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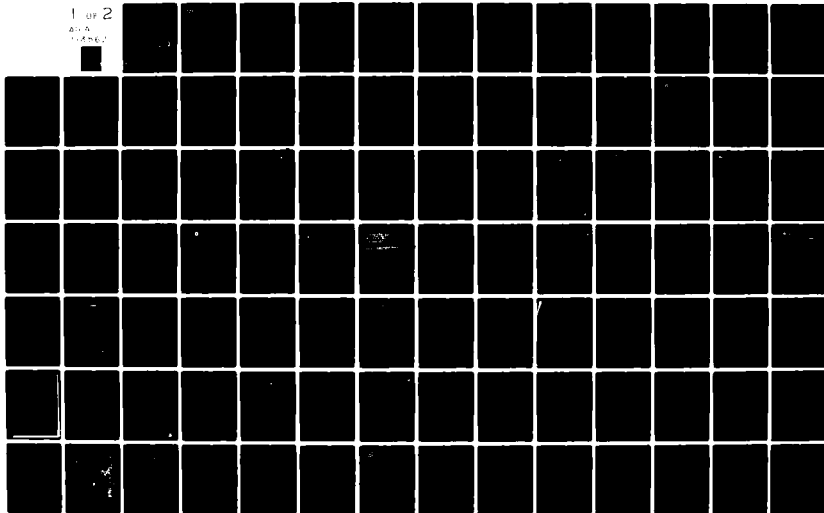
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FINAL
ENVIRONMENTAL IMPACT STATEMENT

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AMERICAN CANYON SANITARY LANDFILL OPERATION
REGULATORY PERMIT APPLICATION
NAPA COUNTY, CALIFORNIA
PUBLIC NOTICE 9297-29R

APR 19 1982



U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO, CALIFORNIA

MARCH 1982

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DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
 211 MAIN STREET
 SAN FRANCISCO, CALIFORNIA 94105

SPNED-E/SPNCO-R

RESPONSE REQUIRED BY: 1 JUN 1982

SUBJECT: AMERICAN CANYON SANITARY LANDFILL OPERATION FINAL ENVIRONMENTAL
 IMPACT STATEMENT, REGULATORY PERMIT APPLICATION NAPA COUNTY,
 CALIFORNIA - PUBLIC NOTICE 9297-29R: COMMENT PERIOD

TO WHOM IT MAY CONCERN:

14 APR 1982

1. As announced in Public Notice No. 9297-29R dated 11 May 1981, the American Canyon Sanitary Landfill Company has applied for a Department of the Army permit to retain and place refuse fill on approximately 108 acres of land and construct flood control and containment levees on land located along the east bank of the Napa River in southern Napa County, California.
2. In response to the National Environmental Policy Act (NEPA) of 1969, Public Law 91-190, and the Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), the San Francisco District, U. S. Army Corps of Engineers has prepared a Final Environmental Impact Statement (FEIS) for the subject permit application. The Draft Environmental Impact Statement for this project was issued in March 1976.
3. The District is now soliciting comments and views of appropriate government agencies, interested groups and individuals concerning the FEIS. Please submit your comments by the date indicated above so that they may be considered along with other relevant information in arriving at a final decision on the permit application. The final decision on the permit cannot be made until 30 days have passed from the announcement in the Federal Register that the FEIS has been filed with the Environmental Protection Agency or until 30 days from the mailing of the document, whichever date is later.
4. Copies of the FEIS as well as the Draft EIS are available for review by contacting the San Francisco District (415-974-0444).

Sincerely,

PAUL BAZILWICH, JR.
 Colonel, CE
 Commanding

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- A -

AMERICAN CANYON SANITARY LANDFILL OPERATION
NAPA COUNTY, CALIFORNIA

REGULATORY PERMIT APPLICATION BY
THE AMERICAN CANYON SANITARY LANDFILL COMPANY
PUBLIC NOTICE NO. 9297-29R

() DRAFT ENVIRONMENTAL IMPACT STATEMENT (X) FINAL ENVIRONMENTAL IMPACT
STATEMENT

Responsible Agency: U.S. Army Engineer District, San Francisco
211 Main Street
San Francisco, CA 94105

Contact Person:

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1. Name of Action: (X) Administrative () Legislative
2. Authority: Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act.
3. Abstract: → The permit applicant requests Department of the Army authorization for both existing fill and proposed fill on portions of a 300 acre parcel of unincorporated land located along the east bank of the Napa River in southern Napa County, California. A permit for the existing landfill operation is requested for the proposed placement of refuse fill on approximately 60 acres with construction of flood protection and containment levees around these areas. The estimated refuse and earthwork volumes are 3,900,000 cubic yards (cys) of refuse, 1,200,000 cys. of earth cover, and 80,000 cys. for levee repair and construction. Of the 300 acre site approximately 130 acres would be used for deposition of refuse and approximately 170 acres would be deeded to the California Department of Fish and Game as mitigation lands. Of the 170 acres approximately 33 acres would be returned to tidal action. ←
4. Comments on this Final Environmental Impact Statement must be submitted to the designated responsible agency (see above) by 1 JUN 1982.

