting within the past five years is prohibited, unless the permittee obtains a coastal development permit or emergency permit authorizing such trimming and removal. Prior to tree trimming or removal of any tree, a qualified biologist or ornithologist shall survey the trees to be trimmed or removed to detect nests and submit a survey report to the permittee and the Executive Director of the Coastal Commission. The survey report shall include identification of all trees with nests. The permittee shall maintain a file of survey reports that includes a record of nesting trees to be used for future tree trimming and removal decisions.

3. No bird nests shall be disturbed. Trimming may not proceed if a nest is found and evidence of courtship or nesting behavior is observed at the site. In the event that any birds continue to occupy trees during the non-nesting season, trimming shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 feet of any occupied tree (500 feet for raptors).

4. No California native trees shall be removed. All existing native vegetation shall be protected.

5. Tree trimming and non-native tree removal shall be done using only hand operated equipment only (e.g., machetes, weed whackers and chain saws). No herbicides shall be used.

B. Weed Abatement

1. Unless otherwise specified by the terms of this permit, weed abatement activities shall take place outside of the marsh bird nesting season (February 1 through August 31). Specifically required restoration work approved by the Executive Director is not subject to this limitation.

2. Prior to weed abatement and removal of any plant material, a qualified biologist or ornithologist shall survey the project site to detect nests and submit a survey report to the permittee and the Executive Director of the Coastal Commission. The survey report shall include identification of all known nests. The permittee shall maintain a file of survey reports that includes a record of nests that is to be used for future vegetation removal decisions.

3. No bird nests shall be disturbed. Weed abatement and removal of any plant material may not proceed within 300 feet (500 feet for raptors) of a nest where evidence of courtship or nesting behavior is observed. In the event that any birds continue to occupy nests during the non-nesting season, trimming shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 feet (500 feet for raptors) of any nest.

4. All existing native vegetation shall be protected.

5. Weed abatement and removal of plant materials shall be done using only hand operated equipment only (e.g., machetes, weed whackers and chain saws). No herbicides shall be used unless it is specifically authorized by the Executive Director.

C. Disposal of plant matter. All cut plant materials shall be disposed of at an appropriate off-site location within ten days of cutting. A separate coastal development permit will be required prior to the placement of any cut plant material in the coastal zone unless the Executive Director determines that no permit is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

All weed abatement, tree trimming and non-native tree removal shall be conducted in strict compliance with this policy. Any proposed change or deviation from the approved development as conditioned shall be submitted for review by the Executive Director to determine whether an amendment to this coastal development permit is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

3. Resource Agencies

The permittee shall comply with all requirements, requests and mitigation measures from the California Department of Fish and Game, Regional Water Quality Control Board, U.S. Army Corps of Engineers, ~~and~~ the U.S. Fish and Wildlife Service, **and any other regulatory agency with jurisdiction over the approved development,** with respect to preservation and protection of water quality and marine environment. Any change in the approved project that may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations.

4. Condition Compliance

Within sixty (60) days of Commission action on this coastal development permit **amendment** application, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

5. Timing of Re-vegetation

Implementation of the approved re-vegetation plan required by Special Condition One (i.e., ~~installation of an impermeable dump cap~~, removal of non-native plants, preparation of the soil, and installation of the native plants) shall commence as soon as possible following the issuance of the coastal development permit. Installation of the native plants shall commence at the project site no later than ninety (90) days from the date of Commission approval of **Permit Amendment A-5-LOB-10-015-A1** ~~this permit~~, or within such additional time as the Executive Director may grant for good cause. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

6. Future Development Restriction

This permit is only for the development described in **amended** Coastal Development Permit A-5-LOB-10-015. Except as provided in Public Resources Code section 30610 and applicable regulations, any future development as defined in PRC section 30106, including, but not limited to, a change in the density or intensity of use land, shall require an amendment to Coastal Development Permit A-5-LOB-10-015 from the California Coastal Commission or shall require an additional coastal development permit from the California Coastal Commission or from the applicable certified local government.

IV. Findings and Declarations for the Permit Amendment

The Commission hereby finds and declares:

A. Description of the Permit Amendment

On November 19, 2010, the Commission approved Coastal Development Permit A-5-LOB-10-015 with conditions that require the applicant to re-create the site's pre-disturbance topography and to create seasonal pools that allegedly had existed on the site prior to the unpermitted grading that occurred in March 2009. In order to prevent water from the seasonal pools from infiltrating the abandoned landfill that exists beneath the site, the Commission required a new engineered impermeable dump cap to be constructed over the abandoned landfill. The permit also requires the applicant to remove weeds and re-vegetate the disturbed area with native plants (Exhibit #3).

The applicant is requesting to amend the permit prior to implementing a proposed revised habitat re-vegetation and monitoring plan (Exhibit #8). The applicant is requesting that the Commission delete the requirement (Special Condition 1.C) for the installation of an impermeable cap and seasonal pools over the landfill as part of the required re-vegetation plan. The applicant asserts that the plan for the installation of an impermeable dump cap, which has been developed and submitted for review as required by the underlying permit, would result in significant adverse environmental effects that have not been reviewed or approved by the Commission. In addition, the applicant asserts that the large and visually impactful infrastructure would require regular maintenance that would result in frequent disturbance of the property.

The applicant lists the following reasons to justify the removal of the Commission's requirement to install an impermeable dump cap and seasonal pools:

- The installation of an impermeable dump cap would cause lateral methane gas migration to the perimeter of the dump, closer to the adjacent residences and the Los Cerritos Channel (Exhibit #5).

- The installation of an impermeable dump cap would trigger new rules of the landfill regulating agencies (County of Los Angeles Health Dept. and the California Regional Water Quality Control Board) that would require the applicant to construct an expensive and unsightly methane gas collection system, consisting of approximately twenty gas extraction wells, thousands of feet of above-ground pipelines, and a gas-burning plant (Exhibit #6).

- The installation of an impermeable dump cap and a methane gas collection system would require extensive re-grading and additional disturbance of the property, including the removal of the native vegetation that has re-established on the site (e.g., Southern Tarplant).

- The installation of an impermeable dump cap and a methane gas collection system, because of the noise and the amount of land that would be covered by wells and pipelines, would have a significant adverse effect on the habitat value of the site.

- The installation of an impermeable dump cap and a methane gas collection system would not be conducive to the Commission's intent of establishing vegetation typically associated with vernal pools on the site because the underlying substrate would be completely artificial and lacking the soil structure and hydrology upon which that plant community is dependant (Exhibit #7).

- The maintenance associated with an impermeable dump cap would likely result in the future removal of vegetation from the site and the disturbance of the soils.

Commission water quality staff has confirmed the current status of the landfill and the necessity of a methane gas collection system (in the event that an impermeable dump cap is installed) with the regulating agencies (Pete Oda, Environmental Health Specialist at County of Los Angeles Health Dept., and Wen Yang, Senior Engineering Geologist at the California Regional Water Quality Control Board). Methane gas has been documented emanating from the site (the reason for which the Commission issued Emergency Permit 5-09-068-G on April 7, 2009). Any water that percolates into the landfill can cause an increase in methane gas releases. Therefore, the regulating agencies do not allow any water to pool on the abandoned landfill (unless there is an impermeable barrier that prevents percolation). The abandoned landfill, with its permeable soil cap which lets methane gas escape vertically, is currently in compliance with the rules and standards of the landfill regulating agencies. The installation of an impermeable dump cap would be a "post-closure land use" on the landfill, as indicated in the letter from the Los Angeles County Department of Public Health Solid Waste Program, dated June 17, 2011, which regulates landfills in the County (Exhibit #4). Installation of an impermeable dump cap would also trigger the requirement build a methane gas collection system to comply with Los Angeles Regional Water Quality Control Board requirements, as indicated in its letter to the applicant dated June 28, 2011, to ensure that the methane does not travel laterally into the groundwater and flow into adjacent coastal waters and/or travel into adjacent residential areas which would create a health and safety hazard (Exhibit #5).

The applicant's proposed re-vegetation plan for the site, without an impermeable dump cap and seasonal pools, includes a revised plant list (Exhibit #8, ps. 10-12). In any case, the plant list is required to be all Southern California native plants. A dry land dump cap that remains permeable, however, must be vegetated primarily with low water-use plants such as coastal sage, buckwheat, bunch grass and annuals (e.g., lupine), instead of plant communities that rely on wetter environments with seasonal pools.

B. Project History

The project site is Subarea 23 of SEADIP (Southeast Area Development and Improvement Plan), a specific plan that covers the southeast portion of the City of Long Beach. The vacant 9.38-acre bay-fronting site, situated between Loynes Drive and the north bank of Los Cerritos Channel (Alamitos Bay), is part of an old landfill operation (refuse dump) that filled coastal marshland in the 1940s and '50s (Exhibit #2). The top layer of the landfill was disturbed by unpermitted grading that occurred on March 19 and 20, 2009. That unpermitted grading altered the topography and removed vegetation from most of the site. The area disturbed by the unpermitted grading is shown on Exhibit #3 (Source: Google Earth/USDA, May 25, 2009). Apparently, the grading also exposed part of the old dump.

On April 7, 2009, Commission staff issued an Emergency Permit 5-09-068-G to allow the applicant to take immediate action to mitigate elevated methane levels (up to 7700 ppm) detected at the site by the South Coast Air Quality Management District (Exhibit #3). Although the project site is located within the primary permitting jurisdiction of the City of Long Beach pursuant to its certified LCP, the emergency permit was granted by the Executive Director of the Commission because the certified LCP does not contain any provisions for issuing emergency permits. The emergency work authorized the applicant to:

> Import 1,000 cubic yards of clean fill dirt to create a minimum six-inch thick dirt cap over an area no larger than 50,000 square feet to cover exposed trash in order to prevent methane release, per orders to comply issued by California Integrated Waste Management Board (Inspection Report, File No. 19-AK-5003 dated 3/26/2009) and South Coast Air Quality Management District (Case No. D-18289, 3/26/2009).

Following the issuance of the emergency permit, the applicant constructed a six-inch thick cap over a 50,000 square foot portion of the dump using approximately one thousand cubic yards of imported fill dirt. A condition of Emergency Permit 5-09-068-G required the applicant to apply to the City of Long Beach for the follow-up permit.

On April 28, 2009, the applicant filed an application for a local coastal development permit with the City of Long Beach Department of Development Services. The City's Notice of Public Hearing for Local Coastal Development Permit No. 0904-15 identified the site as being in the appealable area of the coastal zone (the site comprises part of the north bank of Los Cerritos Channel, Alamitos Bay). The local coastal development permit that is the subject of this appeal also serves as the follow-up permit for Coastal Commission Emergency Permit 5-09-068-G.

On October 12, 2009, the City of Long Beach Zoning Administrator held a public hearing and approved Local Coastal Development Permit No. 0904-15 to allow the import of one thousand cubic yards of soil to re-establish and maintain the cap over the existing landfill (in response to Coastal Commission Emergency Permit 5-09-068-G), and to allow weed abatement to comply with a Fire Department order. The decision of the Zoning Administrator was appealed to the City Planning Commission by several persons because the local coastal development permit did not include a condition requiring any restoration or re-vegetation of the project site.

On December 3, 2009, the Planning Commission held a public hearing and approved Local Coastal Development Permit No. 0904-15 with conditions (Exhibit #3). The appeals were denied, but the Planning Commission added Special Condition Ten, which states:

> 10. The applicant shall comply with a remediation plan to be prepared by staff and submitted to the Planning Commission for consideration within 90 days.

The Planning Commission's decision was not appealable to the Long Beach City Council. On January 25, 2010, the Commission's South Coast District office in Long Beach received the first of seven valid appeals of the local coastal development permit. The appeals of the local coastal development permit call for restoration of the graded area of the site.

On March 10, 2010, the Commission determined that a substantial issue exists with respect to the grounds of the appeals because: a) the certified LCP designates the site for restoration as a brackish pond, b) the certified LCP requires that open space and natural habitat areas be

preserved and that the waters of Alamitos Bay be protected from runoff, and c) the absence of a detailed and enforceable habitat protection and restoration plan could adversely affect wildlife, wetlands, and the quality of adjacent tidal waters. A remediation plan prepared by City staff was never submitted to the Planning Commission (or Coastal Commission) for consideration.

On September 22, 2010, the applicant submitted a proposed re-vegetation and monitoring plan for the site entitled Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., September 2010.

On November 19, 2010, after a public hearing, the Commission approved with conditions Coastal Development Permit Application A-5-LOB-10-015. Special Condition One requires the applicant to submit a revised re-vegetation and monitoring plan that would result in the re-creation of site's pre-disturbance topography and seasonal pools that allegedly existed on the site prior to grading. The permit also requires the applicant to construct an impermeable cap on the dump (to prevent water from infiltrating the abandoned landfill) and to re-vegetate the disturbed area with Southern California native plants appropriate to the site's hydrology and historical ecology. On May 12, 2011, the Commission adopted the revised findings in support of the Commission's November 19, 2010 approval with conditions of Permit A-5-LOB-10-015.

On September 16, 2011, the applicant submitted Permit Amendment Request A-5-LOB-10-015-A1 and a proposed revised re-vegetation and monitoring plan for the site entitled Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., September 2011 (Exhibit #8). The applicant requests the removal of the requirement to construct seasonal pools and an impermeable cap on the dump.

C. Local Coastal Program

This coastal development permit, which is proposed to be amended, came to the Commission as an appeal. A de novo public hearing on the merits of an application uses the certified LCP as the standard of review. In addition, for projects located between the first public road and the sea, as in this case, findings must be made that an approved application is consistent with the public access and recreation policies of the Coastal Act.

The proposed project is located within the City of Long Beach. The City of Long Beach Local Coastal Program was certified by the Commission on July 22, 1980. On March 10, 2010, the Commission determined that the appeals raised a substantial issue regarding consistency of the development with the City of Long Beach certified LCP. The Commission approved the underlying de novo permit (A-5-LOB-10-015) on November 19, 2010.

Land Use Designation

The certified LCP designates the project site (Subarea 23) as a site for a brackish pond in the future. The site does not currently contain a brackish pond or any standing water. The certified City of Long Beach LCP designates the bay-fronting site as a restoration site; specifically as the site for a future 8.3-acre brackish pond. The project site falls within Subarea 23 of SEADIP (PD-1 - Southeast Area Development and Improvement Plan), a specific plan that covers the southeast portion of the City of Long Beach. The standards for SEADIP Subarea 23 (a component of the certified LCP) are set forth as follows:

SEADIP Subarea 23

a. The two wetland concepts generally outlined shall include a 8.3 acre brackish pond on Area 23 provided that the Executive Director of the California Coastal Commission determines (i) in addition to the setback for buffer, the elevation and setbacks between development and wetland edge shall be sufficient to ensure stability during liquefaction events caused by the maximum credible earthquake; (ii) that the location and operation of the proposed wetland are acceptable to the Regional Water Quality Control Board, the State Department of Health and to the Local Mosquito Abatement District.
b. If approval from these agencies results in reductions to the net size of the proposed wetland, restoration at this site shall only occur if the remaining area is sufficient to create a wetland at least the same size as the existing brackish pond at the Marketplace.

The LCP policy for SEADIP Subarea 23 refers to the brackish pond at the Marketplace because the restoration of SEADIP Subarea 23 is linked to the development plan for SEADIP Subarea 25. The brackish pond at the Marketplace is in SEADIP Subarea 25, which is an uncertified portion of the Los Cerritos Wetlands area located south of Second Street. An uncertified section of SEADIP called for filling the pond at the Marketplace (and other wetlands) and the construction of a business park in SEADIP Subarea 25. SEADIP Subarea 23 is identified as the site for mitigating the filling of the pond and wetlands in SEADIP Subarea 25.

There has been no recent development in Subarea 25, and the pond in that subarea has not been filled. Any proposal to place fill in SEADIP Subarea 25 of the wetlands would require a coastal development permit from the Commission and would raise issues of consistency with Section 30233 of the Coastal Act.

The certified LCP sets forth the following general provisions that relate to open space areas like the project site.

LCP Open Space Policies

The certified LCP requires that open space and natural habitat areas shall be preserved and that the waters of Alamitos Bay be protected from polluted runoff. The following goals and policies, contained in the Open Space Element of the City's General Plan, are equally weighted policies of the Land Use Plan (LUP) portion of the City's certified LCP:

1. Goals: Open Space - Preservation of Natural Resources

b. To preserve and enhance the open space opportunities offered by the inland waterways of the city through improved access and beautification.
g. To preserve areas which serve as natural habitats for fish and wildlife species and which can be used for ecologic, scientific, and educational purposes.
h. To locate, define, and protect other beneficial natural habitats in and about the city.

5. Goals: Open Space – Shaping Urban Development

a. To maintain and enhance existing and potential open space areas which are important as links, nodes, and edges, or provide relief from urban built-form.

8. Policies: Open Space Node – Alamitos Bay & Recreation Park

Conserve and enhance Alamitos Bay – Recreation Park open space node by:

e. Improving the quality of the Bay waters by controlling all forms of possible pollution, both in Bay and in tributaries upstream;
h. Maintaining close surveillance over all proposed projects in the Bay area through the environmental review process;
i. Exerting design controls on proposed improvements in order to prevent degradation of the aesthetic environment;

These LCP open space and natural resource preservation policies apply to the proposed project. The current land use of the bay-fronting property is an old dump/open space, devoid of buildings, roads, or other structures on the subject site. The property owner has not granted the public permission to access the property. Because the proposed project involves disturbance of the surface and vegetation on the site by grading, removal of vegetation and depositing fill, which will also help manage methane releases from the site, it is important to invoke these LCP policies to ensure that this open space is enhanced to support wildlife in the Alamitos Bay habitat and to control all forms of possible pollution, including methane, to improve the quality of the bay waters.

D. Re-Vegetation and Monitoring Plan

The previously approved project involves three inter-related phases of development: 1) re-establishment of the dump's soil cap, necessitated by prior unpermitted grading of the site, 2) restoration and re-vegetation of the graded area and disturbed dump cap, and 3) weed abatement/maintenance. The current land use (old dump/open space) has not been changed. The proposed development is intended to improve the environmental condition of the property by improving the scenic qualities and habitat values of the site through the proposed weed abatement and re-vegetation with native plants.

The question now before the Commission, is how to best restore the habitat value of the project site: by constructing water pooling areas over an impermeable dump cap, which would trigger the need to construct a methane gas collection system; or, by re-vegetating the site with native low-water use plants, without installing an impermeable dump cap, a methane gas collection system, and the new contours necessary to create seasonal pools?

The certified LCP calls for the preservation and enhancement of open space areas that serve as natural habitat areas, especially areas near Alamitos Bay like the project site. The LCP also requires that proposed projects along the bay prevent degradation of the aesthetic environment. Although the applicant now has agreed to re-vegetate the disturbed portion of the site with native plants, new information has been presented which substantially changes the scope of the restoration plan that the Commission envisioned when it approved Coastal Development Permit A-5-LOB-10-015 on November 19, 2010. The new information is the requirement for the construction of a methane gas collection system that would be triggered with the installation of the Commission-mandated impermeable dump cap. The construction of an impermeable dump cap and the associated methane gas collection system would include re-grading of the site, drilling of approximately twenty gas extraction wells, installation of

thousands of feet of above-ground pipelines, and construction of a gas-burning plant. Thus, it would cause significant disturbance to the natural habitat of the restored site and would visually degrade the aesthetic environment along the bay with the construction of an obtrusive methane gas collection system (Exhibit #6, ps. 12-15).