SUMMARY

1. Purpose of and Need for the Proposal. The purpose of the proposed refuse and earthwork fill associated with levee repair and construction is to provide waste disposal facilities for the cities of Napa, Vallejo, and surrounding unincorporated areas of Napa and Solano Counties through the year 1990.

2. Authority. The Army's authority over the proposed project is based upon Section 10 of the River and Harbor Act (RHA) of 1899 (33 U.S.C. Section 403) and upon Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344) which pertains to the discharge of dredged or fill material into the waters of the United States. In Leslie Salt Co. vs. Froehlke 578 F 2d 742, 753 (9th Cir. 1978), the court held that the Corps' jurisdiction under the RHA extends to all lands covered by the ebb and flow of the tide to the mean high water (MHW) mark in its unobstructed, natural state, including diked areas below former MHW. Section 10 of the RHA of 1899 regulates any work or structure placed within its jurisdiction. This applies to the proposed project.

Section 404 of the Clean Water Act (CWA) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into the waters of the United States, including wetlands adjacent or contiguous to waters of the U.S.

3. Beneficial/Adverse Impacts of the Proposed Action. The proposed project would:

- a. provide waste disposal facilities to the cities of Napa, Vallejo, and surrounding unincorporated areas of Napa and Solano Counties through the year 1990.
- b. preserve approximately 170 acres of historical marshland which serve as habitat for many fish and waterfowl species. Included in the 170 acres is the return to tidal action of approximately 33 acres.
- c. provide flood protection to the existing as well as future landfill operation thus reducing the potential for adverse water quality impacts in Napa River.
- d. provide a nonexclusive route for public access to the Napa River both in the areas of the disposal operation and to the preserved lands.
- e. complete the proposed landfill operation which would result in approximately 130 acres (48 acres which have already been filled with refuse, 60 to be filled with refuse, and 22 acres of flood control and containment levees) of restorable wetland being permanently converted to upland.
- f. provide nuisance factors associated with refuse disposal such as odor, unsightliness, and dust. These nuisance factors can be minimized through proper protective measures such as placement and compaction of refuse as it is delivered to the site, placement of cover fill on a daily basis, and proper maintenance of access roads by paving, oiling, and watering.

- g. increase traffic entering the site which would result in a decrease in air quality.
- h. result in noise from the heavy equipment involved in extracting and transporting cover material and from vehicles bringing solid waste to the land disposal site.
- i. result in blocking out the view of the river area for much of the residential development located to the east. The preservation of the southernmost portion of the project area (ie. 170 acres) would preserve about 3,500 linear feet of viewing area.
- j. transfer title of about 170 acres of land to the State. This transfer in title would result in a loss of tax revenue to local governments from these lands.

4. Purpose of Final Environmental Impact Statement (EIS) In response to the provisions of the National Environmental Policy Act of 1969, Public Law 91-190, 42 U.S.C. Sec 4321 et seq, an evaluation of the impacts of the proposed activities on all aspects of the quality of the human environment is required prior to any permit application being considered for approval. This EIS addresses such an evaluation of both retention of fill and proposed placement of fill in portions of the American Canyon Sanitary Landfill site.

This Final EIS has been prepared in the form of an "abbreviated" document (reference 40 CFR 1503.4(c) and ER200-2-2 paragraph 11 a.(2)) since the changes between the Draft and Final EIS are minor, consisting of factual corrections (ie. reduced scope of project with addition of mitigation for fish and wildlife resources) and explanations of Corps actions. With this procedure of providing an "abbreviated" environmental document, the Draft EIS is incorporated by reference into this Final EIS.

AMERICAN CANYON SANITARY LANDFILL OPERATION

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DRAFT ENVIRONMENTAL IMPACT STATEMENT
(Dated March 1976)**

**COMMENTS AND RESPONSES TO
PUBLIC NOTICE NO. 9297-29R
(Dated 11 May 1981)**

PLATES

APPENDIX A - MISCELLANEOUS DOCUMENTS

1.00 INTRODUCTION

1.01 The American Canyon Sanitary Landfill Company, c/o Kilpatrick and Peterson, 922 Tennessee Street, Vallejo California 94590, has applied for Department of the Army authorization (Public Notice No. 9297-29R, Appendix A, Document A-1) for both existing fill and proposed fill on portions of a 300 acres parcel of unincorporated land located along the east bank of the Napa River in southern Napa County, California (Plate 1). The applicant has applied to:

- place refuse fill on approximately 60 acres with estimated refuse and earthwork volumes of 3,900,000 cubic yards and 1,200,000 cubic yards, respectively.
- construction of flood protection and containment levees along the perimeter of the landfill with an estimated volume of 80,000 cubic yards of required material.

1.02 Approximately 170 acres (including an estimated 33 acres to be returned to tidal action) south of the area to be used for landfilling and levees are designated as mitigation lands and will be deeded to the California Department of Fish and Game upon receipt of all necessary permits for project construction.

1.03 Project History. The American Canyon site was historically part of the marshland area of the Napa River. For a brief period in approximately 1930, the site was used as a barging point for cement ships. Solid municipal wastes have been disposed of on a portion of the 300 acre site since 1942. Open burning practices were supplemented by modified sanitary landfilling since about 1957. The disposal site was operated as a combined open burning dump and a modified sanitary landfill until November 1971, when open burning was discontinued.

1.04 On 31 October 1973 application was made for a Department of the Army permit for the landfill configuration which essentially paralleled the Napa River (Plate 2). This proposal as announced in Public Notice No. 74-0-105 dated 8 March 1974 (Appendix A, Document A-2) included the retention of existing sanitary landfill on approximately 8 acres including a refuse volume of 148,400 cys, an earth cover volume of 32,400 cys, and levee construction and repair volume of 60,000 cys using Bay mud. Proposed work also included the filling of: (a) 55 acres in Phase 1 with 806,500 cys of refuse and 275,000 cys of the earth cover; (b) 82 acres in Phase 2 with 2,100,000 cys of refuse and 694,000 cys of earth cover; and (c) 120 acres in Phase 3 with 3,280,000 cys of refuse and 1,100,000 cys of earth cover. Also, the volume of Bay mud required for levee construction and repair was estimated at 160,000 cys for all three Phases.

1.05 The most significant public (both agency, and general public) comments received on PN #74-0-105 were concerned with the irreversible commitment of approximately 300 acres of restorable wetlands to sanitary landfill operations.

1.06 A draft environmental impact statement (DEIS) on PN #74-0-105 titled "Draft Environmental Statement American Canyon Sanitary Landfill Operation Regulatory Permit Application Napa County, California" was released by the San Francisco District for public review in March 1976. Public comments received on the DEIS were similar to those generated on the PN in addition to the concern over the proximity of the landfill site to the Napa County Airport and potential for "bird strikes" interfering with flight operations.

1.07 On 20 April 1978 the Corps issued Public Notice No. 9297-29 (Revision of 74-0-105)(Appendix A, Document A-3) and conducted a public hearing on 26 April 1978 to receive comments on a revised plan not discussed in the DEIS. The revised plan involved relocation of the project boundaries by expanding the current landfill operation (Phase I) eastward approximately 2,000 feet closer to the community of American Canyon. Significant comments and objections were received concerning operational, aesthetic, health, and nuisance factors as a result of the landfill operation's potential impact on the community.

1.08 In response to the comments generated on the DEIS and the public hearing on the plan revision, the permit applicant provided the current proposed plan revision as stated in the INTRODUCTION and in Public Notice No. 9297-29R (Appendix A, Document A-1) dated 11 May 1981. It is noted that the current proposed plan is a smaller scale of the proposed plan as presented in the DEIS. The current proposed plan would retain refuse fill on the remaining 7 acres of Phase 1, place new refuse fill on the northern 53 acres of Phase 2, and preservation of 170 acres (33 acres in Phase 2 and 137 acres in Phase 3 with 33 acres of these lands to be ultimately returned to tidal action) by the transfer of title to the California Department of Fish and Game.