An impermeable dump cap and a methane gas collection system are only necessary if the restoration plan includes re-grading of the site to contour the top of the landfill in a manner that creates low areas for water to pool. The applicant's proposed alternative to the seasonal water pool plan does not include re-grading the site or any new construction; it simply involves the removal of non-native plants, importing additional soil to a depth of at least six-inches for planting purposes, landscaping the site with native low-water use plants, and maintaining the abandoned landfill as open space. The applicant's proposed plan would eliminate the potential for periodically disturbing the site in the future in order to maintain the dump cap, pipelines and extraction wells, which could undo the benefit of landscaping the site with native plants (Exhibit #6, ps. 4-7).

The applicant's proposal for re-vegetation of the site is attached as Exhibit #8 (Habitat Revegetation and Monitoring Plan, Loynes Drive Project, Long Beach, by LSA Associates, Inc., September 2011). Staff is recommending the approval of the applicant's permit amendment request (a revised re-vegetation plan with the deletion of the impermeable dump cap and seasonal pools) because it is the alternative with the least significant adverse effects on the environment, both in the short-term and long-term. With the knowledge that the installation of an impermeable dump cap would trigger a requirement to construct a methane gas collection system, to mitigate methane gas that would laterally migrate into the waters of the bay and adjacent residential areas, which would substantially change the character and habitat value of the project site, the Commission recognizes that the construction of seasonal pools on the site conflicts with the Commission's original intent to create an alkali meadow habitat on top of the abandoned landfill.

Type of Habitat

The appropriate type of habitat restoration necessarily depends on what type of habitat the site will support, and what species of wildlife utilize the site. Another factor is whether the disturbed portion of the site had any wetlands on it before the grading commenced on March 19, 2009. If any wetlands were destroyed by the grading, then it would be appropriate to require the applicant to mitigate for the loss of wetlands.

At the Commission's November 19, 2010 public hearing, there was disagreement between the applicant and the appellants over the type of habitat that existed on the site prior to the March 2009 grading episode. The appellants provided substantial evidence (e.g., photographs and testimonials) that wildlife exists on the site. Wildlife observed on the site includes fence lizards, squirrels, rabbits, rodents, raptors, herons, egrets and other common birds. The appellants also provided substantial evidence (e.g., photographs and testimonials) that the disturbed portion of site was not flat before the unpermitted grading occurred. The photographic evidence shows that the area where the unpermitted grading occurred had contours and low spots where the appellants assert that seasonal pools had been observed. Photographs taken on March 19 and 20, 2009 show a bull dozer grading part of the site and changing the contours of the land.

The observations described in a report by Dr. Longcore [Comments on Illegal Development and Retroactive Permit to Remediate at 6400 Loynes Drive, Long Beach, by Travis Longcore, Ph.D. and Catherine Rich, J.D., M.A., Land Protection Partners, 10/8/2009] support the assertions that seasonal pools existed on the disturbed portion of the site prior to the unpermitted grading. The Longcore report states that there are seasonal wetlands (vernal pools) that form on lower elevations on the western side of the property, and that wetlands (areas covered periodically with shallow water) previously existed on the portion of the site where the unpermitted graded occurred in March 2009. Photographs taken prior to March 2009 show small pools of water in the area where the unpermitted grading occurred. The record also shows that hydric soils exist on the site (PCR Report dated 9/9/9), as well as a few native wetland plants.

The applicant, however, did not agree that water ever pooled on the part of the landfill that was disturbed by grading in March 2009, at least not in sufficient quantities to be defined as "seasonal pools". The applicant cited the County and State dump inspection reports and prior surveys of the area which never indicated that there was any standing water or pools on the abandoned landfill.

The applicant continues to dispute this conclusion, asserting that any puddles that were seen on the site would have quickly evaporated and could not be categorized as wetlands or seasonal pools if they were not seen or documented as a regular presence over several years. The applicant also asserts that the aerial photos that were used to support the appellants' contention of rolling topography and water pools on the site do not actually show the presence of any water on the site. The applicant has provided studies of the area which did not identify any wetlands on the disturbed portion of the property [Delineation of Wetlands and Waters subject to Corps of Engineers Jurisdiction Under Section 404 of the Clean water Act and/or Section 10 of the Rivers and Harbors Act, Bixby Ranch, Los Cerritos Wetlands, Long Beach, California (by LSA Associates, Inc., 1/17/1997) & Biological Setting of the Bixby Ranch Company Oil Field Property in the Los Cerritos Wetland, Long Beach, California (by LSA Associates, Inc., Revised 7/8/1998).]

It must be noted that the Commission did not find that the unpermitted grading that occurred in March 2009 affected any wetlands or environmentally sensitive habitat areas based on testimony and written evidence, including aerial photos, submitted at the hearing by the appellants. In weighing the testimony and written materials submitted, the Commission, on November 19, 2010, determined that the appellants had provided sufficient evidence that the site had contained varying topography with low spots that may have allowed water to pool on top of the dump after rains. The Commission required the applicant to restore the varying topography on the site with low spots for seasonal pools.

The following studies of the site have also been produced as a result of the investigations that followed the unpermitted grading of the site:

- Biological Resources Evaluation and Jurisdictional Waters Delineation for APN 7237017006, by Ty M. Garrison, SWCA Environmental Consultants, 5/28/2009.
- Peer Review of the Biological Resources Evaluation and Jurisdictional Waters Delineation for APN 7237017006, by PCR Services Corporation (PCR), 9/9/2009.

- Comments on Illegal Development and Retroactive Permit to Remediate at 6400 Loynes Drive, Long Beach, by Travis Longcore, Ph.D. and Catherine Rich, J.D., M.A., Land Protection Partners, 10/8/2009.
- Biological Review for Coastal Development Permit Appeal A-5-LOB-10-015 – 6400 E. Loynes Drive, Long Beach, by LSA Associates, Inc., 11/15/2010.
- Supplement to Biological Review for Coastal Development Permit Appeal A-5-LOB-10-015 – 6400 E. Loynes Drive, Long Beach, by LSA Associates, Inc., 11/16/2010.
- Memo to Coastal Commission regarding Hitchcock Property, 6400 Loynes Drive, Long Beach, by Travis Longcore, Ph.D., Land Protection Partners, 11/17/2010.

These studies were conducted after the initial grading of the site occurred in March 2009, and all the studies acknowledge that the site is generally dominated by exotic plant species. The report for the project site submitted by the Los Cerritos Wetlands Trust (by Travis Longcore, PhD) indicates that the site has significant biological value because of its characteristics and its proximity to the tidal channel and the adjacent salt marshes. The Los Cerritos Channel (Alamitos Bay) borders the southern side of the property and the Los Cerritos Wetlands tidal marsh (Steam Shovel Slough) is about three hundred feet south of the project site (Exhibit #2). While most of the project site is primarily upland (about 16 to 20 feet of fill covering former salt marsh), Dr. Longcore's report states that there are seasonal wetlands (vernal pools) that form on lower elevations on the western side of the property and that seasonal wetlands (vernal pools) also existed on the disturbed portion of the site prior to grading.

The applicant asserts that the land should be restored to the condition it was in before the grading occurred, but he contends that the site was basically flat and contained no wetlands. Ultimately, the Commission on November 19, 2010 determined that there was substantial evidence to support the appellants' claims that water did pool, at least periodically, on some portion of the project site. The Commission, however, did not find that there was sufficient evidence to conclude that any actual wetland habitat had been destroyed because the evidence was not conclusive as to how often or for what duration (or even the location) these seasonal pools may have existed prior to the unpermitted grading. Site visits by the Commission staff ecologist and the applicant's biologist in March and October 2010 found very few specimens of native plants growing among the weeds, notably flowering lupine plants (in March) and Southern Tarplant (in October).[1] Based on the site visits and the review of the available evidence, and considering the state of the property as an abandoned landfill, the Commission's staff ecologist could not define any wetlands on the disturbed portion of the site.

In recognition of the scope of habitat destruction that was documented during the unpermitted grading that occurred in March 2009, the Commission determined that the most appropriate type of site restoration for the site was a project implemented by the applicant that would restore the site's former topography with bumps and low spots sufficient to create a few seasonal pools. The Commission, recognizing that a proposal to allow pooling water on the abandoned landfill would be problematic if it resulted in increased methane gas production (from mixing of water and the materials in the landfill), imposed the requirement to install an impermeable dump cap over the landfill.[2]

---

[1] Southern Tarplant (*Centromadia parryi ssp. Australis*), which is listed as a 1B.1 rare plant by the California Native Plant Society.

[2] Los Angeles Co. Dept. of Public Health (Thomas White, 5/12/10) confirmed that the mixture of water and decomposing materials in an old dump would likely result in increased levels of methane emissions.

The Commission, at the November 19, 2010 hearing on the matter, also directed the applicant to come back with a permit amendment if the impermeable dump cap could not be approved by the appropriate landfill regulating agencies. The conditions of the permit require that the impermeable dump cap shall be designed in compliance with the specifications and requirements of the California Integrated Waste Management Board, the Los Angeles County Department of Public Health (Environmental Health Solid Waste Management Program), the Regional Water Quality Control Board (Los Angeles RWQCB), and the South Coast Air Quality Management District (AQMD).

After the applicant consulted with the landfill regulating agencies (County of Los Angeles and California Regional Water Quality Control Board), it was learned that an engineered impermeable dump cap could be constructed over the landfill, but only in conjunction with a methane gas collection system (Exhibits #4-6). The construction of such a system would thoroughly change the character and scale of the previously approved development that was anticipated to be a habitat restoration project.

Therefore, the underlying permit must be amended to either: a) revise the re-vegetation plan to reflect the deletion of the impermeable dump cap and seasonal pools, or b) revise the project to include the construction of the methane gas collection system that would be required by the California Regional Water Quality Control Board and County if an impermeable cap is constructed over the abandoned landfill. Staff is recommending that the Commission approve the proposed amendment to the permit, which results in a revised re-vegetation plan with the deletion of the impermeable dump cap and seasonal pools because it is the alternative with the least significant adverse effects on the environment. Approval of the permit amendment with conditions will require the applicant to re-vegetate the disturbed area on the landfill with Southern California native plants appropriate to the site's condition as an abandoned landfill. The previously imposed provisions for monitoring and future maintenance of the site are unchanged by the amendment.

The restoration plan that does not include an impermeable dump cap is the alternative with the least significant adverse effects on the environment, and more consistent with the policies of the Long Beach certified LCP because it involves minimal disturbance of the site and the protection of the native plants that have already re-established themselves on the site (e.g., Southern Tarplant). Maintenance of the abandoned landfill (with native plant landscaping), as proposed by the applicant, does not cause the significant adverse environmental effects associated with the installation of an impermeable dump cap. The permit amendment, if approved as requested, would eliminate the following significant adverse environmental effects associated with the installation of an impermeable dump cap:

- Lateral methane gas migration to the perimeter of the dump, closer to the adjacent residences and the Los Cerritos Channel (Exhibit #5).

- The adverse impacts caused by extensive re-grading and additional disturbance of the property, including the removal of the native vegetation that has re-established on the site (e.g., Southern Tarplant).

- The adverse impacts to the aesthetic environment along the bay caused by construction of a methane gas collection system, consisting of approximately twenty

gas extraction wells, thousands of feet of above-ground pipelines, and a gas-burning plant (Exhibit #6).

- The loss of habitat area and lowering of habitat value caused by land used for gas extraction wells and pipelines, and noise caused by blowers in the gas-burning plant.

- The adverse impacts caused by additional disturbance of the site in the future for ongoing maintenance of the dump cap and methane collection system (i.e., removal of established native vegetation).

In addition, the applicant's biologist asserts that the installation of an impermeable dump cap and a methane gas collection system would not be conducive to the Commission's intent of establishing vegetation typically associated with vernal pools on the site because the underlying substrate would be completely artificial and lacking the soil structure and hydrology upon which that plant community is dependant (Exhibit #7).

In order to avoid the significant adverse effects associated with the installation of a methane gas collection system described above, the implementation of a habitat protection and restoration plan, subject to the requirements of a revised Special Condition One, would bring the proposed development into consistency with the requirements of the certified LCP to preserve and enhance open space areas as natural habitats and to prevent the degradation of the aesthetic environment along the bay. Revised Special Condition One requires the planting of Southern California native plants appropriate to the site's hydrology and historical ecology (transitional grassland/coastal scrub). Alkali meadows are not an appropriate type of vegetation community on this abandoned landfill because the soil structure and hydrology necessary for the plants' survival cannot be constructed without an impermeable barrier that would cause significant adverse environmental impacts.

Appropriate native plants for the site include, but are not limited to, coastal sage bush, buckwheat, coast goldenbush, shining pepper grass, salt grass, bunch grass and annuals (e.g., lupine and yellowray goldfields). These plants need little or no irrigation to thrive in the upland area adjacent to Alamitos Bay. It is important to limit irrigation of the site to prevent polluted runoff from entering the waters of Alamitos Bay, and to prevent water from infiltrating into the underlying landfill (and increase methane pollution). The re-vegetation of the disturbed area with native plants will help protect the adjacent bay waters from polluted runoff by reducing erosion of the dump cap caused by wind and precipitation. The re-vegetation of the disturbed area will also improve aesthetic environment along the bay. The permit, as amended, also includes mitigation and habitat enhancement measures that will help protect the adjacent tidal areas from polluted runoff and sediment that may erode from the subject site subsequent to weed abatement.

The restoration of the project site as a brackish pond, as called for by the SEADIP plan, is not appropriate at this time and does not appear to be a viable alternative. The LCP calls for the conversion of the site (old landfill into a brackish pond at the time when another site in the SEADIP area (Subarea 25) is developed. At this time there is no proposal to develop Subarea 25. Therefore, now is not the time contemplated by the LCP for the conversion of the project site to a brackish pond. There is no proposal to convert the old dump site to a brackish pond~~,~~ and it would involve substantial environmental risk to create a pond on top of the old dump. Of course the LCP does not allow for any other use of the site, so it continues to remain open

space. The proposed project does not propose to change the use of the site, but to improve the environmental condition and aesthetics of the property by creating native habitat and controlling runoff and erosion.

Consistent with the certified LCP, the restoration plan required by Special Condition One is necessary to control pollution, runoff and erosion on the bay-fronting site. The implementation of a detailed habitat protection and restoration plan that protects wildlife and the adjacent tidal waters and wetlands would bring the proposed development into consistency with the requirements of the certified LCP to preserve and enhance open space areas as natural habitats.

Restoration and Re-vegetation Plan

In conclusion, to mitigate the adverse impacts of the proposed development, the disturbed portion of the site must be re-vegetated in order to enhance its value as wildlife habitat, reduce the potential for erosion, and beautify the site as required by the open space policies of the certified LCP. Revised Special Condition One requires the applicant to submit a revised re-vegetation plan for the portions of the project site disturbed by prior grading and by re-establishment of the dump cap. The applicant's proposed plan would re-vegetate 5.93-acre portion of the site that was disturbed by the unpermitted grading in March 2009 (Exhibit #8, p.5). The applicant's plan is consistent with the areal photograph dated on May 25, 2009 which shows the disturbed area that must be re-vegetated (Exhibit #4: Google Earth/USDA).

The revised re-vegetation plan must be developed in consultation with the California Department of Fish and Game, the County of Los Angeles Department of Public Health (Environmental Health Solid Waste Management Program), the Regional Water Quality Control Board (Los Angeles RWQCB), and the South Coast Air Quality Management District (AQMD). The revised re-vegetation plan must be developed and submitted for the approval of the Executive Director within sixty days (or within such additional time as the Executive Director may grant for good cause) of Commission action on this permit amendment. Only as conditioned to develop and implement a restoration and re-vegetation plan does the proposed development conform with the open space and habitat protection policies of the certified LCP.

The re-vegetation plan shall include only Southern California native plants appropriate to the site's hydrology and historical ecology natural habitat type, which is transitional scrub grassland). Appropriate native plants include, but are not limited to: coastal sage bush, buckwheat, coast goldenbush, shining pepper grass, salt grass, bunch grass and annuals (e.g., lupine and yellowray goldfields). All seeds and cuttings employed are required to be from local sources in the Los Angeles and Orange County coastal areas.

The disturbed open space, once restored and re-vegetated with native plants, will better support the wildlife observed on the site and in the adjacent wetlands, and will mitigate the adverse impacts to the habitat that result from the approved development, thereby complying with the relevant LCP policies. As conditioned, the permit includes specific provisions necessary to protect habitat and native vegetation on the site, and to protect the adjacent tidal areas from polluted runoff and sediment that may erode from the site subsequent to the vegetation removal. For example, revised Special Condition One specifies that native plants already growing on the site shall be protected and that no bird nests shall be disturbed at any time. A temporary irrigation system may be employed, but the applicant is required to install

erosion control during the restoration project (e.g., temporary sediment basins, silt traps, drains and swales, sand bag barriers, and silt fencing). Additionally, the permittee is required to provide the funding necessary to compensate a third party monitor (approved by the Executive Director) for the completion of the monitoring reports required by this condition. The site shall be actively monitored for at least five years. At the end of five years, a minimum of eighty percent (80%) of the disturbed area shall be covered with native plants. No more than five percent (5%) of the disturbed area shall be covered with non-native plants at any time.

This amended permit does not authorize the construction of any trails or roads, or the erection of any fence, gate or wall. Special Condition Six clarifies that future development as defined in PRC Section 30106, including, but not limited to, a change in the density or intensity of use land, shall require another amendment to Coastal Development Permit A-5-LOB-10-015 from the California Coastal Commission or shall require an additional coastal development permit from the California Coastal Commission or from the applicable certified local government (City of Long Beach).

The resource agencies may require further mitigation measures to minimize or avoid impacts to marine resources. Therefore, Special Condition Three requires the permittee to comply with all permit requirements and mitigation measures of the other regulatory agencies with jurisdiction over the approved development with respect to preservation and protection of water quality and marine environment. Prior to any re-vegetation or disturbance of the site, the permittee shall also file an 1150.1 (Excavation of Landfill Plan) with the South Coast Air Quality Management District. Any change in the approved project which may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed changes shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. Only as conditioned to mitigate and avoid impacts to marine resources does the proposed development conform with the open space and habitat protection policies of the certified LCP.

E. Recreation and Public Access

Because of the project's location between the first road (Loynes Drive) and the sea (Alamitos Bay), the proposed project must conform to the following public access and recreation policies of the Coastal Act.

Section 30210 of the Coastal Act states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

> Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212 of the Coastal Act states (in part):

> (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Section 30213 of the Coastal Act states:

> Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30220 of the Coastal Act states:

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221 of the Coastal Act states:

> Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30222 of the Coastal Act states:

> The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30223 of the Coastal Act states:

> Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30224 of the Coastal Act states:

> Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Most of the project site is fenced and provides no public access or recreation at this time. A service road/walkway that is used for walking by the public runs along the north bank of the Los Cerritos Channel (Alamitos Bay) along the water on the southern side of the property. This permit does not authorize the construction of any trails or roads, or the erection of any fence, gate or wall. Therefore, the proposed development will not affect the public's ability to gain access to, and/or to make use of, the coast and nearby recreational facilities. Therefore, the proposed development conforms with the public access and recreation policies of the Coastal Act.