2.00 ALTERNATIVES

2.01 Planning Alternatives. The DEIS (March 1976) considered impacts from the proposed project as well as impacts from no project, alternate disposal sites, alternative means of disposal, and modification of the proposed project. Since publication of the DEIS, the proposed project has been modified twice in response to concerns raised by Federal and State agencies and individuals. The current revised proposed project is called Alternative #2R. Alternative #2R in comparison to the proposed project discussed in the DEIS reduces the area to be filled with refuse by 57% (from 300 acres to 130 acres) and preserves 170 acres, including 33 acres to be returned to tidal action, as project mitigation. The modified project associated with Alternative #2R appears to have resolved the objections of commenting agencies. This Final Environmental Impact Statement considers two basic planning alternatives: no project and proposed project (Alternative #2R). These alternatives are discussed throughout the text in the order presented below.

2.02 Alternative #1. No project. This alternative considers the effects of no additional refuse fill or repair/construction of levees in the project area. The project area would remain in its existing undeveloped state for the foreseeable future.

2.03 Alternative #2R. This alternative reflects the following revised proposed project: Retain refuse fill on approximately 48 acres (Phase 1 of Plate 2), place new refuse fill on the remaining estimated 7 acres of Phase 1, place new refuse fill on the northern 53 acres of Phase 2 (Plate 2), construction of flood protection and containment levees along these areas, and deed to the California Department of Fish and Game (CAF&G) approximately 170 acres of land south of Phase 2 as mitigation of which approximately 33 acres of these lands would be returned to tidal action. (A written agreement guaranteeing this action has been signed by the applicant and the CAF&G, reference Appendix A, Document A-4). The estimated refuse and earthwork volumes are as follows: 3,900,000 cubic yards of refuse; 1,200,000 cubic yards of earth cover, and 80,000 cubic yards of Bay mud for levee construction and repair of which approximately 20,000 cubic yards of Bay mud for use in improving a portion of the Napa River levee would be excavated from the disposal area or dredged from the river bottom. These quantities assume that the fill would be constructed to the elevation shown in Plate 3. Plate 4 shows the proposed levee details. Final fill elevations may vary depending upon the final end use selected for the site. The landfill disposal area would be excavated to depths ranging from 5 to 10 feet to generate the levee fill material and refuse fill cover material. The precise depth of excavation would depend upon difficulties encountered during the excavation effort. All construction procedures, materials, precautions, and protective works described in the Draft EIS dated March 1976, would be adhered to in this revised alternative.

2.04 Additional alternatives considered in the Draft EIS but which are now rejected from further consideration are discussed below:

2.05 Alternative disposal sites. The Fairfield Disposal Site southeast of Fairfield is the only disposal site which by virtue of location and current service to the general population of Napa County and Solano County might be considered available as an alternative site to the American Canyon site. The anticipated life of the Fairfield site is 20 years at a disposal rate of approximately 100 tons of waste per day. This site does not have the capacity or site life to satisfy the long-term disposal requirements of the Napa-Vallejo area.

2.06 The distance of the Fairfield site from the cities of Napa and Vallejo (23 and 21 miles, respectively) might necessitate the establishment of a waste transfer station to reduce the haul costs and minimize the adverse impact on the existing disposal rate structure.

2.07 Commercial vehicles from the Napa Garbage Company and the Vallejo Garbage Company, as well as the general public, would dispose of refuse at such a transfer station. The wastes would then be transferred to the disposal site in large capacity transfer vehicles. Disposal costs at an alternative site would be similar to costs of disposal at the American Canyon site. Therefore, the total cost of transfer stations and transfer are added costs which would probably have to be covered by garbage service rate increases.

2.08 The disposal of large volumes of wastes from the Napa-Vallejo area would decrease the estimated site life at the Fairfield site to approximately 4 years. This short life would probably not be adequate to allow the amortization of transfer vehicles or station(s) costs. Utilization of existing alternative sites in conjunction with a transfer station to serve the short-term disposal needs of the Napa-Vallejo area does not, therefore, appear to be economically feasible.

2.09 The inadequate capacity, short site life, and haul distance from the Cities of Napa and Vallejo appear to eliminate the Fairfield disposal site from consideration as a viable alternative to the American Canyon site.

2.10 Alternative means of disposal. An alternative to disposal of wastes by sanitary landfilling would be recovery and reuse of all wastes. The technology needed to achieve this goal is still in its early stages of development, but the current energy situation has improved the market for recycled waste products and considerable effort is now being expended to develop the technology and markets needed for more complete recycling of wastes. Basic economic feasibility requirements must be met before such recovery efforts can be sustained on a continuing basis. In addition to the need to allocate sufficient resources to develop the technology required for recycling of a substantial percentage of our wastes, longterm recycling programs will require development of markets for new products, tax incentives, freight rate equalization, and the solution of numerous economic and environmental problems that will result from recycling.

2.11 Solid wastes not recycled or converted to energy must ultimately be disposed of in one of two receptacles--the land or the oceans. Aesthetic, environmental, and legal concerns rule out the possibility of sea disposal, thus eliminating this concept from consideration. With the exception of disposal at sea, all other processing or disposal methods currently being considered require disposal of some percentages (usually a major percentage) of the original waste on land.

2.12 There are many forms of solid waste processing which can be utilized in combination with landfill disposal. These processing systems include incineration, composting, grinding to sewers, salvage, reclamation and pyrolysis. Of major importance, however, is the fact that none of these systems replace or eliminate the need for landfilling. The primary purpose, therefore, in considering one or more of the above systems as an adjunct to landfilling is to obtain volume reduction or to handle a specific type of problem waste.

2.13 Decision Alternatives. The two decision alternatives available to the Corps are:

- a. Denial of Permit - This corresponds to Planning Alternative #1.
- b. Issuance of Permit - This corresponds to Planning Alternative #2R.

2.14 A third decision alternative of issuance of permit with conditions does not appear applicable since Alternative #2R is a revised project proposal which apparently has addressed the primary issues of the Draft EIS and comments received on the Corps' Public Notices and Public Hearing.

3.00 SUMMARY AND COMPARISON OF SIGNIFICANT IMPACTS BY ALTERNATIVE.

3.01 Alternative #1 (No project).

- accelerate the schedule of closing the current sanitary landfill operation and utilizing alternative disposal sites serving the cities of Napa and Vallejo and the surrounding unincorporated areas
- the project area would remain in its existing undeveloped state for the foreseeable future
- preclude the transfer and preservation of 170 acres of historic marshlands to the California Department of Fish and Game
- preclude approximately 33 acres of the 170 acres from being returned to tidal action.

3.02 Alternative #2R (Revised proposed project).

- provide waste disposal facilities to the cities of Napa and Vallejo and the surrounding unincorporated areas through the year 1990
- provide flood protection to the existing as well as future landfill operation thus reducing the potential for adverse water quality impacts in Napa River
- preservation of approximately 170 acres of historic marshland which serve as habitat for many fish and waterfowl species; of the 170 acres approximately 33 acres would be returned to tidal action
- provide a nonexclusive route for public access to the Napa River-both in the disposal area and the preserved land area
- completion of the proposed landfill operation would result in approximately 130 acres (48 acres which have already been filled with refuse, 60 acres to be filled with refuse and 22 acres of flood control and containment levees) of restorable wetland being permanently converted to upland
- the portion of the project involving the possible +20,000 cubic yards of dredging from the river to provide levee material would temporarily disturb/destroy those bottom dwelling organisms at the dredge site and temporarily increase sediment loading of the water column
- existence of nuisance factors associated with refuse disposal such as odor, unsightliness, and dust; these nuisance factors can be minimized through proper protective measures such as placement and compaction of refuse as it is delivered to the site, placement of cover fill on a daily basis, and proper maintenance of access roads by paving, oiling and watering

- increase in traffic entering the site which would result in a decrease in air quality
- noise from the heavy equipment involved in extracting and transporting cover material and from vehicles bringing solid waste to the land disposal site
- continuation of the landfill operation would result in obstructing the river view area for much of the residential development located to the east; preservation of the southernmost portion of the project area (ie. +170 acres) would preserve about 3,500 linear feet of viewing area
- title transfer of about 170 acres to the California Department of Fish and Game would result in a loss of tax revenue to local governments from these lands

3.03

COMPARISON OF ALTERNATIVES

<u>IMPACT CATEGORY</u>	<u>ALTERNATIVES*</u>	
	<u>#1</u>	<u>#2R</u>
Vegetation	0	-/+
Fish and Wildlife	0	-
Historic Marshland	0	-/+
Water Quality	-	-/+
Flood Control	-	+
Sanitary Landfill Service	-	+
Nuisance Factors	0	-
Traffic	0	-
Air Quality	0	-
Noise	0	-
Aesthetics	-	-
Land Values	0	0
Taxation	+	-
Mitigation		
- Preservation/Enhancement of Historic Marshland	0	+
- Nuisance Factors	0	+

- + Beneficial Impact
- 0 No Significant Impact
- Adverse Impact

*The alternatives are: (#1) No project; (#2R) revised proposed project.