F. California Environmental Quality Act (CEQA)

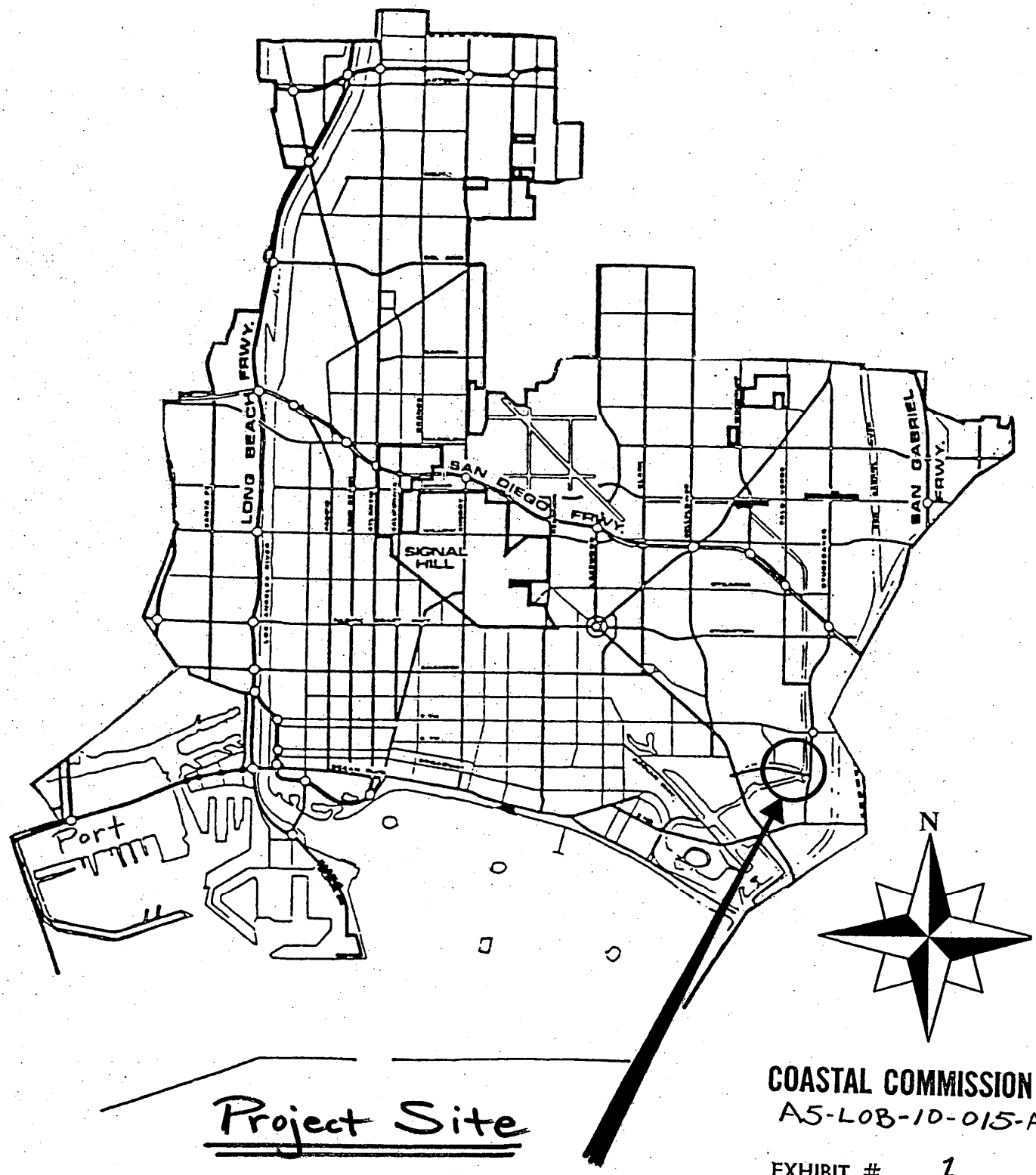
Section 13096 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The City of Long Beach is the lead agency for the purposes of CEQA review and has determined that the proposed project is categorically exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Section 15308 (Class 8 – Actions by Regulatory Agencies for Protection of the Environment. On September 21, 2009, the City of Long Beach issued CEQA Categorical Exemption CE-09-029.

As explained in the findings above, the proposed project and permit amendment has been conditioned in order to be found consistent with the certified LCP and the public access and recreation policies of the Coastal Act. As conditioned, the approved project and permit amendment is the environmentally preferable alternative. Mitigation measures, in the form of special conditions, provide requirements for restoration and re-vegetation of the previously graded area of the site with native plants appropriate to the location; timing of the re-vegetation; monitoring and future maintenance of the site; and protection of water quality and marine resources.

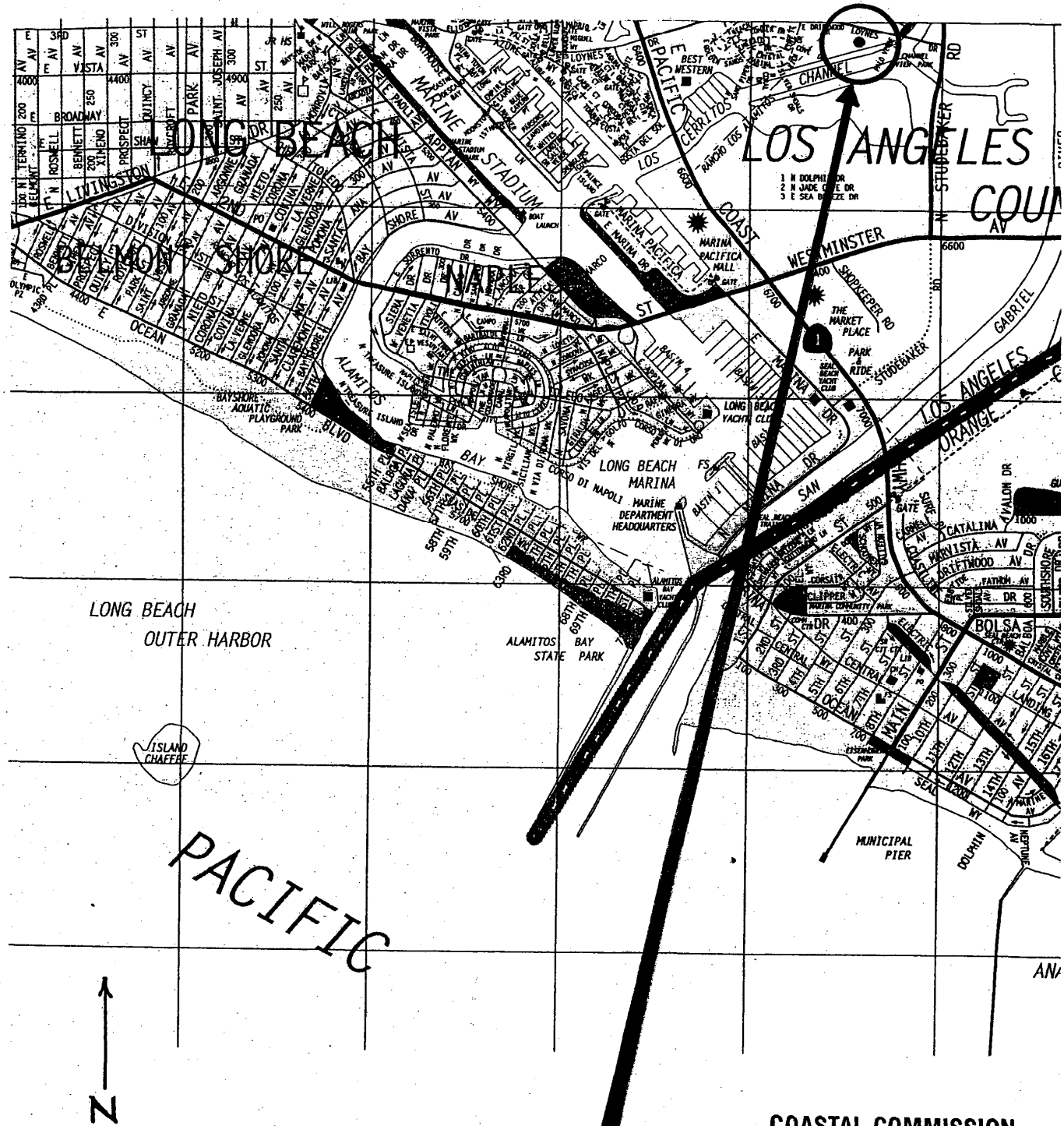
As conditioned, there are no feasible alternatives or additional feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and complies with the applicable requirements of the Coastal Act and CEQA.

City of Long Beach



COASTAL COMMISSION
A5-LOB-10-015-A1

EXHIBIT # 1



Project Site

6400 E. Loynes Drive

COASTAL COMMISSION
A5-LOB-10-015-A1
EXHIBIT # 2
PAGE 1 OF 1

Area of Disturbance

A-5-LOB-10-015-A1

EXHIBIT # 3

PAGE 1 OF 1

COUNTY OF LOS ANGELES
Public Health
Environmental Health

JONATHAN E. FIELDING, M.D., M.P.H.
Director and Health Officer

JONATHAN E. FREEDMAN
Chief Deputy Director

ANGELO J. BELLOMO, REHS
Director of Environmental Health

KENNETH MURRAY, REHS
Director of Environmental Protection Bureau

CINDY CHEN, REHS
Solid Waste Program Chief
5050 Commerce Drive
Baldwin Park, California 91706
TEL (626) 430-5540 • FAX (626) 813-4839

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Gloria Molina
First District

Mark Ridley-Thomas
Second District

Zev Yaroslavsky
Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

June 17, 2011

Mr Paul Willman
Principal Solid Waste Planner
1360 Valley Vista Drive
Diamond Bar, CA 91765

RE: PROPOSED POST-CLOSURE LAND USE OF CITY DUMP & SALVAGE NO. 1 AND 3 (SWIS # 19-AK-5003)-6400 E. LOYNES DRIVE

The Los Angeles County Department of Public Health Solid Waste Program, acting as the Local Enforcement Agency has reviewed the Staff Report: Revised Findings from the California Coastal Commission. This proposed project is considered a change in post-closure land use which will trigger applicable regulatory requirements pursuant to California Code of Regulations (CCR), Title 27 Section 21190 "Post-closure Land Use". The proposed project mentions the installation of an impermeable cap to accommodate seasonal pools. Methane gas still is being generated at this closed landfill as indicated on the 03/26/09, "Closed Disposal Site Inspection Report". With that said, the installation of an impermeable cap will increase the potential of the gas migrating laterally towards the mobile home park and the homes across Loynes Drive.

If you have any questions, please contact me at (626) 430-5541.

Sincerely,

Pete Oda
Environmental Health Specialist IV

COASTAL COMMISSION
A-5-LOB-10-015-A1

EXHIBIT # 4
PAGE 1 OF 1

California Regional Water Quality Control Board
Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Linda S. Adams
Cal/EPA Secretary

Arnold Schwarzenegger
Governor

June 28, 2011

Mr. Paul Williams, Principal Solid Waste Planner
Bryan A. Stirrat & Associates
1360 Valley Vista Drive
Diamond Bar, CA 91765

FURTHER COMMENTS ON PROPOSED POST-CLOSURE LAND USE OF CITY DUMP & SALVAGE NO. 3, 6400 E. LOYNES DRIVE, LONG BEACH, CALIFORNIA (FILE NO. 56-110)

Dear Mr. Williams:

Reference is made to a letter from the Executive Officer of the Regional Water Quality Control Board (Regional Board) to Ms. Tamar C. Stein of Cox, Castle & Nicholson LLP, dated November 9, 2010, that provided opinions on the proposed land use of a closed landfill as a brackish pond at the subject location (copy attached). The letter states that any land use of a closed landfill that submerges municipal wastes under water would not be consistent with the policies and practices of the Regional Board, because pollutants may be leached out of the wastes and cause pollution to surface and ground waters.

In a letter dated May 10, 2011, to the Regional Board and the Los Angeles County Department of Health Services, you proposed a conceptual final cover system for the closed landfill that includes, among other things, a linear-low density polyethylene (LLDPE) flexible membrane and a geosynthetic clay liner (GCL). Seasonal pools formed by captured stormwater would be constructed on top of the final cover system. While the proposed final cover system appears to be adequate to prevent water in the seasonal pools from entering buried wastes in the closed landfill, we are still concerned with the following:

1. Because the closed landfill is still generating landfill gas, the installation of an impermeable final cover could potentially contribute to lateral landfill gas migration that may cause pollution of groundwater;

2. With the installation of an impermeable final cover, landfill gas may be forced to flow into the residential areas at the vicinity of the site and create a health and safety hazard; and

3. Your plan does not include a program to monitor and maintain the integrity of the proposed final cover system, which could be damaged after installation.

A-5-LOB-10-015-A1
EXHIBIT # 5
PAGE 1 OF 3

If you plan to proceed with the proposed plan, the above issues must be adequately addressed. Please call me at 213-620-2253 or send me an email at wyang@waterboards.ca.gov if you have any questions.

Sincerely,

Wen Yang, Senior Engineering Geologist
Land Disposal Unit

Enclosure: Letter from Regional Board Executive Officer dated November 9, 2010

Cc: Pete Oda, County of Los Angeles Department of Health Services, Baldwin Park

COASTAL COMMISSION

EXHIBIT # 5
PAGE 2 OF 3

California Regional Water Quality Control Board
Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Linda S. Adams
Cal/EPA Secretary

Arnold Schwarzenegger
Governor

November 9, 2010

Ms. Tamar C. Stein
Cox, Castle & Nicholson LLP
2049 Century Park West, 28th Floor
Los Angeles, CA 90067-3284

OPINION ON PROPOSED POST-CLOSURE LAND USE OF CITY DUMP & SALVAGE NO. 3, 6400 E. LOYNES DRIVE, LONG BEACH CALIFORNIA (FILE NO. 56-110)

Dear Ms. Stein,

We are in receipt of your letter dated November 1, 2010 (copy attached), requesting an opinion letter from the Los Angeles Regional Water Quality Control Board (Regional Board) staff regarding whether the proposed use of a closed landfill at the subject location, referred to as the City Dump & Salvage No. 3 (Property), as a brackish pond would be consistent with the policies and practices of the Regional Board. Your letter indicates that the Property is approximately 9 acres, within the Coastal Zone, adjacent to the Los Cerritos Channel, and was used as a landfill until 1958.

Our records indicate that the Regional Board adopted Resolution No. 56-35 on October 18, 1956, prescribing requirements for City Dump & Salvage Company for the disposal of refuse east of the Pacific Coast Highway and north and west of the Los Cerritos Channel in Long Beach. Based on the location described in an aerial photo attached to your letter, the Property is part of the area that was permitted to accept household and commercial refuse as described in Resolution No. 56-35.

Municipal solid wastes contain various pollutants, such as metals, nutrients, volatile and semi-volatile organic compounds. When submerged to water, such pollutants may be leached out of the wastes and cause pollution to surface and ground waters. Any land use of a closed landfill that submerge municipal wastes under water would not be consistent with the policies and practices of the Regional Board, which is the state regulatory agency responsible for protecting water quality in Los Angeles and Ventura Counties, including the Property.

If you have any questions, please call Dr. Wen Yang, Chief of Land Disposal Unit, at 213-620-2253 or send an email to him at wyang@waterboards.ca.gov.

Sincerely,

Samuel Unger, P.E.
Executive Officer

Enclosure

COASTAL COMMISSION

EXHIBIT # 5
PAGE 3 OF 3

Submitted by Applicant 7Feb2012

EXECUTIVE SUMMARY OF THE PROJECT DESCRIPTION AND SUMMARY OF IMPACTS CITY DUMP & SALVAGE NO. 1 AND 3, 6400 E. LOYNES DRIVE, LONG BEACH

The conceptual final cover design that was developed in order to implement the seasonal pools requirement in the CCC's proposed Special Condition 1C for the City Dump & Salvage No. 1 and No. 3 site consists of an impermeable cap over the existing refuse. The seasonal pools are to be created on top of the cover section.

The County of Los Angeles Solid Waste Local Enforcement Agency (LEA) and the Los Angeles Regional Water Quality Control Board (LARWQCB) (local and state agencies which have jurisdiction over the site to enforce Federal and State regulations for solid waste sites) have voiced concerns via correspondence in regards to placing an impermeable cover on the site. They include the following:

- Impermeable cover could contribute to lateral landfill gas migration that may cause pollution of groundwater;
- With installation of impermeable cover landfill gas may be forced to flow into the residential areas adjacent to the site and create a health and safety hazard (due to landfill gas migration and ignition); and
- Need to include a program to monitor and maintain the integrity of the impermeable final cover system which could be damaged after installation.

In response to the above concerns, the addition of the impermeable final cover with seasonal pools would necessitate design/installation of a landfill gas collection and treatment system. Maintaining the site with a permeable soil cover would allow up to 20% of the methane to continue to be converted to harmless carbon dioxide. If the impermeable cover is placed, as required by Special Condition 1C, the methane cannot vent and no conversion to carbon dioxide can occur. Additionally, placement of an impermeable cover will force landfill gas to migrate laterally to homes and potentially the groundwater table and the nearby Los Cerritos Channel. This problem may be mitigated with installation of a comprehensive landfill gas collection and treatment system. This system would have to be operated for an indefinite amount of time until landfill gas generation levels are low enough to no longer present a threat to public health and safety.

The installation and maintenance/monitoring of the impermeable cover and landfill gas collection and treatment system will have several impacts to the surrounding neighbors and the environment. Additionally, existing and created biota and the created ponds will be impacted with construction and ultimate post-construction maintenance and monitoring. Impacts due to construction and post-construction maintenance/monitoring are summarized on Table 1.

Installation of the seasonal pools could also cause potential impacts to the groundwater and other issues. It is anticipated that the LARWQCB would require some type of moisture monitoring beneath the seasonal pools in order to ensure the effectiveness of the liner system in preventing water intrusion into the landfill from the pools. If moisture threshold levels are exceeded (indicating failure of the cover and infiltration into the waste below with associated potential impacts on the groundwater below the site), this would entail excavation and repair of the liner system above the suspected leak thus disturbing the pool and any established vegetative habitat in the area of the leaking pool.

The site in its current state is in compliance with the State requirements for closed landfills regulated by the LEA, LARWQCB and SCAQMD and would remain so with the addition of six inches of soil and non-irrigated native vegetation and habitat as initially recommended by CCC staff. None of the above environmental control and monitoring would be required because there would be no new post-closure activities that may jeopardize the integrity of the previously closed disposal site or pose a potential threat to public health and safety or the environment. The perimeter gas migration monitoring regularly performed by the LEA has noted no landfill gas migration exceedances and therefore, to date, no threats to public health and safety. Special Condition 1C requires placement of an impermeable cap which carries with it a large risk of landfill gas migration toward the adjacent residences as documented by the LEA and RWQCB letters mentioned above. The corrective action for this consists of construction and continual maintenance, monitoring and operation of a landfill gas collection and treatment system. This system does not guarantee that migration will not occur as it is based on periodically monitoring for exceedances and taking action to correct the exceedances. During the time between when an exeedance is detected and when it is corrected the residences would be at risk to landfill gas migration within their homes. This risk, as well as the impacts to the community from the construction, maintenance and operation of the landfill cover and gas collection systems described above, must be compared to the perceived benefit derived from the creation of ponds on top of the landfill.

COASTAL COMMISSION
A-5-LOB-10-015-A1

EXHIBIT # 6
PAGE 1 OF 15

PROJECT DESCRIPTION AND SUMMARY OF IMPACTS
CITY DUMP & SALVAGE NO. 1 AND 3, 6400 E. LOYNES DRIVE, LONG BEACH

The conceptual final cover design that was developed in order to implement the seasonal pools requirement in the CCC's proposed Special Condition 1C for the City Dump & Salvage No. 1 and No. 3 site consists of an impermeable cap over the existing refuse. The seasonal pools are to be created on top of the cover section (ranging in size from 1,700 to 3,200 square feet) as depicted on Exhibit 1 with the placement of additional soils to create the ridges and depressions. The conceptual final cover design (see Exhibit 2) includes from top to bottom:

- 12-inch minimum and 24-inch average (depth varies with seasonal pools and inter-pool ridges) vegetative soil layer;
- Geocomposite drainage layer (a thin plastic mesh that allows drainage and prevents build-up of water directly on top of the impermeable membrane liner);
- Linear-Low Density Polyethylene (LLDPE) flexible membrane liner (an impermeable plastic liner to prevent water from penetrating the refuse);
- Geosynthetic clay liner (bentonite, a clay-like material, encased in a fabric like material, used as a secondary measure to prevent water penetration into the refuse); and
- 24-inch minimum foundation soil layer (assumes 12-inch existing).