4.00 SUBJECT CATERGORIES INCORPORATED BY REFERENCE

4.01 As this is an "abbreviated" environmental document for the reasons stated in paragraph 4 of the summary, the following subject categories contained in the Draft EIS dated March 1976 are incorporated by reference in this Final EIS.

- Interrelationship and compatibility of the Project with existing or Proposed and other Federal Projects
- Relationship of the Proposed Action to land use plans
 - Association of Bay Area Governments (ABAG)
 - San Francisco Bay Conservation and Development Commission (BCDC)
 - Napa County
 - Napa County Solid Waste Management Plan
 - Coordination with Solano County
 - Summary

- AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Regional Location
Land Use and Zoning
Physico-Biotic Consideration
Vegetation and Wildlife
Wetland Habitat
Floral Populations
Faunal Populations
Oat Hill Flora and Faunal
Napa River Fishery
Endangered and Threatened Species

Geomorphological Conditions
Geology and Soils
Seismicity
Water Quality
Surface Water
Flood Preventive Measures
Groundwater
Socio-Economic Considerations
Population
Growth Inducement
Taxes
Land Values
Public Health
Fire Hazard
Vehicular Traffic Circulation
Climate
Air Quality
Noise
Project Conditions
Aesthetics
Historical and Archaeological Resources

4.02 Update Information

4.03 Environmental Impact. The March 1976 Draft EIS presented the anticipated impacts of the American Canyon Sanitary Landfill project. The proposed plan revisions of alternative #2R (ie. retention of refuse fill on 48 acres of Phase I, placement of refuse fill on the remaining 7 acres of Phase I, placement of refuse fill on 53 acres on the northern end of Phase 2 and provision of 137 acres in Phase 3 as mitigation lands to be deeded to the California Department of Fish and Game) would likely have the effect of decreasing some impacts, not changing some impacts, and possibly increasing others relative to the information presented in the Draft EIS. A discussion of those significant impacts which may or may not change due to Alternative #2R follows.

4.04 The Draft EIS indicated that the project site was historically a marshland area. The site still contains areas of marshland, and considering the elevations of unfilled portions of the site much of the area could be restored to wetland. Wetlands are considered a unique, valuable, and irreplaceable water resource and serve as a habitat for many species of fish and waterfowl. Such areas moderate extremes in water flow, aid in natural purification, and provide unique recreational values. Alternative #2R would permit the southernmost 170 acres of the site (ie. part of Phase 2 and all of Phase 3) to be preserved and not filled. Also, approximately 33 acres of the 170 acres to be preserved would ultimately be returned to tidal action as part of this alternative. Of the remaining acreage (ie. 108 acres proposed for refuse fill plus 22 acres proposed for flood protection and containment levees) in this alternative, approximately 48 acres have already been filled. The remaining 60 acres (7 acres in Phase I and 53 acres in Phase 2) to be filled with refuse are relatively less valuable in terms of supporting wildlife given their proximity to the existing fill area in Phase I.

4.05 Nuisance Factors. Nuisance factors such as odor, debris, unsightliness, dust, etc., are items which must be considered in the development of any sanitary landfill project. Implementing alternative #2R could reduce the impact of these nuisance factors compared to the information presented in the Draft EIS since this alternative would require filling 108 acres plus 22 acres for flood protection and containment levees instead of the filling of 257 acres under the old plan. If proper protective measures are taken by the landfill operator, these impacts could be minimized. The key to successful control of nuisance factors is constructing the sanitary landfill in accordance with an operational plan that allows for the control of nuisance factors as part of everyday operations. Nuisance factors associated with refuse disposal, such as odor, unsightliness, fire and dust can be controlled by placement and compaction of refuse as it is delivered to the site, placement of daily cover, and proper maintenance of access roads (paving, oiling, and watering). Blowing debris can be contained by controlled wetting of the refuse as it is dumped and by surrounding the work area with properly placed debris fences.

4.06 Land Values. Proximity to the American Canyon Sanitary Landfill has apparently not had a significant effect on land values in the past. The disposal site pre-dates adjacent subdivisions by at least 10 years, and many homes were purchased when the site was being used as a dump with open burning. Since the proposed site configuration (especially the eastern boundary as discussed in the Draft EIS) is the same as the current proposed plan revisions no change in land values is expected relative to the information presented in the Draft EIS.