The County of Los Angeles Solid Waste Local Enforcement Agency (LEA), the primary agency which regulates the disposal site, has stated in their letter dated June 17, 2011 that "installation of an impermeable cap will increase the potential of the gas migrating laterally towards the mobile home park and homes across Loynes Drive." The implementation of Special Condition 1C would represent new post-closure activities that may jeopardize the integrity of the previously closed disposal site or pose a potential threat to public health and safety or the environment pursuant to 27 CCR 21100(b) (i.e, landfill gas migration and potential explosion, groundwater impacts). This project would therefore trigger 27 CCR, Section 21190 which requires that end uses of disposal sites be designed to:

- Protect public health and safety and prevent damage to structures, roads, utilities and gas monitoring and control systems;
- Prevent public contact with waste, landfill gas and leachate; and
- Prevent landfill gas explosions (due to landfill gas migration and ignition).

The Los Angeles Regional Water Quality Control Board (LARWQCB), the agency which regulates the protection of water quality as it relates to disposal sites, stated the following concerns in their June 28, 2011 correspondence:

- Impermeable cover could contribute to lateral landfill gas migration that may cause pollution of groundwater;
- With installation of impermeable cover landfill gas may be forced to flow into the residential areas at the vicinity of the site and create a health and safety hazard (due to landfill gas migration and ignition); and
- Need to include a program to monitor and maintain the integrity of the impermeable final cover system which could be damaged after installation.

The following discusses project construction and post-closure maintenance and monitoring required for the final cover and landfill gas collection and treatment system design items. Also included is a qualitative assessment of the potential impacts these activities may have on the surrounding community and the environment.

CONSTRUCTION REQUIREMENTS

Impermeable Cover Construction

The impermeable cover system construction will require approximately 75 working days or 15 weeks to complete. Work would not be performed during rain events.

COASTAL COMMISSION

EXHIBIT # 6
PAGE 2 OF 15

- Clearing and Grubbing - Prior to final grading (preparation and leveling of the land to design specifications) and placement of the final cover, all existing vegetative materials must be removed from the surface without disturbing the underlying refuse. A scraper and dozer will be utilized to perform this work. Nuisances such as dust and noise will be generated as well as tailpipe pollutant emissions from the construction equipment.
- Foundation Layer/Vegetative Layer Placement - Foundation layer and vegetative soils will be placed at the site. This will require hauling of additional soil to the site to cover the impermeable cap area with an average of three feet of soil. Approximately 1,218 truckloads will be required to haul 19,500 cubic yards of soil, assuming 16 cubic yards per load. This equals 2,436 one-way truck trips and using a typical 2.0 multiplier for the end dumps results in 4,874 passenger car equivalents with associated neighborhood impacts on traffic circulation and road integrity. Use of a scraper, dozer and compactor will be required to place and compact the soils. In addition to traffic circulation impacts, nuisances such as tailpipe pollutant emissions, dust and noise will be generated from both construction and traffic.
- Barrier Layer – The geocomposite drainage layer, LLDPE liner, and geosynthetic clay liner will be delivered to the site on flatbed diesel trucks in rolls (approximately 22 feet long by 2 feet in diameter) and then placed using especially designed diesel forklifts. Diesel powered generators will be used to power the liner placement tools (grinders, heat welders, etc.). Nuisances such as truck traffic, dust, noise and pollutant emissions from the generators will be produced.

Landfill Gas Collection and Treatment System Construction

Maintaining the site with the existing permeable soil cover would allow up to 20% of the methane generated by the landfill to continue to be converted to harmless carbon dioxide. If the impermeable cover is placed, as required by Special Condition 1C, the methane cannot vent and no conversion to carbon dioxide can occur. Additionally, placement of an impermeable cover will force landfill gas to migrate vertically to adjacent homes and potentially the groundwater table and the nearby Los Cerritos Channel. This problem may be mitigated with installation of a landfill gas collection and treatment system consisting of landfill gas collection wells, lateral landfill gas collection lines, blowers which draw the landfill gas out of the landfill through the wells and collection lines, landfill gas condensate collection tanks, and a landfill gas flare (unit which incinerates the landfill gas) as detailed below (see Exhibit 3 which depicts the conceptual landfill gas collection plan):

- Drill vertical gas extraction wells with diesel drill rig to depth to be determined (see Photo 1). Noise, dust and pollutant emissions from diesel engines would generate impacts. Spoils (soil and refuse generated from drilling) would generate foul odors from exposed decomposing refuse, fugitive landfill gas emissions from the open hole and additional truck trips to haul spoils to a permitted disposal facility which can accept drilling spoils.
- Install collection piping from wells to main collection header (approximately 2,080 linear feet) and then approximately 136 linear feet of piping to the blowers and flare with landfill gas condensate (extremely odorous liquids from the landfill gas containing volatile organic compounds and other pollutants) collection (see Photos 2, 3, and 4 which depicts a representation of what may be required to be installed at the site). Diesel generators will be required to weld piping along with attendant noise impacts and pollutant emissions. The above ground piping option will be visually impactful as it will not blend into the vegetation. However, the below ground piping option would be extremely difficult to maintain due to inaccessibility. Excavation of the soils and disturbance of the vegetation would be required every time a repair is needed.
- Continuous treatment (incineration) of landfill gas via flare (minimum 20 feet high, 4-foot diameter). Blowers to create a vacuum to draw the landfill gas from the refuse to the flare requires construction of a concrete foundation (approximately 40 feet x 60 feet) with a 6 to 8 foot high fence or wall for security. Installation is via a crane. See Photo 5.

COASTAL COMMISSION

EXHIBIT # 6
PAGE 3 OF 15

- Minimum of 6 months to permit system through the SCAQMD to build and ultimately operate the system. The minimum cost is $3 million to permit and build the system. Operating and maintenance costs could be as much as 6.4 million dollars over 20 years.
- Due to the age of the landfill, landfill gas quality (percent methane) and quantity (volume generated usually measured in standard cubic feet per second) may be relatively low yet still represent a flammable and explosive hazard. Because of the low quality and quantity of methane, the landfill gas may not be sufficient to maintain the flame within the flare. Additional fuel (e.g. propane or natural gas) would likely be required in order to augment low methane levels in the landfill gas and operate the flare.
- Landfill gas collection and treatment system would have to be operated until landfill gas generation levels are low enough to no longer present a threat to public health and safety; hence, long term operational impacts will include:
    - Visual (one stack at a height of a minimum 20 feet)
    - Noise (blowers for gas extraction will be adjacent to homes [closest home is approximately 175 feet from potential station locates – see Exhibit 3] which creates 80 dB but can be reduced to 65 dB with sound enclosure)
    - Requires regular maintenance as discussed under Post-Closure Maintenance/Monitoring Requirements below. This would disturb neighboring homes with noise and equipment emissions and may disturb protected habitat (plants and animals) should the surface soils need to be disturbed or pools drained.

A suitable alternative to the traditional landfill and treatment collection system with a flare may be a Granulated Activated Carbon (GAC) system. A GAC system is utilized when landfill gas levels may be too low to sustain a flame to operate a flare. A GAC system consists of GAC canisters and potassium permanganate ($KMNO_4$) vessels fed by gas blowers and a minimum 14-foot tall by 6-inch diameter exhaust vent stack. The gas is drawn by the blower under vacuum from the gas collection system through a filter which removes particulates and liquid (landfill gas condensate) from the landfill gas. Gas is then forced under pressure through the GAC vessel which removes most of the volatile organic compounds (VOC's) in the landfill gas and then through the $KMNO_4$ vessel which removes most of the other landfill gas constituents. The GAC system will require the same piping system and blowers as the flare treatment system. Construction of a concrete foundation (approximately 20 feet x 40 feet) for the equipment with a 6 to 8 foot high security fence or wall will be required. This alternative system does not incinerate or otherwise destroy the methane (a potent greenhouse gas) which is allowed to vent into the atmosphere and contribute to greenhouse effect issues. This system will cost the same as the collection and treatment system with a flare at $3 million to permit and build. Operating and maintenance costs could be as much as 6.6 million dollars over 20 years.

POST-CLOSURE MAINTENANCE/MONITORING REQUIREMENTS

Post-closure maintenance and monitoring is required to be performed under State regulations which are enforced by the LARWQCB (groundwater protection), LEA (landfill gas control and cover integrity), and South Coast Air Quality Management District (SCAQMD) (air quality/landfill gas control). The owner of the property would be responsible to ensure that all maintenance and monitoring is performed in accordance with the State regulations and that landfill gas migration and emission limits are met in order to ensure protection of Public Health and Safety and the Environment.

- Final Cover Maintenance - The primary purpose of the final cover maintenance procedures is to maintain the integrity of the completed final cover over the long-term and provide maintenance, scheduling and documentation so that materials and maintenance practices are consistent with the final cover design specifications for public safety and effectiveness of the cover. Quarterly visual inspections of the final cover will include identification of erosion and settlement problems by grid walking the site to visually observe the following typical maintenance issues:

COASTAL COMMISSION

EXHIBIT # 6
PAGE 4 OF 15

- Evidence of erosion
- Visible depressions
- Ponded water (other than the seasonal pools)
- Odor
- Exposed refuse
- Cracks
- Settlement and subsidence
- Liquid seepage through the cover

All final cover repair and/or reconstruction activities are to be conducted in a manner directed at maintaining the integrity of the as-built final cover system. Potential causes of damage to the cover could be from earthquake, storm water erosion, differential settlement and vandalism. Repair of cover materials should be performed consistent with the layers and procedures utilized during the original final cover construction.

Impacts to the community from final cover maintenance are similar to those discussed above for Impermeable Cover Construction (i.e. traffic, dust, noise, pollutant emissions), but less severe due to a smaller, confined repair area (i.e., damaged cover area). Impacts to established vegetative habitat will also occur caused by construction equipment traveling to the affected area and excavation of vegetation and soils to repair any damaged area.

- Landfill Gas Collection and Treatment System Maintenance - The general maintenance of the landfill gas collection and treatment system involves weekly inspections of all wells, pipelines, mainline valves, and mainline sample points. One of the principal problems is vertical well breakage or shearing of the well casing caused by settlement or subsidence of the landfill. Another problem encountered in vertical well systems is the settlement of the landfill around the well casing. If a problem is discovered with a gas well, the following maintenance procedures will be performed:

  - The damaged well will be turned off to avoid excess dilution of the gas with outside air.
  - Necessary replacement parts (i.e., valves, hoses, pipe fittings) will be installed as required.
  - The well will then be reconnected to the system and returned to service.

  Redrilling, adding or replacing a gas well will be required should a well break or otherwise become non-functional or an additional gas extraction well be needed. The procedures are as follows:

  - The vegetative soil cover material will be excavated and the synthetic barrier layer cut in the area for drilling. Once the well has been installed, a synthetic boot will be slipped over the well head and then welded to the surrounding synthetic barrier layer. The vegetative soil material will then be back filled and compacted to 90% relative density.
  - The maintenance crew will construct the proper bentonite seal and install the valve vault.
  - The crew will also connect the well to the gas collection system.

  Weekly inspection of the landfill gas collection and treatment system will impact the ability to establish vegetation as regular pedestrian access to the wells is necessary. Maintenance of the landfill gas collection and treatment system will impact established vegetation due to cover removal/excavation to repair/replace a well. Impacts to established vegetative habitat will also occur due to construction equipment traveling to and from the affected area. In addition, impacts from dust, noise and tail pipe pollutant emissions will result through the use of construction equipment. There is also a potential for odors should the buried refuse be exposed as part of well repair/replacement.

- Landfill Gas Collection and Treatment System Monitoring – The SCAQMD, which enforces air quality regulations and permits landfill gas collection and treatment systems, administers Rule 1150.1 which requires evaluation of the destruction efficiency (effectiveness of the treatment

COASTAL COMMISSION

EXHIBIT # 6
PAGE 5 OF 15

system to destroy/combust methane and other constituents of landfill gas) of equipment used to dispose of landfill gas on an annual basis. The evaluation of the efficiency will be based on flare exhaust source tests. Source tests are to be conducted in accordance with the requirements in the SCAQMD Permit to Operate which will be issued upon completion of construction of the landfill gas collection and treatment system. In addition to flare source testing, monitoring of interior and perimeter gas wells is to be performed and includes monthly measurements at each well head.

Monitoring of the landfill gas collection and treatment system will impact the ability to establish vegetation as regular pedestrian access to the wells is necessary. In addition, any corrective measures to the well field that are needed in response to flare exhaust source test or wellhead monitoring exceedances will cause additional impacts to the vegetation should any excavation of soils be necessary. In this case, impacts from dust, noise and tail pipe pollutant emissions will also result through the use of construction equipment.

- Perimeter Landfill Gas Monitoring System - Results of the perimeter gas migration monitoring program are also an indicator as to whether the landfill gas collection and treatment system is operating effectively. As required by 27 CCR, Section 20934(a), the results of regular (i.e., monthly or quarterly) landfill gas migration monitoring of the gas probes will be submitted to the LEA within 90 days of sampling unless the compliance levels of methane are exceeded in which case agency notification procedures must be followed. When gas migration monitoring indicates concentrations of methane in excess of the State regulated compliance level (greater than 5 percent methane by volume), the following steps should be taken by the owner:

  1. Take immediate steps necessary to protect public health and safety, and the environment from potential explosion due to landfill gas ignition.
  2. Confirm exceedances by re-monitoring the probe within 72 hours. If exceedances are confirmed, the LEA is notified within five days with proven measures that will be implemented for mitigation, see below. A written report is required to be submitted within ten days of compliance limit exceedance.
  3. If exceedance is confirmed through additional monitoring, increase monitoring frequency to a minimum of weekly or more frequently if appropriate. One or more of the following general techniques and procedures to control methane gas may be initiated:
     - Maintain and optimize landfill gas collection using the existing gas collection system.
     - Improve gas collection by improving landfill surface cover through remedial grading, which may disturb established vegetative habitat, to decrease air infiltration and the potential for subsurface combustion. Subsurface combustion can cause settlement due to the consumption of the refuse and ultimately damage the cover, vegetative habitat and the seasonal pools. The heat from subsurface combustion can melt the plastic liner portion of the final cover and allow water from the pools into the refuse and potentially the groundwater.
     - Install additional landfill gas extraction system components such as horizontal and/or vertical wells.
     - Install air injection systems using additional horizontal and vertical wells. Caution should be practiced to avoid air intrusion into the fill, which could cause subsurface combustion which may cause hot spots on the landfill surface. The heat from the hot spots can melt the plastic liner portion of the final cover and may impact established vegetative habitat and/or the pools.
     - Install barrier systems such as slurry walls or cement grout columns to block gas migration.
     - Other new technology alternatives that may be available at the time this procedure is implemented.

COASTAL COMMISSION

EXHIBIT # 6
PAGE 6 OF 15

- All mitigation measures, other than simple adjustments of the landfill gas collection and treatment system, will be presented to the regulatory agencies (i.e., LEA and SCAQMD) prior to implementation (installation of air injection systems, slurry walls, etc.) for approval.

Any mitigation measures needed in response to perimeter methane gas level exceedances that require construction of additional facilities will cause impacts from dust, noise and tail pipe pollutant emissions through the use of construction equipment.

SEASONAL POOLS

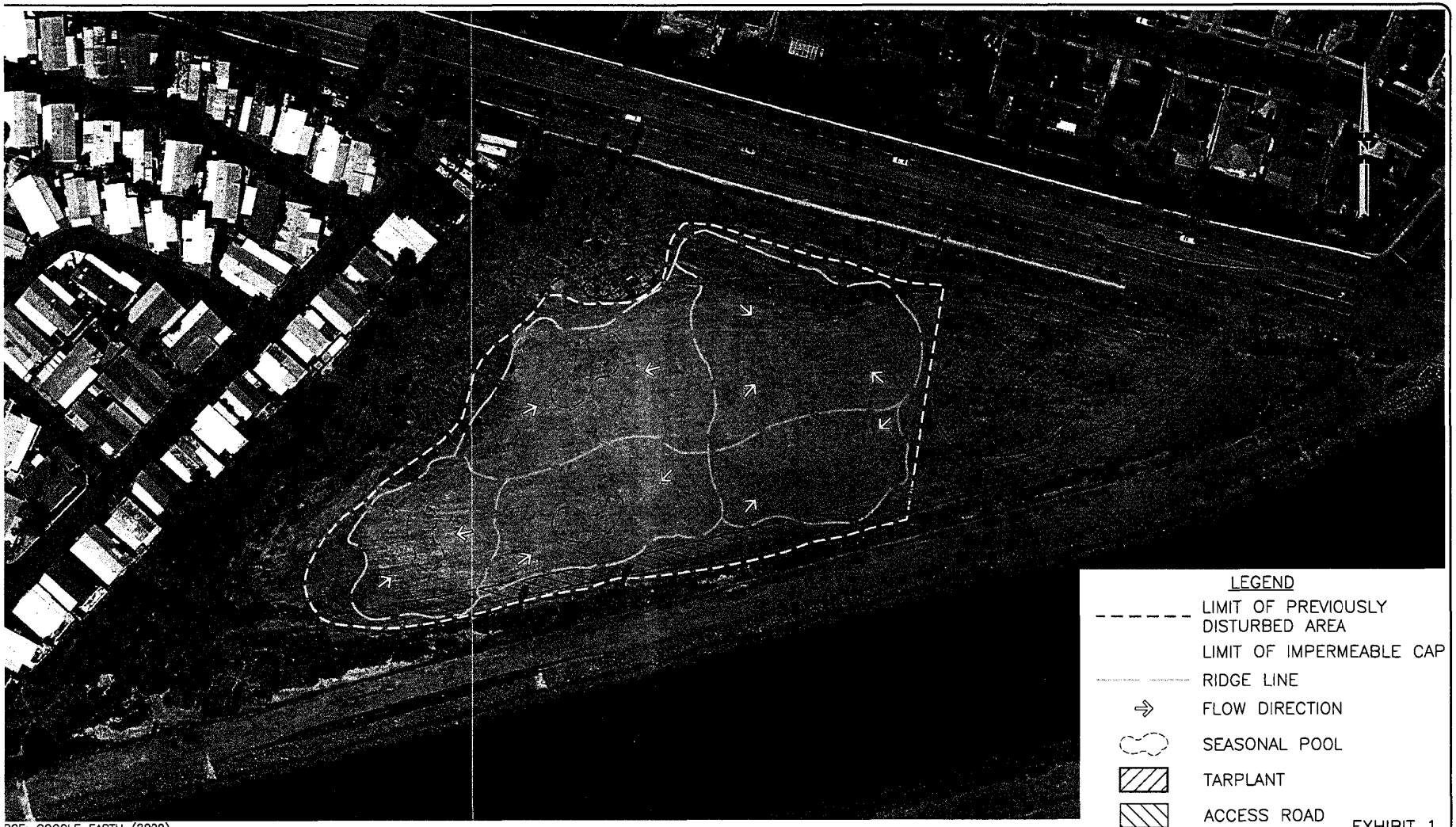
- Sub-Pool Monitoring and Corrective Action - It is anticipated that the LARWQCB would require some type of moisture monitoring beneath the seasonal pools in order to ensure the effectiveness of the liner system in preventing water intrusion into the landfill from the pools. These monitors would be checked by the owner on a quarterly basis. If moisture threshold levels are exceeded (indicating failure of the cover), the situation would be evaluated and appropriate corrective action measures taken. Most likely this would entail excavation and repair of the liner system above the moisture monitor in question thus disturbing the pool and any established vegetative habitat in the area of the leaking pool.
- Vector Control - Due the presence of standing water within the seasonal pools inspections by the owner for vectors, particularly mosquitoes (which may carry vector borne disease), would need to be routinely conducted as they could become a nuisance for nearby residents. Control measures should be instituted as necessary (e.g., If pooled water persists into the mosquito season). This would most likely involve spraying the surface of the pools with an appropriate insecticide. Insecticides may have an adverse affect on the biota inhabiting the seasonal pools and/or any established vegetative habitat.