4.07 Noise. Noise and its impact on people is usually measured in decibels (dBA). Generally, 80 dBA at a distance exceeding 200 feet is considered the maximum acceptable limit. There are two primary sources of noise resulting from the existing landfill operation: (1) heavy equipment involved in extracting and transporting cover material and in compacting and covering the fill; and (2) vehicles bringing solid waste to the disposal area. Under existing conditions it is expected that normal daytime noise levels in the residential area to the east of the site would be about 40 to 45 dBA. The homes which are closest to the landfill operation (those on the western edge of the Rio Del Mar) are roughly 3,000 feet from the edge of the site and could experience noise levels resulting from the landfill operation of about 40 to 60 dBA. However, because the machinery on the site does not operate at full power for extended periods, and because the operation is planned so that the working area will face away from the residential area, equipment would not produce these noise levels, and noise levels may not increase significantly over existing levels. The noise impact resulting from vehicles entering and leaving the site is currently limited to the daytime hours of 8 a.m. to 5 p.m., the hours of site operation.

4.08 Aesthetics. The continuation of the landfill operation with either Alternative #2R or the proposed plan in the Draft EIS would result in blocking out the view of the river area for much of the residential development located to the east. The primary change due to the proposed plan revisions of Alternative #2R could create a plateau up to 60 feet in height compared to a plateau height of approximately 25 feet considered in the proposed project of the Draft EIS. The current Alternative #2R would also allow for the preservation of the southernmost portion of the project area and would preserve about 3,500 linear feet of viewing area.

4.09 Taxation. The proposed plan revisions of Alternative #2R as indicated in the agreement between the American Sanitary Landfill Company and the Resources Agency of California would transfer title of 170 acres of land to the State. This would result in loss of tax revenue to local governments from these lands.

4.10 Endangered or Threatened Species. The Corps requested formal consultation with the U.S. Fish and Wildlife Service (US F&WS) pursuant to Section 7 of the Endangered Species Act as amended in 1979. The US F&WS indicated the following five species may occur within the project area: salt marsh harvest mouse (*Reithrodontomys raviventris*), California clapper rail (*Rallus longirostris obsoletus*), American peregrine falcon (*Falco peregrinus anatum*), soft bird's-beak (*Cordylanthus mollis* ss. *mollis*), and California blackrail (*Laterallus jamaicensis* ss. *coturniculies*). After further consultation, the only species in question was the salt marsh harvest mouse

and the US F&WS provided the Biological Opinion (letter dated 13 August 1980) "...that the proposed fill at the American Canyon Sanitary Landfill site is not likely to jeopardize the continued existence of the salt marsh harvest mouse and/or its habitat."

4.11 Other Impacts. The other impacts resulting from implementation of Alternative #2R are expected to be similar in magnitude to those presented in the Draft EIS.

4.12 Alternative #2R Mitigation. In order to satisfy wetland concerns expressed by other agencies the applicant has entered into a signed formal agreement (dated 7 October 1980) with the Resources Agency of California to provide the following mitigation measures:

(1) Preservation of approximately 170 acres (33 acres in Phase 2 and 137 acres in Phase 3 (see Sheet 2)) by deeding such land to the California Department of Fish and Game (CA F&G).

(2) Install a tidal gate in the Phase 2 levee such that the portion of Phase 2 deeded to CA F&G will flood and drain twice daily to minimum depth of 1.5 feet above 70 percent of the existing vegetation. CA F&G would operate and maintain the tidal gate.

(3) Install a tidal gate in the Phase 3 levee; the location of the tidal gate would be mutually selected by the applicant and CA F&G; the tidal gate would be operated and maintained by CA F&G.

(4) Install as much fencing around Phase 3 and the remainder of phase 2 as is required to prevent cows and horses from entering the area.

(5) the land area surrounding the embayment to the west of the project site will be graded, covered, and compacted by the applicant in a manner deemed aesthetically sound.

(6) Provide all necessary leachate controls for Phase I and the 53 acres of Phase 2.

(7) Construct (with the review and approval of CA F&G) a slough and connect lateral ditches within the existing levees surrounding the remainder of Phase 2.

(8) Provide a nonexclusive route for public access to the river in the areas of the disposal operation and to the mitigated lands referred to in item (1) above.

(9) Upon closure of the landfill operation,, the project site will be utilized for open space purposes only.

4.13 Authorizations obtained by the permit applicant include a Waste Discharge Requirements Order No. 79-115 from the California Regional Water Quality Control Board, and a Solid Waste Facilities Permit No. 28-AA-001, dated 11 August 1978, from the California Solid Waste Management Board, in conjunction with the Napa County Environmental Health Department.