CONCLUSION

The site in its current state is in compliance with the State requirements for closed landfills regulated by the LEA, LARWQCB and SCAQMD and would remain so with the addition of six inches of soil and non-irrigated native vegetation and habitat as initially recommended by CCC staff. None of the above environmental control and monitoring would be required because there would be no new post-closure activities that may jeopardize the integrity of the previously closed disposal site or pose a potential threat to public health and safety or the environment. The perimeter gas migration monitoring regularly performed by the LEA has noted no landfill gas migration exceedances and therefore, to date, no threats to public health and safety. Special Condition 1C requires placement of an impermeable cap which carries with it a large risk of landfill gas migration toward the adjacent residences as documented by the LEA and RWQCB letters mentioned above. The corrective action for this consists of construction and continual maintenance, monitoring and operation of a landfill gas collection and treatment system. This system does not guarantee that migration will not occur as it is based on periodically monitoring for exceedances and taking action to correct the exceedances. During the time between when an exeedance is detected and when it is corrected the residences would be at risk to landfill gas migration within their homes. This risk, as well as the impacts to the community from the construction, maintenance and operation of the landfill cover and gas collection systems described above, must be compared to the perceived benefit derived from the creation of ponds on top of the landfill.

COASTAL COMMISSION

EXHIBIT # 6
PAGE 7 OF 15



RCE: GOOGLE EARTH (2009)

EXHIBIT 1

(909) 860-7777
AN A. STIRRAT & ASSOCIATES
AND ENVIRONMENTAL ENGINEERS
VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

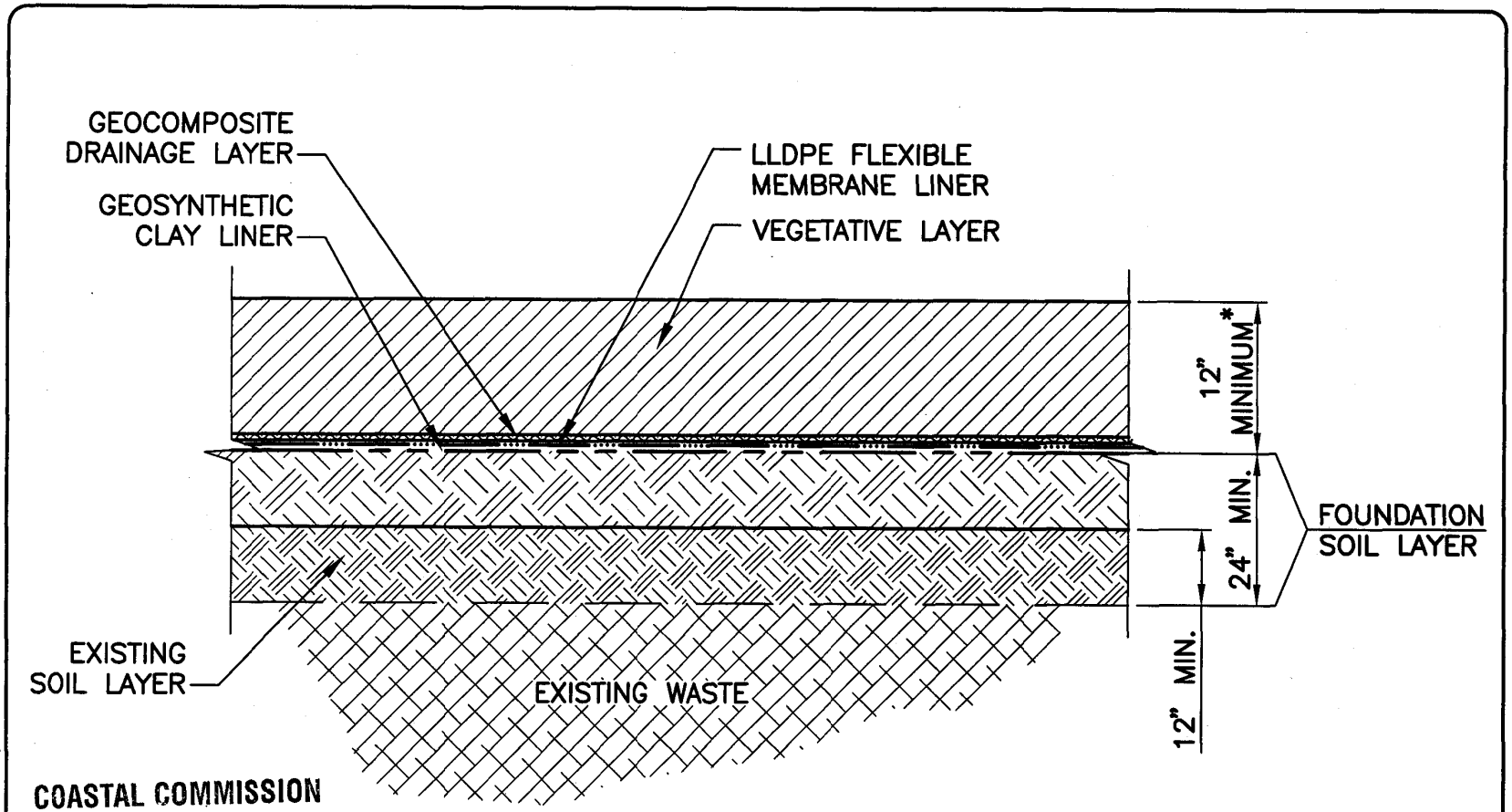
CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

CONCEPTUAL SITE PLAN WITH SEASONAL POOLS

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-040?FIG

COASTAL COMMISSION

EXHIBIT # 6
PAGE 8 OF 15



COASTAL COMMISSION

EXHIBIT # 6

PAGE 9 OF 15

* VARIES WITH SEASONAL POOLS AND INTER-POOL HUMMOCKS

EXHIBIT 2

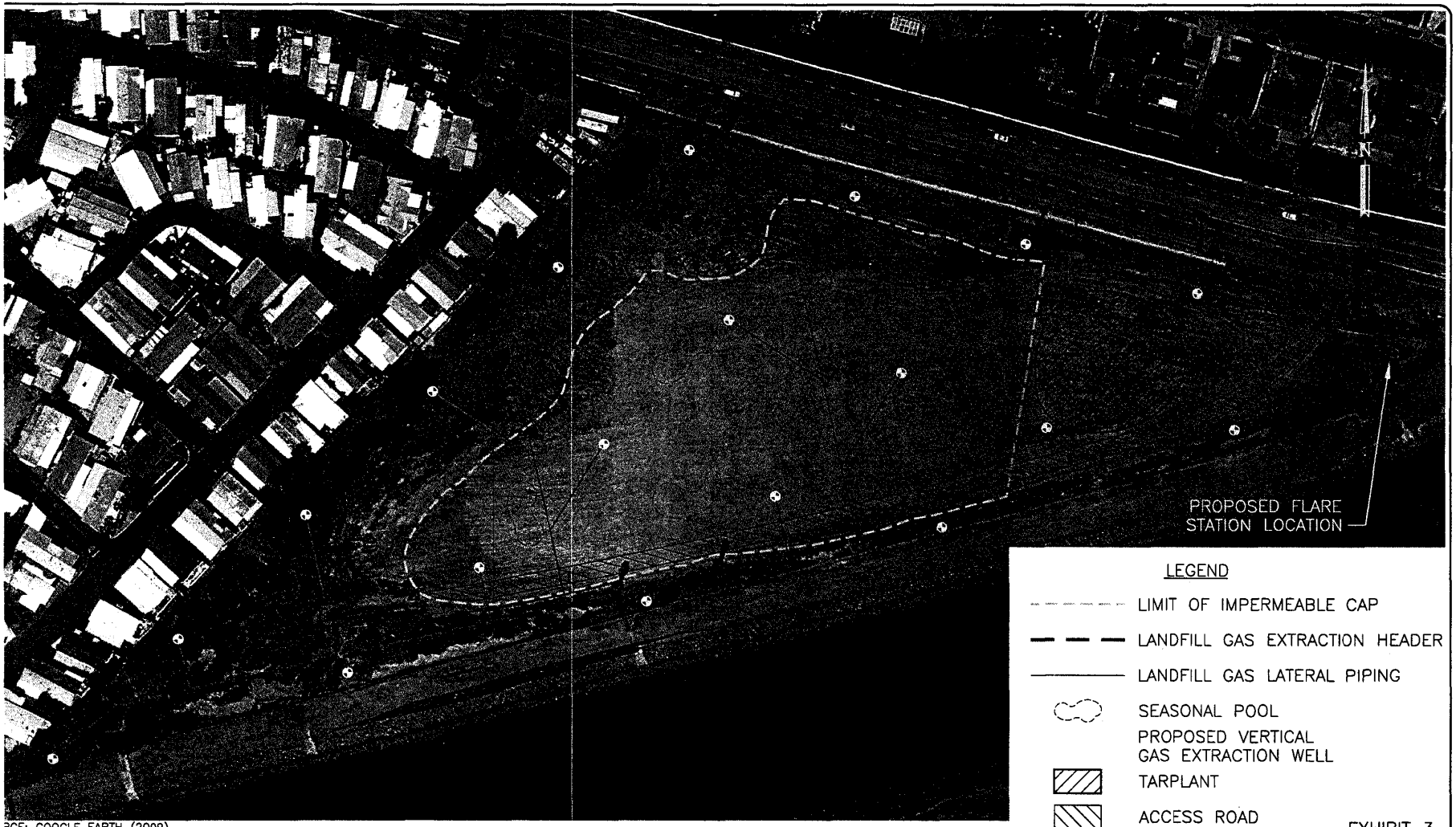
G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0408FIG

BAS (909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

PROPOSED FINAL COVER SECTION WITH SYNTHETIC IMPERMEABLE LINER

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-0408FIG



RCE: GOOGLE EARTH (2009)

EXHIBIT 3

(909) 860-7777
AN A. STIRRAT & ASSOCIATES
. AND ENVIRONMENTAL ENGINEERS
VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

CONCEPTUAL LFG COLLECTION PLAN

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-0405FIG

COASTAL COMMISSION

EXHIBIT # 6
PAGE 10 OF 15

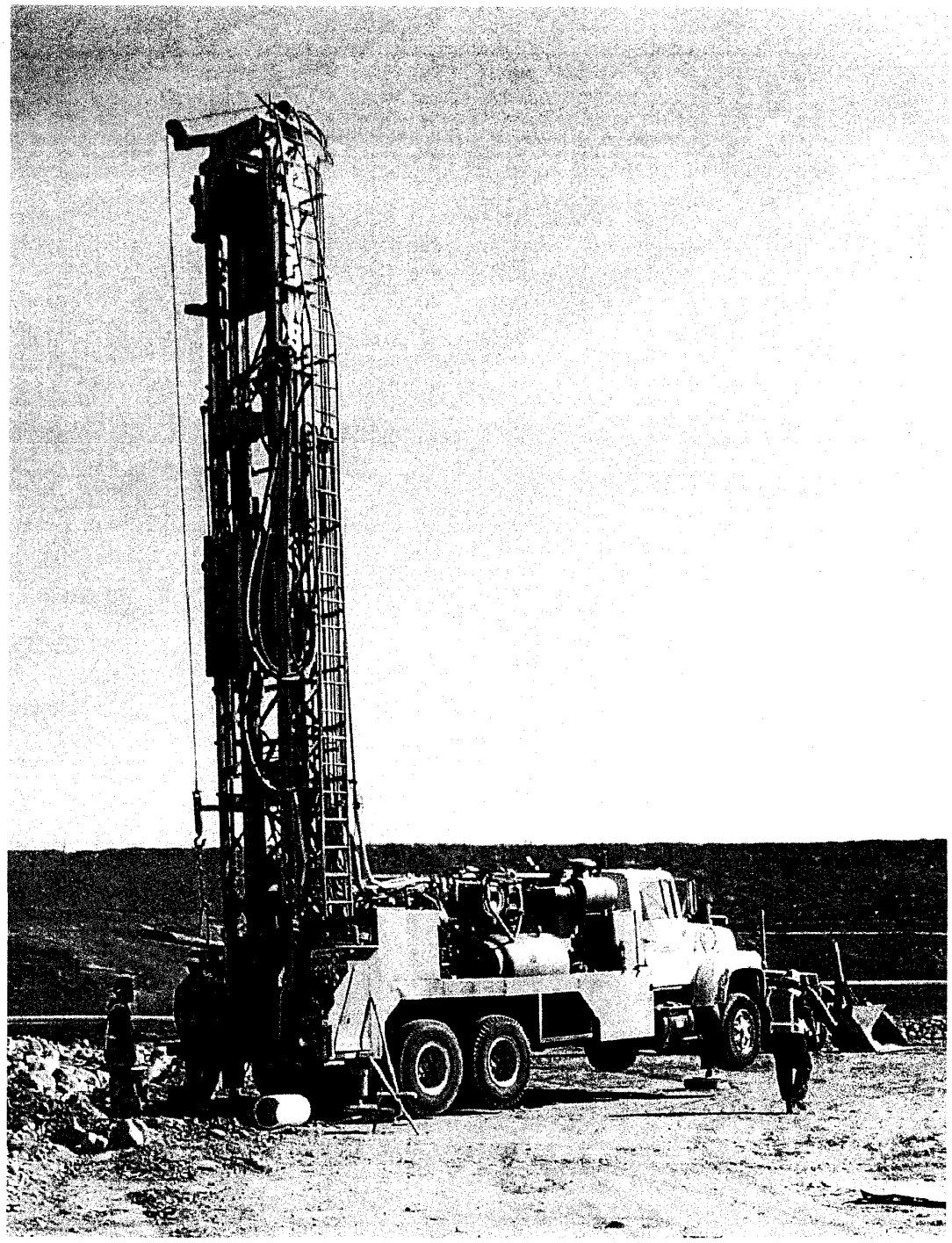


PHOTO 1

G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0409FIG

BAS (909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3
(SWIS # 19-AK-5003)

LFG EXTRACTION WELL DRILLING

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME	30-0409FIG

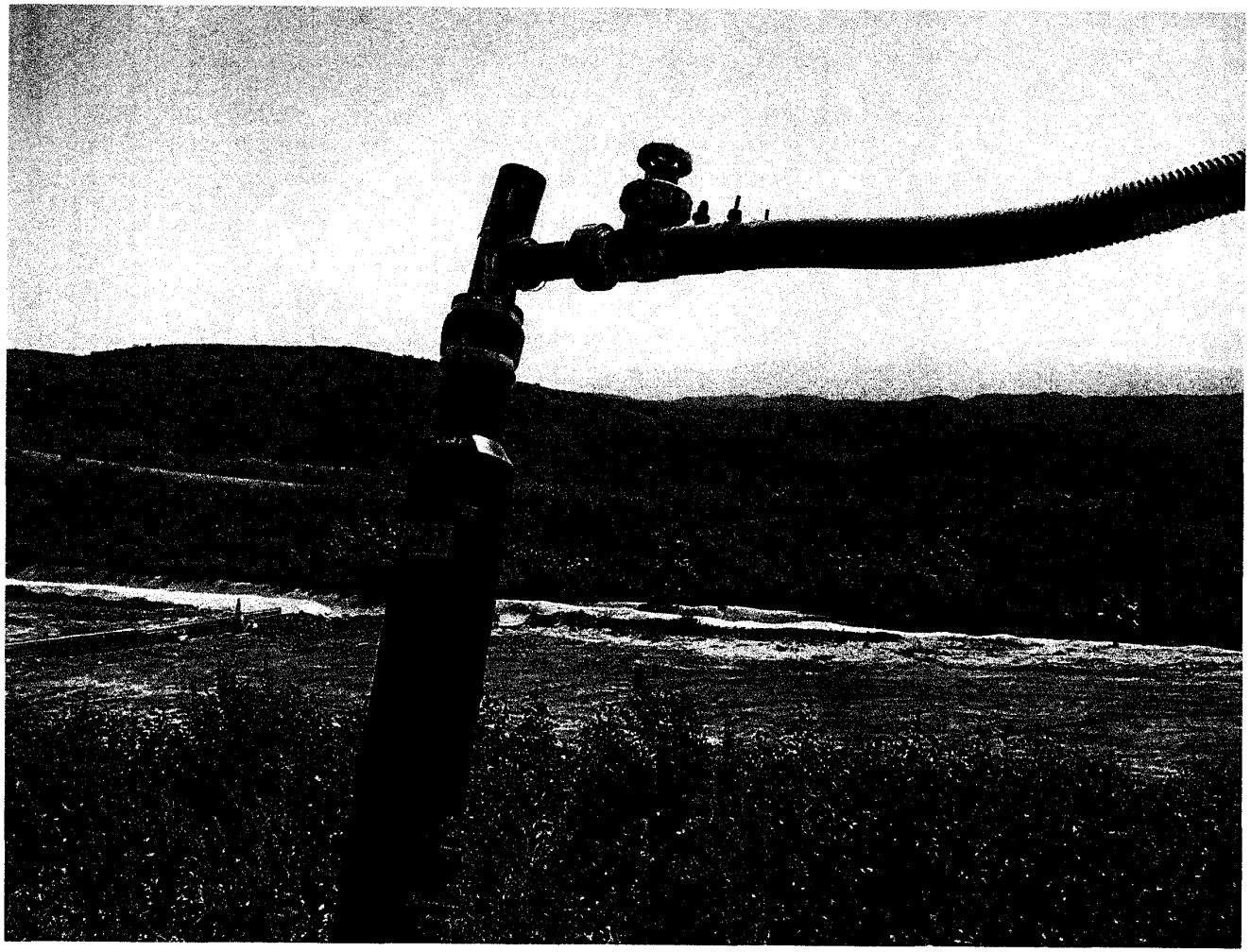


PHOTO 2

G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0410FIG

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

COASTAL COMMISSION

LFG COLLECTION WELL

EXHIBIT # 6

PAGE 12 OF 15

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-0410FIG

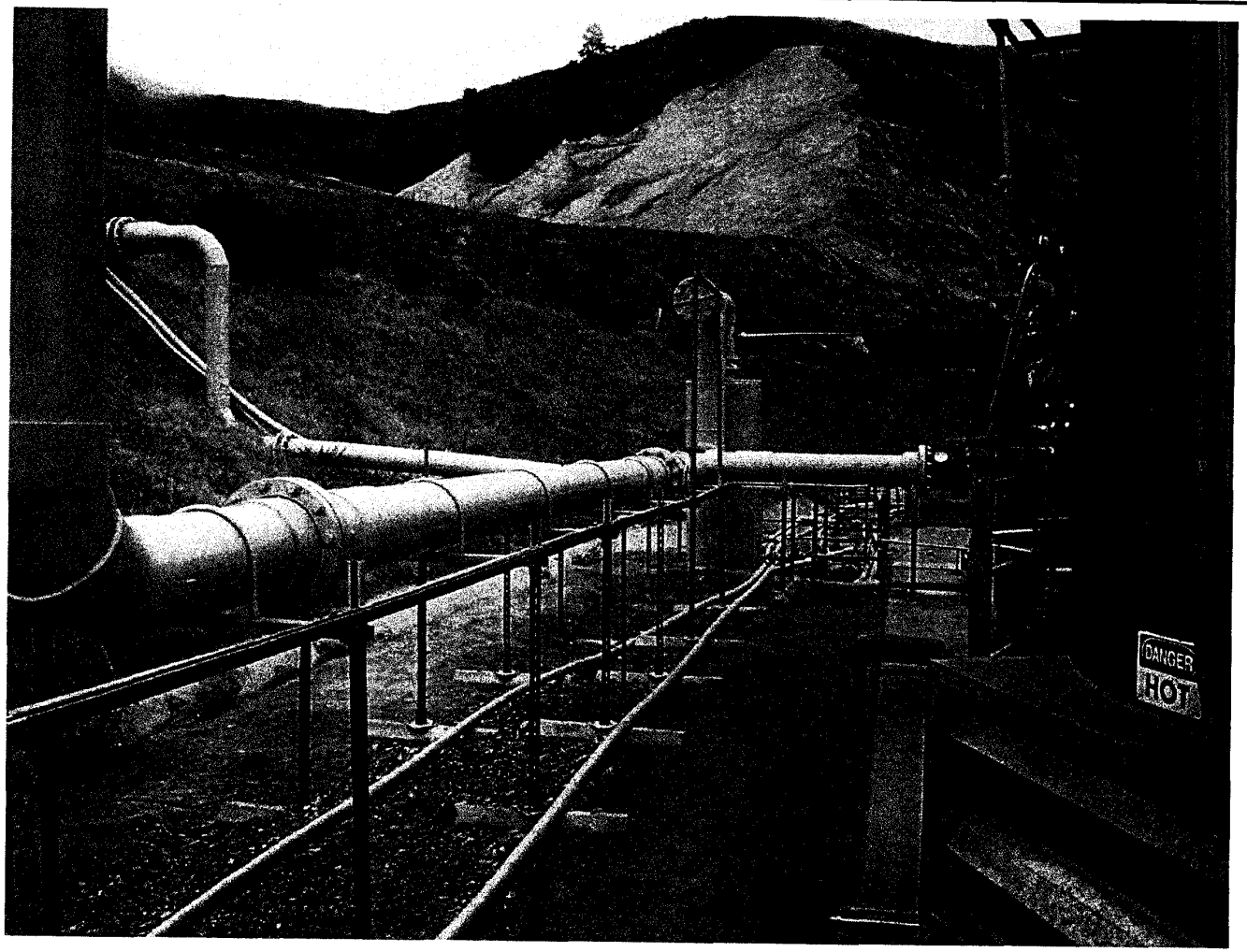


PHOTO 3

G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0411FIG

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

LFG COLLECTION PIPING

COASTAL COMMISSION
EXHIBIT # 6
PAGE 13 OF 15

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-0411FIG

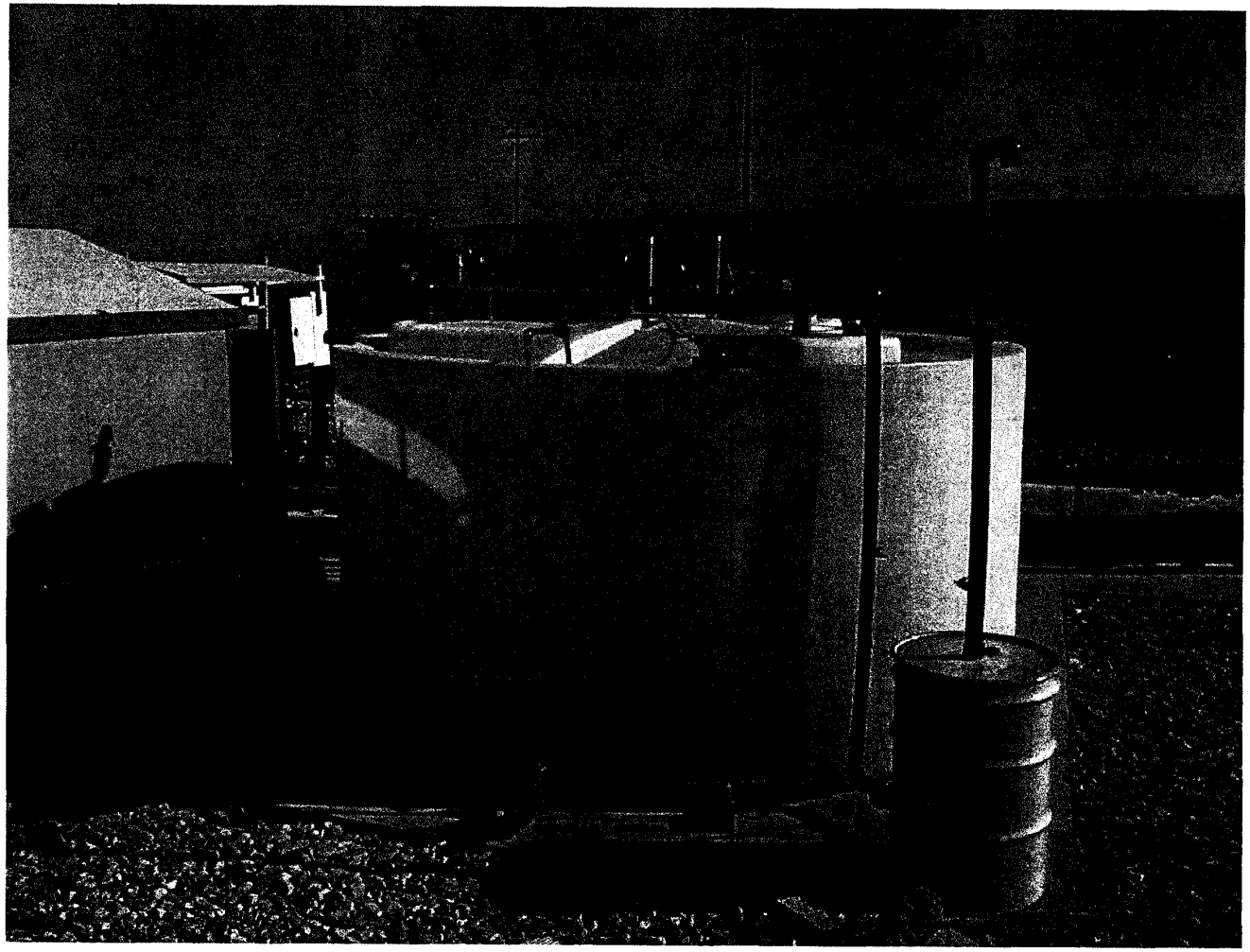


PHOTO 4

G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0412FIG

BAS
(909) 860-7777
BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

LFG CONDENSATE TANK

JOB NO.	2011.0021
DATE	8/2012
DRAWN BY	J.M.L.
FILE NAME:	30-0412FIG

COASTAL COMMISSION

EXHIBIT # 6

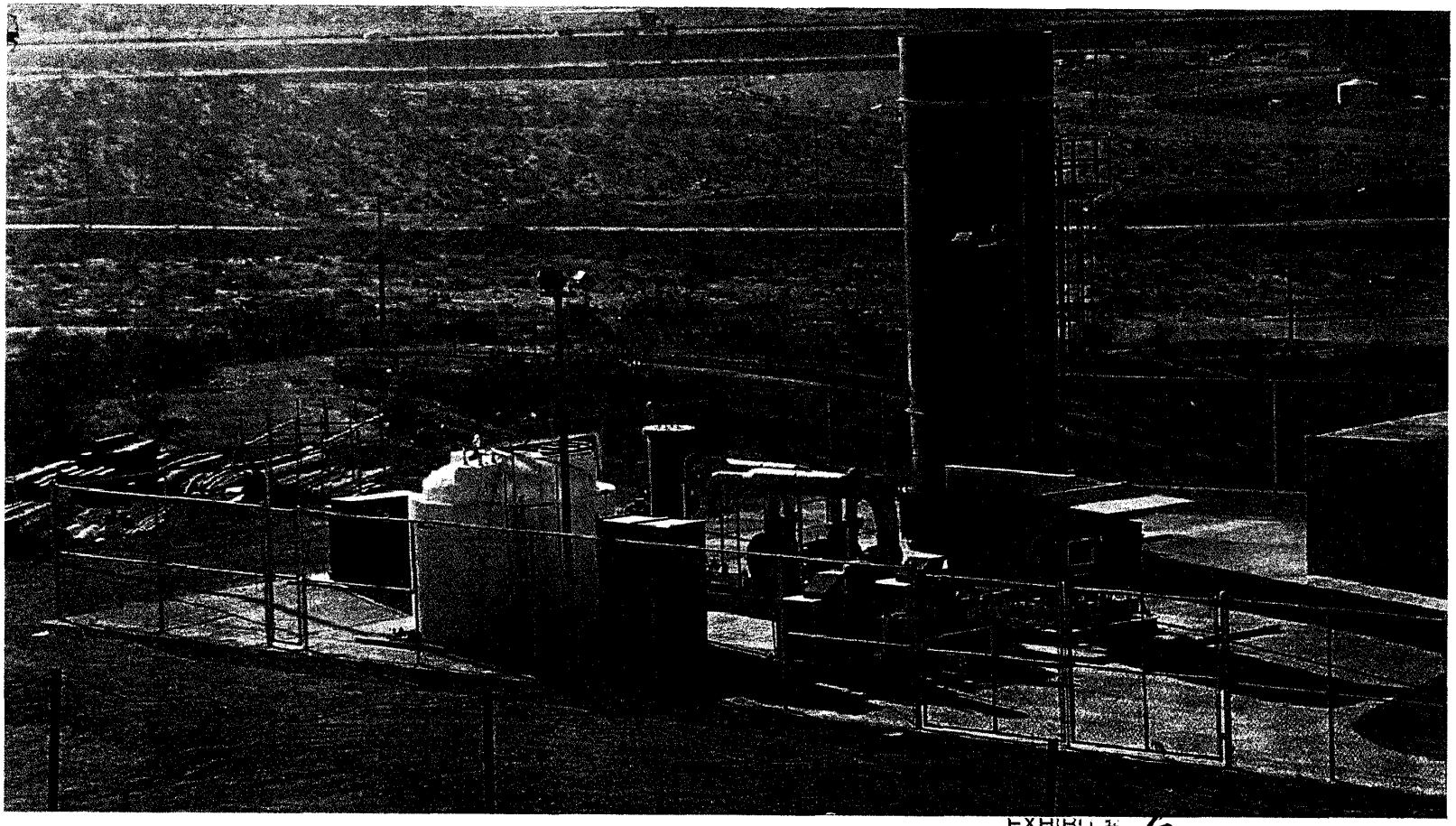


EXHIBIT # 6

PAGE 15 OF 15

PHOTO 5

G:\DWG\HITCHCOCK PROPERTY\FIGURES\PROJECT DESCRIPTION\30-0413FIG

BAS

(909) 860-7777

BRYAN A. STIRRAT & ASSOCIATES
CIVIL AND ENVIRONMENTAL ENGINEERS
1360 VALLEY VISTA DRIVE DIAMOND BAR, CA 91765

CITY DUMP & SALVAGE NO. 1 AND NO. 3 (SWIS # 19-AK-5003)

LFG FLARE CONTROL SYSTEM

JOB NO.	2011.0021
DATE	01-2012
DRAWN BY	J.M.L.
FILE NAME:	30-0413FIG

LSA

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614
949.553.0666 TEL
949.553.8076 FAX

BERKELEY
CARLSBAD
FORT COLLINS
FRESNO
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROCKLIN
SAN LUIS OBISPO
SOUTH SAN FRANCISC

February 6, 2012

Ms. Tamar C. Stein
Cox Castle and Nicholson, LLP
2049 Century Park East, Suite 2800
Los Angeles, CA 90067

Subject: Review of Potential Effects of Seasonal Pond/Cover System on Biological Resources, 6400 E. Loynes Drive, Long Beach, CA

Dear Ms. Stein:

Per your request, LSA Associates, Inc. (LSA) is providing this assessment of the potential effects of the conceptual plan for seasonal pools and the associated cover system that has been developed by Bryan A. Stirrat Associates (BAS) for the subject parcel.

LSA worked with Paul Willman of BAS to develop the parameters for the pools themselves (e.g., size, quantity, depth, watershed area). With the conceptual design developed by BAS, the pools could likely be successfully established, and have the general appearance of natural vernal pools. However, based on the landfill cover and closure requirements as described in the conceptual plan, the underlying substrate would be completely artificial; thus, the pools would not provide all of the functions of natural vernal pools. In particular, biogeochemical function, which is highly dependent on soil structure, hydrology, and vegetation would be considerably less than in a natural system. Similarly, maintenance of a plant community that is characteristic of natural vernal pools is also highly dependent on soil structure. When this is considered along with the highly disturbed nature of the surrounding area, the chances of maintaining a characteristic vernal pool community are very low. Of course, faunal communities are in turn dependent on vegetation to some extent, and this too would likely be depauperate.

Beyond the pools themselves, it appears that implementation of the conceptual plan would require removal of all of the existing vegetation within the area of the membranes and other liners, approximately 3.5 acres, whereas the restoration plans prepared by LSA called for the retention and protection of existing native vegetation during the restoration process. While much of the vegetation on the site is nonnative, there is native vegetation present, including scattered occurrences of dozens of southern tarplant (*Centromadia parryi* ssp. *australis*), which is considered endangered by the California Native Plant Society.

In addition to the immediate removal of all vegetation within the limits of the impermeable cap, implementation of the conceptual plan would apparently require an extensive array of gas extraction wells, headers, piping, and a flare/treatment facility. Installation of this system would also require extensive disturbance of the existing vegetation. Moreover, it would permanently preclude the development of native vegetation where the aboveground facilities occur (estimated 18,000 square feet), and the ongoing inspection and maintenance of the equipment would continually disturb both the native vegetation and any wildlife that may use it. LSA has first-hand experience with similar

COASTAL COMMISSION
A-5-LOB-10-015-A1

circumstances and has worked on several large closed landfills where native habitat has been restored for the benefit of special-status species. On several occasions, LSA has encountered situations where emergency maintenance requirements conflicted with nesting birds. In these instances, LSA has been able to judiciously avoid impacts to nesting birds or implement stop-gap measures until birds have completed nesting. However, as noted, these were large landfill areas that were not adjacent to existing residences. In the case of the smaller Loynes Drive parcel, given the proximity of existing residences and the relative density of gas control equipment, the potential for irreconcilable conflict between public safety and resource protection would appear to be much higher.

In conclusion, LSA believes that the most recent Habitat Restoration and Enhancement Plan (prepared by LSA) would be more effective and valuable from a resource management perspective than anything that could be accomplished in conjunction with the conceptual final cover design.

Sincerely,

LSA ASSOCIATES, INC.

Art Homrighausen

Art Homrighausen
Principal

COASTAL COMMISSION

EXHIBIT # 7
PAGE 2 OF 2

HABITAT REVEGETATION AND MONITORING PLAN

LOYNES DRIVE PROJECT

LONG BEACH, CALIFORNIA

Submitted to:

Cox, Castle, & Nicholson, LLP
2049 Century Park East, 28th Floor
Los Angeles, California 90067

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

LSA Project No. CCN1001

LSA

September 2011

COASTAL COMMISSION
A-5-LOB-10-015-A1
EXHIBIT # 8
PAGE 1 OF 21

TABLE OF CONTENTS

FIGURES

TABLES

COASTAL COMMISSION

EXHIBIT # 8
PAGE 2 OF 21

INTRODUCTION

This Habitat Revegetation and Monitoring Plan (HRMP) for the Loynes Drive Project has been prepared to support the project's California Coastal Commission (CCC) Coastal Development Permit (CDP) amendment application package.

The project site is located at 6400 E. Loynes Drive, fronting the Los Cerritos Channel in the City of Long Beach (City), California, as shown on the United States Geological Survey (USGS) *Los Alamitos, California* 7.5-minute quadrangle (Figure 1). The site is within the Coastal Zone.

The property is part of an old landfill that was closed prior to 1961 and covered with soil. In March 2009, the landowner cleared a portion of the property without CCC authorization. In April 2009, the CCC issued an emergency permit so the landowner could mitigate for elevated methane levels resulting from the unauthorized clearing. Per the emergency permit, the landowner placed a 6-inch-thick soil cap over approximately 50,000 square feet (sf) (1.15 acres [ac]) of the property. The City subsequently issued an after-the-fact CDP. The CDP was appealed to the CCC, which resulted in a substantial issue finding. The CCC staff issued a report on May 26, 2010, for a de novo CDP action. This HRMP also complies with the Special Conditions set forth within the CCC Staff Report: Revised Findings; however, it has been modified to reflect the results of consultation with the landfill closure agencies. The staff report recommended the preparation of an HRMP to be included as a condition of the CCC CDP. This HRMP has been prepared to provide direction for the remediation of the portion of the property (5.93 ac) impacted by the unauthorized clearing activities and subsequent soil placement. The 5.93 ac revegetation area is shown on Figure 2.

The current vegetation community within the proposed 5.93 ac project site is ruderal grassland. The term "ruderal" refers to weedy and/or early successional species, often nonnative grasses, that readily colonize disturbed ground. Dominant species on site include small-flowered iceplant (*Mesembryanthemum nodiflorum*), five-hook bassia (*Bassia hyssopifolia*), shortpod mustard (*Hirschfeldia incana*), garland chrysanthemum (*Chrysanthemum coronarium*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), wild oats (*Avena* sp.), and rabbitfoot grass (*Polypogon monspeliensis*).

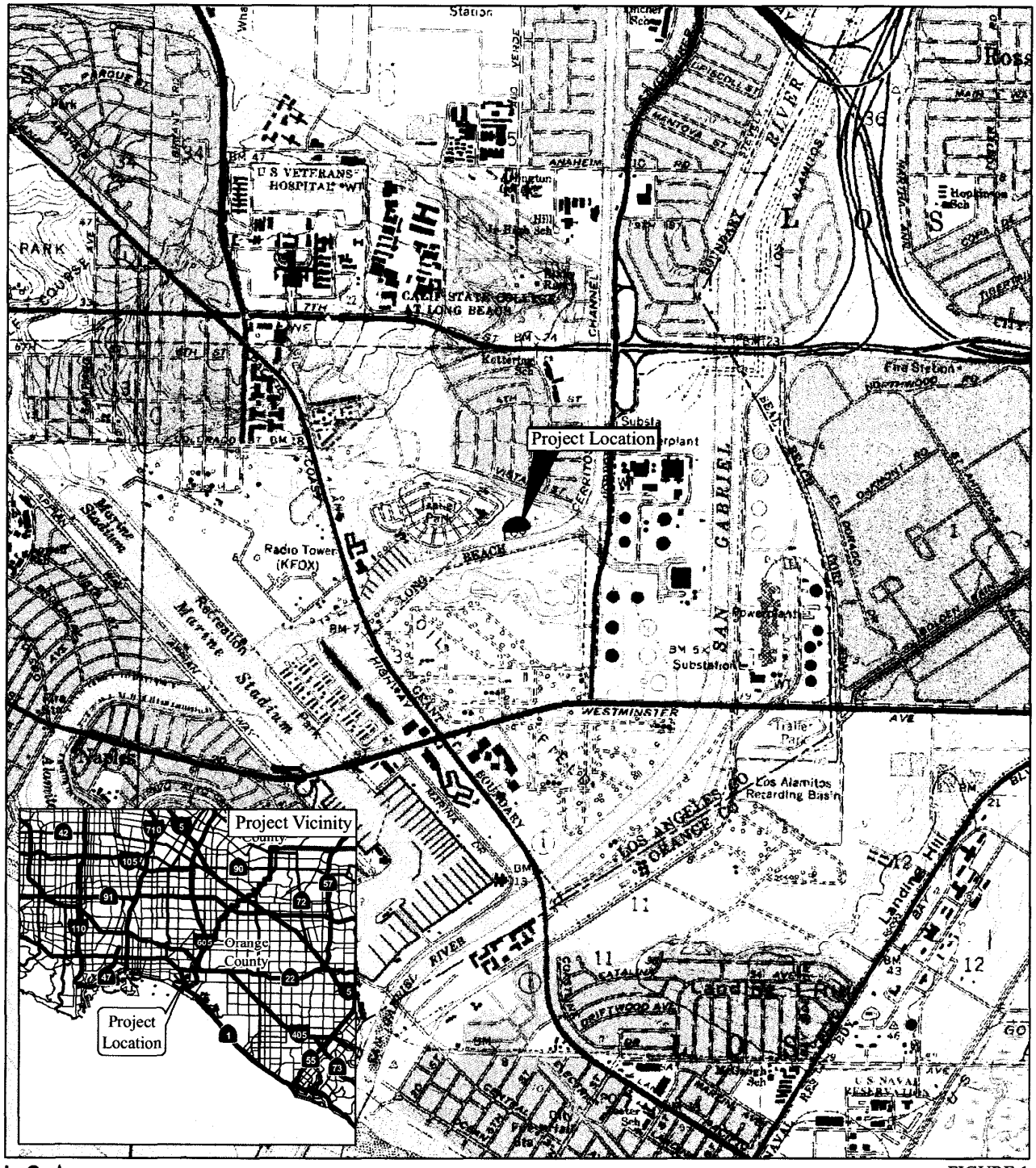
SUPERVISION/RESPONSIBILITIES

Restoration Ecologist

The Restoration Ecologist is the landowner's representative in the field and will be responsible for monitoring the revegetation area according to the guidelines set forth in these specifications. The qualified Restoration Ecologist shall be familiar with all aspects of native revegetation. The Restoration Ecologist must be approved by the CCC Executive Director. These duties will include overseeing all aspects of the work performed by the Restoration Contractor. In addition, the Restoration Ecologist will have the responsibility of documenting and reporting the progress of the native plant community to the landowner and the CCC, as well as making recommendations to achieve the goals stated above. If necessary, the Restoration Ecologist may also prescribe remedial measures.

COASTAL COMMISSION

EXHIBIT # 8
PAGE 3 OF 21



LSA

LEGEND

Project Location

FIGURE 1

EXHIBIT # 8

PAGE 4 OF 21

0 1000 2000

FEET

SOURCE: USGS 7.5' QUAD - LOS ALAMITOS (81)

I:\ccn1001\GIS\Fig1.mxd (8/17/2010)

Loynes Drive Revegetation

Project Location Map

LSA

LEGEND

Revegetation Area (5.93 ac)

Southern Tarplant Individuals

Aggregation of High Density Southern Tarplant (0.44 ac)

0 75 150
FEET

SOURCE: Bing Maps (2009)

I:\ccn1001\GIS\RevegSitePlan.mxd (9/12/2011)

FIGURE 2

Loynes Drive Revegetation
Site Plan

COASTAL COMMISSION

EXHIBIT # 8

PAGE 5 OF 21

Restoration Contractor

Qualifications and Responsibilities of the Restoration Contractor. The Restoration Contractor responsible for the native revegetation shall have successfully completed (with agency acceptance) a minimum of three revegetation projects (installation and maintenance) involving establishment of native vegetation that are comparable to this project in terms of size and species composition. The Restoration Contractor shall provide at least one English-speaking person who is experienced with all aspects of native revegetation and is thoroughly familiar with all aspects of the project, including the equipment and materials being utilized or installed and the best methods for their installation and application. This person (job foreman) shall be present at all times during the execution of this work and shall direct and supervise all work performed as specified herein. The job foreman shall be on site no less than 90 percent of the time that crews are working. All prospective Restoration Contractors shall provide the resumes of the foreman and crew leader, who must meet the experience criteria listed above and whose replacements are subject to approval. Contractors who do not meet these qualifications will be disqualified from the bidding process. The Restoration Contractor will ensure that sufficient firefighting equipment (e.g., extinguishers, shovels) is available on site to help minimize the chance of human-caused wildfires.

SCOPE OF WORK

The Restoration Contractor shall furnish all labor and materials (including water) to execute this work as indicated below and as necessary to complete the contract. This includes, but is not limited to, the following:

- Performing a grow/kill regimen of the revegetated area and associated buffer prior to installation of plants and seed
- Installation and maintenance throughout the duration of the revegetation contract of any erosion control measures that may be installed within the revegetation area
- Installation, maintenance throughout the duration of the revegetation contract, and removal of the temporary irrigation system
- Hydroseeding of 326.69 pounds (lbs) of seed and 60 lbs/ac of mycorrhizal inoculum (329.40 lbs) within 5.49 ac of the revegetation area (seed and plants will not be installed within the high-density southern tarplant areas)
- Installation and guarantee of 75 percent survival of 4,116 container plants for 120 days following installation
- Maintenance of the revegetation site for 5 years following installation of the hydroseed or until the performance standards are achieved

INSPECTIONS

Preinstallation and postinstallation inspections by the Restoration Ecologist shall be requested by the Restoration Contractor to ensure that all work is completed in compliance with these specifications. Inspections shall be requested at least 48 hours prior to the time inspection is required. Inspection by the Restoration Ecologist shall be required for each phase of work listed below. In addition, the

COASTAL COMMISSION

Restoration Ecologist shall inspect the site more frequently, if necessary, to ensure that it is continuously in compliance with these specifications throughout the maintenance period.

Inspection shall be required for the following phases of work:

- During the grow/kill regimen
- During the rinsing of the hydroseed tank, prior to the preparation of seed slurry to be applied
- During the application of hydroseed
- During marking of container plant locations
- Upon delivery of the container plants
- Following container plant installation
- At the end of the 120-day establishment period
- Monthly following installation and through the 120-day establishment period and at least quarterly thereafter
- Following removal of the temporary irrigation system

PROJECT SCHEDULE

Work shall commence following notice to proceed and shall adhere to the following schedule.

- All erosion control measures and the temporary irrigation system shall be installed prior to initiation of the grow/kill regimen.
- The grow/kill regimen will begin before October of the year in which these actions take place and cease one month prior to the installation of the hydroseed.
- Hydroseeding will be performed in the fall following the completion of the grow/kill regimen and will be completed no later than December 31.
- The Restoration Contractor must guarantee 75 percent survival of the container plants during the 120-day establishment period following installation.
- Container plants will be installed in the spring following installation of the hydroseed.
- The Restoration Contractor shall maintain the revegetation area for 5 years or until the performance standards are met.
- The Restoration Ecologist shall prepare progress reports in the form of field memorandums for each inspection, and an annual report will be submitted by June 30 of each year until the performance standards are achieved.
- The irrigation system shall be removed once the performance standards have been achieved or at the discretion of the Restoration Ecologist.

COASTAL COMMISSION

SITE PREPARATION

Soil Import

If necessary, soil will be imported onto the site in order to create a topsoil layer or cap that is at least 6 inches thick across the site. The storage or stockpiling of soil, silt, and other organic or earthen materials shall not occur where such materials could pass into coastal waters. No grading or scraping of existing soil is permitted. No heavy machinery may be used. Smaller mechanized vehicles (e.g. Bobcats) may be used to transport heavy loads between paved roads and the work areas.

Grow/Kill Regimen

Grow/kill cycles shall be undertaken by the Restoration Contractor within the proposed revegetation area and within a 10-foot (ft) buffer zone surrounding the proposed revegetation area (Figure 2). Grow/kill cycles will not be performed within areas where southern tarplant (*Centromadia parryi* ssp. *australis*) or other native vegetation occurs. Prior to the commencement of the grow/kill regimen, the Restoration Ecologist will demarcate all areas of existing native vegetation. The Restoration Ecologist will determine the commencement and completion deadlines for grow/kill cycles throughout the year.

"Grow/kill" is a process of depleting the seed bank in the soil by promoting the growth of plants (through irrigation if rainfall is not sufficient) and then killing the seedlings with herbicide before they set seed. Unless there is adequate natural rainfall (as determined by the Restoration Ecologist), the Restoration Contractor shall begin a grow/kill cycle by irrigating the entire revegetation site, either by using a water truck or by using the temporary irrigation system. Excess irrigation runoff shall not be allowed, and the Restoration Contractor shall be responsible for the source and expense of the water needed for this task. The site shall be irrigated with sufficient water to initiate and promote vegetative growth. Once the vegetative growth reaches a height of approximately 3 inches, all vegetation on the revegetation site shall be herbicide treated in accordance with the "Herbicide Treatment Guidelines" below. Any plants that germinate within the revegetation areas during this phase shall be removed before they produce flowers, set seed, or reach a height of 6 inches, whichever occurs first. Following each grow/kill cycle, all of the thatch will be removed and legally disposed of off site. Grow/kill cycles will be conducted continuously throughout the summer and fall prior to installation of the hydroseed.

The Restoration Ecologist will visit the areas periodically to determine when grow/kill events should occur and will notify the Restoration Contractor when irrigation or herbicide treatment are necessary. Timing is crucial in the implementation of grow/kill cycles; thus, upon receiving notification, the Restoration Contractor will have 5 working days to complete the specified task. Though the Restoration Ecologist will be making recommendations regarding timing of herbicide application and irrigation, throughout this period it will be the responsibility of the Restoration Contractor to monitor the progress of the weeds on site and to remove or spray weeds before they set seed.

Erosion Control

In the case of heavy rainfall conditions, nonvegetative erosion control measures (e.g., sandbags, rice straw wattles) may need to be installed within the revegetation area. Only sandbags and straw

COASTAL COMMISSION

wattles are to be used within the revegetation area. Erosion control measures shall be installed prior to the initiation of the grow/kill regimen.

The Restoration Contractor shall be responsible for all erosion control for the entire term of the contract. Erosion control shall include, but is not limited to: (1) continuation of nonvegetative erosion control, as necessary; and (2) repair of damaged plants, rutting, and washouts. The Restoration Contractor is responsible for the success of the restored plant community; therefore, it is to the Restoration Contractor's advantage to use as many erosion control measures as necessary to prevent erosion damage. All rice straw wattles will be installed along slope contours in accordance with the manufacturer's specifications. All rice straw wattles shall be manufactured from straw that is wrapped in biodegradable, natural fiber netting a minimum of 8 inches in diameter and can be purchased from California Straw Works ([916] 453-1456) or an approved equivalent.

Irrigation

To facilitate the grow/kill regimen, prevent loss of the plantings during periods of dry conditions, and help establish the newly installed native vegetation, a temporary irrigation system subject to approval by the Restoration Ecologist shall be installed by the Restoration Contractor. Established native vegetation does not require irrigation under normal conditions, so supplemental irrigation will be applied sparingly and used primarily to establish the native plant community. The Restoration Contractor shall be responsible for the inspection, maintenance, and removal of the irrigation system. All water used for irrigation shall be free of impurities, excess chlorine, and salts. Irrigation shall be applied in a manner that does not allow runoff to leave the project site.

REVEGETATION INSTALLATION

The Restoration Contractor shall supply all materials necessary to complete the following work in accordance with these specifications. All materials are subject to approval by the Restoration Ecologist. Revegetation shall take place as soon as possible following the site preparation activities described above. Revegetation shall commence within 90 days from the CCC's approval of the CDP, or within such additional time as the Executive Director may grant for good cause. It is likely that a delay in installation will be requested in order to perform the aforementioned grow/kill regimen and assure that all native species are installed at the optimal time (i.e., fall/winter). All planting and seeding shall be completed no later than 6 weeks from the commencement of planting.

Endo (Arbuscular) Mycorrhizal Inoculum

In order to promote the establishment and growth of the installed native vegetation, mycorrhizal inoculation of the soil will be conducted concomitantly with hydroseeding. Endo (arbuscular) mycorrhizal inoculum shall be provided by the Restoration Contractor at a rate of 60 lbs/ac. The inoculum shall contain a minimum of 60,000 propagules per pound and shall consist of spores, mycelium, and mycorrhizal root fragments in a solid carrier suitable for hydroseeding. The carrier shall be the material in which the inoculum was originally produced and may include organic materials, vermiculite, perlite, calcined clay, and other approved materials consistent with mechanical application and good plant growth. This inoculum shall carry a supplier's guarantee of the number of

COASTAL COMMISSION

propagules per unit of weight or volume of bulk material. If the supplier claims more than one species, the label shall include a guarantee for each species of mycorrhizal fungus claimed. Using mycorrhizae inoculum that contains high concentrations of humus and humic acids reduces the potency of the inoculum (SERCAL, Mycorrhizae Workshop 2002). The Restoration Contractor shall supply a product that contains only mycorrhizae, roots, and growing medium such as is found in products sold by S&S Seeds ([805] 684-0436), Reforestation Technologies International ([800] 784-4769), or Bionet, LLC ([877] 777-8327). All alternative sources shall be approved by the Restoration Ecologist.

Seed

A total of 5.49 ac of the revegetation area will be hydroseeded. Seed will not be installed within the 10 ft buffer zone or within the high-density southern tarplant areas. The species to be included for the revegetation area (Table A) were selected based on the native species found within the coastal region of southern Los Angeles and northern Orange Counties. With the exception of species that are only obtainable through commercial sources, all seed shall be collected from areas within a 20-mile (mi) radius of the project site and from a similar microclimatic regime, if available. All seed substitution decisions or alternative genetic sources shall be approved by the Restoration Ecologist. Prior to sowing, a list of all species to be installed (including quantities and genetic sources) will be provided to the CCC Executive Director. Upon receipt, the seed must be stored in a manner that ensures its viability until it is sown. All seed must be sown within 48 hours of being delivered.

Table A: Revegetation Seed List

Scientific Name	Common Name	Lbs/Acre	Lbs Required (5.49 acre)
Ambrosia acanthicarpa	Sand bur	1.50	8.24
Amsinckia menziesii	Common fiddleneck	1.25	6.86
Bromus carinatus	California brome grass	5.75	31.57
Camissonia bistorta	California suncup	0.25	1.37
Camissonia cheiranthifolia	Beach evening primrose	0.25	1.37
Croton californicus	California croton	4.50	24.71
Croton setigerus	Doveweed	3.00	16.47
Deinandra fasciculata	Fascicled tarplant	1.50	8.24
Distichlis spicata	Salt grass	1.00	5.49
Eriophyllum confertiflorum	Long-stemmed golden yarrow	0.25	1.37
Eschscholzia californica	California poppy	0.50	2.75
Gnaphalium bicolor	Bicolored cudweed	0.25	1.37
Gnaphalium californicum	California everlasting	0.25	1.37
Heliotropium curassavicum	Alkali heliotrope	2.25	12.35
Hordeum brachyantherum	Meadow barley	6.00	32.94
Lasthenia californica	Coastal goldfields	0.25	1.37
Lepidium nitidum	Shining peppergrass	0.25	1.37
Leymus condensatus	Giant wild-rye	0.75	4.12
Leymus triticoides	Beardless wild-rye	0.75	4.12

COASTAL COMMISSION

Table A: Revegetation Seed List

Scientific Name	Common Name	Lbs/Acre	Lbs Required (5.49 acre)
Lotus purshianus	Spanish lotus	3.00	16.47
Lotus salsuginosus	Alkali lotus	1.50	8.24
Lupinus bicolor	Miniature lupine	1.50	8.24
Lupinus succulentus	Arroyo lupine	4.00	21.96
Malacothrix saxatilis	Cliff malacothrix	1.00	5.49
Melica imperfecta	Small-flowered melic grass	1.75	9.61
Nassella lepida	Foothill needlegrass	2.00	10.98
Nassella pulchra	Purple needlegrass	5.00	27.45
Phacelia distans	Common phacelia	0.75	4.12
Plantago erecta	California plantain	2.00	10.98
Poa secunda	Perennial bluegrass	0.75	4.12
Sisyrinchium bellum	California blue-eyed grass	1.50	8.24
Solanum douglasii	Douglas' nightshade	2.25	12.35
Trifolium willdenovii	Valley clover	1.50	8.24
Verbena lasiostachys	Western verbena	0.50	2.75
Total		**59.50**	**326.69**

lbs/acre = pounds per acre

Color-Coded Wire Pin Flags

Color-coded wire pin flags shall be provided by the Restoration Contractor for marking container plant locations. Each species shall have a different color (or combination of colors). All pin flags must be new. The locations of areas where container plants will be installed must be marked with wire pin flags prior to planting. Special attention must be paid when placing the flags, taking into consideration the microclimatic requirements of each species. The layout must be approved by the Restoration Ecologist. All of the pin flags shall be separated by species prior to coordination with the Restoration Ecologist in the field.

Container Plants

Container plants in the form of plugs shall be installed within 5.49 ac of the revegetation area in the spring following installation of the hydroseed. Container plants will be installed after the seed has germinated and established itself. Container plants will be installed within areas that are devoid of native perennial species. Container plants will not be installed within the 10 ft buffer zone. All container plants that have mycorrhizal associations shall be inoculated with mycorrhizal fungi at the nursery. The genetic source of all container plants will be within 20 mi of the project site, if possible, and of similar microclimatic regime. All plant substitution decisions or alternative genetic sources shall be approved by the Restoration Ecologist. Prior to planting, a list of all species to be installed (including quantities and genetic sources) will be provided to the CCC Executive Director. A representative sample of all container plants must be inspected and approved by the Restoration Ecologist at the time of delivery. All plants shall be healthy, be in good condition, and have a good

COASTAL COMMISSION

root-to-shoot ratio (approximately 2:1). The roots shall be young roots that fill the container and must not be wrapped around the sides of the container. Any plants that, in the opinion of the Restoration Ecologist, are incapable of surviving for 120 days following proper installation techniques will be returned to the nursery to either be replaced or regrown for installation during the following growing season. Upon receipt, the container plants shall be stored in such a way that the natural elements (e.g., dryness, heat, excessive wind) will not hinder their growth or kill the plants prior to installation. Delivery of the container plants for the revegetation area may be requested at least 2 weeks prior to the scheduled planting time. All container plants shall be installed within 3 days following acceptable delivery. All container plants shall be maintained at a 75 percent survival rate throughout the first 120 days following installation. The list of container plants and densities to be installed within the revegetation area is presented in Table B. In order to maintain the integrity of the landfill's soil cap, deep-rooted species (e.g., native perennial shrubs and trees) will not be installed within the project area.

Other Materials

All other materials not specifically described herein, but required to complete this project, shall be furnished by the Restoration Contractor and are subject to the approval of the Restoration Ecologist.

Table B: Container Plant List

Scientific Name	Common Name	Container Size	Spacing (ft on center)	Plants/ac	Plants Required (5.49 ac)
Bromus carinatus	California brome grass	Plugs	2	125	686
Distichlis spicata	Salt grass	Plugs	2	125	686
Leymus condensatus	Giant wild-rye	Plugs	5	125	686
Melica imperfecta	Small-flowered melic grass	Plugs	2	125	686
Nassella lepida	Foothill needlegrass	Plugs	2	125	686
Nassella pulchra	Purple needlegrass	Plugs	2	125	686
Total				**750**	**4,116**

ac = acre
ft = feet

INSTALLATION METHODS

Hydroseeding Technique

The revegetation area shall be seeded using a two-stage hydroseed application method. The application procedure is as follows.

First Application

- 150 lbs/ac of 100 percent long-strand wood fiber (no tackifier)
- Specified seed

COASTAL COMMISSION

- 60 lbs/ac of vesicular-arbuscular mycorrhizal inoculum
- Specified fertilizer

Second Application

- 2,000 lbs/ac of 100 percent long-strand wood fiber (no tackifier)
- 150 lbs/ac Ecology Control "M" binder

All hydroseed mixing shall be performed in a clean tank. The tank must be rinsed a minimum of three times in the presence of the Restoration Ecologist. It is the Restoration Contractor's responsibility to locate a source of clean water and a washout area where rinsing can legally be carried out. The hydroseeder must be equipped with a built-in continuous agitation and recirculation system of sufficient operating capacity to produce homogeneous slurry and a discharge system that will apply slurry to the designated areas at a continuous and uniform rate.

The slurry preparation shall take place at the project site and shall be started by adding water to the tank while the engine is running at half-throttle. Good recirculation shall be established when the water level has reached the height of the agitator shaft; at this time, the seed and fertilizer shall be added. The long-strand wood fiber shall be added when the tank is at least 30 percent filled with water. The Restoration Contractor shall commence spraying once the tank is full and homogeneous slurry has been created.

The Restoration Contractor shall spray designated areas with the slurry in a sweeping motion and in an arched stream until a uniform coat is achieved with no slumping or shadowing as the material is spread at the required rate. The hydroseed slurry should float down from the arched stream as opposed to being shot directly at the ground.

The tanks must be emptied completely during each stage of hydroseeding. Any slurry mixture that has not been applied by the Restoration Contractor within 1 hour after mixing shall be rejected and replaced at the Restoration Contractor's expense. In addition, all cost incurred for repair or replacement of bare, sparse, or damaged areas shall be the sole responsibility of the Restoration Contractor. Following application, all activity on the mulch layer must be kept to a minimum until the seed has germinated and established itself.

Planting Technique

Planting locations for container plants within the revegetation area shall be marked under the direction and supervision of the Restoration Ecologist. Plantings shall be spaced in natural-looking patterns to replicate the character of the nearby native plant communities with consideration of the microclimate requirements of each species.

COASTAL COMMISSION

In the spring following installation of the hydroseed, the Restoration Ecologist shall use pin flags provided by the Restoration Contractor to mark the planting locations of the container plants. The plantings shall be spaced in natural-looking patterns to replicate the character of adjacent natural communities, with consideration of the microclimate requirements for each species.

All container plants shall be installed in accordance with the following specifications:

- Plants will be placed into a hole that is capable of accepting the diameter and height of the container.
- Any roots wrapped around the sides of the containers shall be pulled loose from the root balls. The sides of the root balls shall be scarified to promote new root development.
- Plants shall be planted with the roots untangled and laid out in the planting holes to promote good root growth and prevent the plants from becoming rootbound.
- Roots shall be adequately protected at all times from sun and/or drying winds.
- The top of the rootball will be set slightly above finish grade, and the planting hole will be backfilled with native soil.
- The revegetation area shall be irrigated at the time of planting, with sufficient water to reach the lower roots of the installed container plants. Special care must be taken to prevent the soil from washing away from the roots and the root crown from being buried with soil.
- All empty plant containers shall be removed from the revegetation site and not left on site overnight.

REVEGETATION MAINTENANCE

Maintenance of the revegetation area must be undertaken in accordance with the following specifications until the performance standards are achieved. Normal maintenance will include weeding, herbivore control, and watering as necessary within the revegetation area and weeding within the 10 ft buffer zone.

Following installation of the hydroseed and through the first 120 days after installation of the container plants, the revegetation area and buffer zone must be maintained regularly to ensure successful establishment. At the end of the 120-day establishment period, a thorough inspection of the revegetation area shall be conducted by the Restoration Ecologist, and a list of those container plants that are dead within the revegetation area shall be submitted to the Restoration Contractor. Dead or missing container plants in excess of 10 percent will be replaced. The species and planting locations shall be determined by the Restoration Ecologist.

Nonnative Weed Control

In order to help establish the developing community, nonnative weeds shall be removed from the revegetation area and buffer zone to reduce the amount of competition for natural resources, including water, nutrients, and sunlight. The amount of weeding required will be determined by the amount of weed seed in the soil, weather conditions, and the diligence and persistence in removing the weeds

COASTAL COMMISSION

before they produce more seed, thereby reducing the weed seed bank. The following weeding guidelines shall be adhered to continuously:

- The percentage of cover by nonnative weeds within the revegetation area and buffer zone must be kept below 5 percent at all times.
- No more than 10 percent of the buffer zone may be covered at any time by weeds that have reached the seed dispersal stage.

Methods of Removal. During the 5-year maintenance period, with the exception of those weed species that cannot be eradicated through manual removal (e.g., garland chrysanthemum and small-flowered iceplant), weeds present shall be removed manually. Herbicide is only permitted with the written authorization of the Restoration Ecologist (see "Herbicide Treatment Guidelines"). No weed whipping or string-line trimmers shall be permitted without the written authorization of the Restoration Ecologist. Special care must be taken to prevent damage to native plants. Native plants intentionally or unintentionally damaged shall be replaced as needed in the form of container plants during the next growing season in order to attain the performance standards. All nonnative vegetative debris accumulated as a result of weed removal activities shall be legally disposed of off site within 10 days of cutting.

Herbicide Treatment Guidelines. Herbicide will be used during the grow/kill regimen and may be used with written authorization from the Restoration Ecologist during the 5-year maintenance period. In order to apply an unrestricted herbicide (Rodeo), the Restoration Contractor must have a Pest Control Business License, which requires that at least one individual employed by the Restoration Contractor be in possession of a Qualified Applicator's License (QAL). If a qualified applicator is not present during treatment, all applicators must have undergone documented herbicide application training. All licenses must be issued by the State of California, registered in Los Angeles County, and of current status.

Only Rodeo, a United States Environmental Protection Agency-approved, glyphosate-based systemic herbicide, may be used. No preemergent herbicides may be used. No persistent herbicides may be used. The following herbicide concentrations shall be used according to the type of application required:

- Foliar spray application: minimum of 3 percent solution
- Foliar wick application: 33 percent solution
- Stump treatment: 100 percent solution

A brightly colored dye shall be used in all applications. The material shall be a nontoxic, water-soluble, liquid material such as "Blazon" by Milliken Chemicals or its equivalent. "Turfmark" is not an acceptable alternative. The dye shall be mixed with the herbicide at no more than one-half the rate specified on the label (one-quarter the rate will usually suffice).

Spraying shall be conducted only when weather conditions are conducive to effective uptake of the herbicide by the targeted species (i.e., sunny, dry, and when plants are actively growing) and when

COASTAL COMMISSION

wind conditions are such that herbicide drift is nonexistent (5 miles per hour or less). During herbicide application, protection or avoidance of nontargeted species (i.e., native vegetation) is required. Any nontargeted species lost within the revegetation area due to intentional or unintentional application of herbicide shall be replaced by the Restoration Contractor during the following planting season at the direction of the Restoration Ecologist.

Weed species known to occur on site include, but are not limited to, the following:

- Soft chess (*Bromus hordeaceus*)
- Garden beet (*Beta vulgaris*)
- Five-hook bassia
- Foxtail barley (*Hordeum murinum*)
- Wild oat
- Common ripgut grass
- Red brome
- Bittercress (*Cardamine* sp.)
- Garland chrysanthemum
- Small-flowered iceplant
- Lesser wart-cress (*Coronopus didymus*)
- Bermuda grass (*Cynodon dactylon*)
- Weedy cudweed (*Gnaphalium luteo-album*)
- Prickly lettuce (*Lactuca serriola*)
- Rye grass (*Lolium* sp.)
- High mallow (*Malva sylvestris*)
- Bur-clover (*Medicago polymorpha*)
- White sweet-clover (*Melilotus albus*)
- European sickle-grass (*Parapholis incurva*)
- Littleseed canary grass (*Phalaris minor*)
- Bristly ox-tongue (*Picris echioides*)
- Smilo grass (*Piptatherum miliaceum*)
- Common knotweed (*Polygonum aviculare*)
- Rabbitfoot grass
- Wild radish (*Raphanus sativus*)
- Curly dock (*Rumex crispus*)
- Milk thistle (*Silybum marianum*)

COASTAL COMMISSION

- Sand-spurry (*Spergularia* sp.)
- Tocalote (*Centaurea melitensis*)
- Shortpod mustard
- Yellow sweet clover (*Melilotus indicus*)
- Sow-thistle (*Sonchus* sp.)

Erosion Control

The Restoration Contractor shall be responsible for all erosion control maintenance required for the revegetation area for the entire term of the contract. Erosion control shall include, but not be limited to: (1) continuation of nonvegetative erosion control, as necessary; and (2) repair of damaged plants, rutting, and washouts.

Pest Control

Insect and herbivore damage control shall be the responsibility of the Restoration Contractor, using only those methods approved by the Restoration Ecologist. The Restoration Contractor shall implement control measures, which may require fencing or caging all container plants at the earliest sign of damage. In addition, the Restoration Contractor shall treat any insect infestation as necessary to protect the health and establishment of the plant community, per the recommendation of the Restoration Ecologist.

Irrigation

The Restoration Contractor shall be responsible for inspection and maintenance of the irrigation system throughout the revegetation area. The Restoration Contractor shall be responsible for removal of the irrigation system prior to the completion of the project.

Litter Removal/Site Maintenance

All trash and other debris shall be removed from the revegetation area prior to and during revegetation activities. All planted and seeded areas shall be kept neat, clean, and free of all nonvegetative debris and trash (including vegetative debris accumulated during weeding activities, which shall be removed as specified).

Pruning and Leaf Litter Removal

No pruning or leaf litter removal shall take place within the revegetation area. Therefore, all leaf litter and native thatch shall be left in place and not cleared away from the plantings.

COASTAL COMMISSION

Fertilizer

The Restoration Contractor shall not use a chemical fertilizer within the revegetation area during the maintenance period unless directed to do so by the Restoration Ecologist.

REMEDIAL MEASURES

The purpose of the remedial measures is to remedy unsuccessful revegetation efforts, as indicated by excessive nonnative species or erosion or the excessive mortality of installed plants and/or seed. Remedial measures, as identified in the monitoring reports or field memorandums, include weed eradication, replacement of dead or diseased container plantings, and/or reseeding in areas as necessary to meet the performance standards. Such actions will be taken immediately upon the identification of problems and will be implemented as often as necessary to meet the performance standards. The removal of dead and/or diseased container plants will be left to the discretion of the Restoration Ecologist. The genetic source of all remedial seed and plants shall be the same as that described in the Restoration Installation section above.

PERFORMANCE STANDARDS

The goal of this project is to establish healthy and functional native habitat of the identified revegetation area. The revegetation will be considered successful when all of the following criteria are met:

- There is at least 80 percent relative cover by native plant species in the 5.93 ac revegetation area.
- Evidence that the site is sustainable, which includes signs of regeneration (progeny and new growth), healthy plants, a low mortality rate, and resistance to weeds (less than 5 percent cover by nonnative species and minimal weed maintenance during the previous spring season).

The site will not be eligible for CCC approval until it has gone without irrigation for a period of 3 years. It is the goal of the project to meet the performance standards within 5 years following installation of the hydroseed.

MONITORING

In order to ensure that the site is in compliance with these specifications, the site will be evaluated regularly.

The postinstallation monitoring program will be as follows:

- Monitoring for survival, appearance, function, wildlife usage, and general compliance will be completed monthly for the first year following installation of the hydroseed and at least quarterly thereafter until the performance standards are met.
- A survey will be conducted in the spring of each year. Qualitative data will be collected on native and nonnative vegetation cover, species composition, survival, appearance, and function of the plant community. In addition to qualitative data, quantitative data on native and nonnative

COASTAL COMMISSION

vegetation cover and species composition will be collected by performing at least 10, 1-square-meter quadrats. All wildlife species present on site shall be recorded.

- As part of the site inspections and annual surveys, the Restoration Ecologist will prepare field memorandums. The field memorandums will record general ecological observations and make maintenance recommendations, and copies will be sent to the landowner and the Restoration Contractor.
- If any special-status species are observed on or in proximity to the project site during project surveys, the Restoration Ecologist will submit California Natural Diversity Database (CNDDB) forms and maps to the CNDDB of the sightings and will provide the regional California Department of Fish and Game (CDFG) office with copies of the CNDDB forms and survey maps.

The individual who monitors the site shall be an experienced Restoration Ecologist qualified to assess the performance of the revegetation effort and to recommend corrective measures as needed.

DOCUMENTATION

Approximately 120 days following installation of the container plants, the Restoration Ecologist will prepare an as-built report that describes the installation and how the project was consistent with this HRMP. The as-built report will also document the situations where it was necessary to diverge from this HRMP. By June 30 of each following year until the performance standards are achieved, a formal report will be prepared and submitted by the Restoration Ecologist to the landowner and the CCC.

The report will include the following:

- A summary of the establishment period monthly site inspections and quarterly site inspections for the first year and a summary of the quarterly site inspections for each year thereafter
- A description of the existing condition of the revegetation area, including descriptions of vegetation composition, weed species, and any erosion problems
- A description of the maintenance activities (including revegetation and weed removal) and when they were conducted
- A summary of the qualitative and quantitative data collected
- Any observations of wildlife at the site, including sensitive and/or listed species or their sign within the revegetation area
- A discussion of any problems encountered during revegetation
- Photo documentation at specified locations
- Remedial measures (e.g., weed control, trash removal) that were implemented to correct problems or deficiencies, if any

LONG-TERM MAINTENANCE

The purpose of the revegetation effort is to replace the ruderal grassland vegetation that was impacted/removed as a result of the unauthorized clearing with native vegetation in order to provide

COASTAL COMMISSION

foraging habitat for wildlife and reduce the likelihood of erosion of the newly replaced soil cap on the old landfill. The removal of nonnative vegetation pursuant to future weed abatement notices is an allowable activity; however, the weed removal activities should be monitored to ensure that only nonnative species are removed. The land is subject to alternative future uses with an appropriate CDP.

Weed abatement, tree trimming, nonnative tree removal, and ongoing maintenance of the property consistent with the CDP is allowed. All work carried out pursuant to any City- or County-issued abatement order shall comply with the terms of the CDP in order to ensure the protection of wildlife habitat and the long-term protection of breeding, roosting, and nesting habitat of State and federally listed bird species, California bird Species of Special Concern, and bird species that play an especially valuable role in the ecosystem.

No bird nests shall be disturbed. Prior to tree trimming and weed abatement, a qualified biologist or ornithologist shall survey the project site to detect bird nests and submit a survey report to the CDP permittee (Permittee) and the CCC Executive Director. The survey report shall include identification of all known nests. The Permittee shall maintain a file of survey reports that includes a record of nests that is to be used for future vegetation removal decisions.

All weed abatement, tree trimming, nonnative tree removal, and ongoing maintenance of open space areas shall be supervised by a qualified biologist and shall be undertaken in compliance with all applicable codes or regulations administered by the CDFG and, the United States Fish and Wildlife Service (USFWS), including the United States Migratory Bird Treaty Act, and shall be conducted in conformance with the following terms.

- Tree Trimming and Nonnative Tree Removal
    - Tree trimming and nonnative tree removal shall take place only outside of the bird breeding and nesting season, which is January 1 through September 30.
    - The trimming or removal of any tree that has been used for breeding and nesting within the past 5 years is prohibited, unless the Permittee obtains a CDP or emergency permit authorizing such trimming and removal. Prior to tree trimming or removal of any tree, a qualified biologist or ornithologist shall survey the trees to be trimmed or removed to detect nests and submit a survey report to the Permittee and the CCC Executive Director. The survey report shall include identification of all trees with nests. The Permittee shall maintain a file of survey reports that includes a record of nesting trees to be used for future tree trimming and removal decisions.
    - No bird nests shall be disturbed. Trimming may not proceed if a nest is found and evidence of courtship or nesting behavior is observed at the site. In the event that any birds continue to occupy trees during the nonnesting season, trimming shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 ft of any occupied tree (500 ft for raptors).
    - No California native trees shall be removed. All existing native vegetation shall be protected.
    - Tree trimming and nonnative tree removal shall be undertaken using only hand-operated equipment (e.g., machetes, weed whackers, and chain saws). No herbicides shall be used.
- Weed Abatement

COASTAL COMMISSION

- Weed abatement activities shall take place outside of the marsh bird nesting season (February 1 through August 31). Specifically required restoration work approved by the CCC Executive Director is not subject to this limitation.
- Prior to weed abatement and removal of any plant material, a qualified biologist or ornithologist shall survey the project site to detect nests and submit a survey report to the Permittee and the CCC Executive Director. The survey report shall include identification of all known nests. The Permittee shall maintain a file of survey reports that includes a record of nests that is to be used for future vegetation removal decisions.
- No bird nests shall be disturbed. Weed abatement and removal of any plant material may not proceed within 300 ft (500 ft for raptors) of a nest where evidence of courtship or nesting behavior is observed. In the event that any birds continue to occupy nests during the nonnesting season, trimming shall not take place until a qualified biologist or ornithologist has assessed the site, determined that courtship behavior has ceased, and given approval to proceed within 300 ft (500 ft for raptors) of any nest.
- All existing native vegetation shall be protected.
- Weed abatement and removal of plant materials shall be undertaken using hand-operated equipment only (e.g., machetes, weed whackers, and chain saws). No herbicides shall be used unless they are specifically authorized by the CCC Executive Director.

- Disposal of plant matter
  - All cut plant materials shall be disposed of at an appropriate off-site location within 10 days of cutting. A separate CDP will be required prior to the placement of any cut plant material in the Coastal Zone unless the CCC Executive Director determines that no permit is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

All weed abatement, tree trimming and nonnative tree removal shall be conducted in strict compliance with these conditions. Any proposed change or deviation from these conditions shall be submitted for review by the CCC Executive Director to determine whether an amendment to the CDP is required pursuant to the requirements of the Coastal Act and the California Code of Regulations.

COASTAL COMMISSION

California Coastal Commission
CDP Application No. A-5-LOB-10-015-A1

Applicant: Loynes, LLC

Agent: Schmitz & Associates, Inc.

Project Site/Property Address: 6400 Loynes Dr., Long Beach, CA

Project Description: CDP-Amendment for proposed restoration to comply with CDP A-5-LOB-10-015 Special Conditions, excluding the wetlands feature and impermeable cap as conditioned per Special Condition One of the underlying CDP.

I, Commissioner Brian Brennan, had ex parte communication with Don Schmitz, agent for the above-referenced project on December 8, 2011. Mr. Schmitz reviewed with me the history of activities on and the conceptual plan for restoration and re-vegetation of the subject site. We specifically reviewed Special Condition One of the underlying CDP which called for an impermeable cap and wetlands features despite CCC Staff's original recommendation to the Commission; Mr. Schmitz advised me of the unfavorable disposition of Los Angeles County Department of Health and RWQCB with respect to these two requirements, particularly with respect to lateral gas migration concerns resulting from the cap. Mr. Schmitz also advised me of the large scope, scale and costs of attempting to mitigate such lateral migration, and to maintain such mitigation infrastructure. Accordingly, the applicant proceeded with this amendment application to go back to the initially proposed upland vegetation restoration as originally recommended by CCC Staff.

12/13/11

Commissioner Brennan Date