<u>IMPACTS*</u>	<u>ALTERNATIVES</u>	
	<u>#1</u>	<u>#2R</u>
Associated with disturbance of approximately six acres of river bottom during dredging activities required for levee improvement		
-increased sediment suspension in water column		X
-temporary reduction in the concentration of dissolved oxygen		X
-increased turbidity and resultant stress on planktonic larvae, filter feeding organisms and reduction in photosynthesis		X
-disturbance/destruction of benthic organisms		X
Loss of restorable wetland wildlife habitat due to landfill within diked area	X <u>1/</u>	X
Permanent displacement of some bird species from the site	X <u>1/</u>	X
Increase in vehicle traffic during life of the landfill operation		X
Decrease in air quality due to increased vehicle traffic during life of the landfill operation		X
An increase in noise due to vehicle traffic and machinery during life of the landfill operation		X
A permanent alteration of the visual appearance of the area due to the landform that would be created	X <u>1/</u>	X

* "X" Denotes an impact for that alternative.

X 1/ Applies to the approximately 48 acres of existing refuse fill in Phase 1.

6.00 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

6.01 The question of essential productivity for the American Canyon Sanitary Landfill site is a question of land use. That is, does the proposed use of Alternative #2R offer the community short-term utility while foreclosing future options for long-term productivity?

6.02 The short-term utility of the project site is that it offers a geographically convenient, relatively low-impact location to handle solid wastes generated by a service population of some 130,000 persons. Although service would extend to the year 1990, this use must be considered only temporary. The long-term utility of the site would not be related to the disposal activity which Alternative #2R proposes to continue.

6.03 The project site is zoned for industrial use in conjunction with the use permit for the ongoing disposal activity. Development on the site is not feasible due to inadequate flood protection and the mitigation agreement between the applicant and the Resources Agency of California which limits use of the completed landfill to open space purposes only.

6.04 Alternative #2R combines the retention of intensive use options (landfilling) with the foreclosure of the wetland open space option. Alternative #2R would irreversibly convert the remainder of the Phase 1 area and 53 acres of Phase 2 to upland habitat. However, Alternative #2R would also permanently retain approximately 170 acres of open space and improve the wetland value of a portion (ie. 33 acres) of the 170 acres. Wetlands represent an ecosystem of unique and major importance. Wetlands and other low-lying areas, which during some period of the year will be covered in part by natural non-flood waters, are a unique, valuable, irreplaceable water resource. They serve as a habitat for important fur-bearing mammals, many species of fish, and waterfowl. Such areas moderate extremes in water flow, aid in the natural purification of water, and maintain and recharge the groundwater resource. They are: the nursery areas for a great number of wildlife and aquatic species; unique recreational areas, high in aesthetic value, that contain delicate and irreplaceable specimens of fauna and flora.

6.05 Fresh-water wetlands support the adjacent downstream aquatic ecosystem in addition to the complex web of life that has developed within the wetland environment. The relationship of the fresh-water wetland to the subsurface environment is symbiotic, intricate, and fragile. In the tidal wetland areas the tides tend to redistribute the nutrients and sediments throughout the tidal marsh and these in turn form a substrate for the life supported by the tidal marsh. These marshes produce large quantities of plant life that are the source of much of the organic matter consumed by shellfish and other aquatic life in associated estuaries (EPA, 1973).

6.06 The land comprising the site and immediate environs has already been subjected to intensive use by man over the last 50 years. Due to this, the land is now quite different from its original state. For example, the levees prevent periodic flooding of most of the historic marshland on the site; a dike composed of Bay Mud and fill material runs through the site; drainage ditches have been dug, etc. However, Alternative #2R as stated previously would retain approximately 170 acres of the 300-acre site as open space and improve the wetlands value of a portion of the 170 acres.

7.00 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION (ALTERNATIVE #2R) SHOULD IT BE IMPLEMENTED

7.01 The continued use of the site as a sanitary landfill would raise the land elevation above the original grade. The cost of excavating and transporting refuse from the site and the difficulty of locating and developing an acceptable alternative disposal site for this waste essentially prohibits substantial lowering of land elevations. It can, therefore, be assumed that once the refuse is placed to elevations above the original ground surface, a final commitment to increased land elevation has been made. Because of this, the possibility of returning the site to a wetland habitat would be lost and the loss of this potential is a significant irreversible and irretrievable commitment of a resource. In total, 120 acres of restorable wetland either have been (ie. 48 acres of Phase 1) or would be (ie. 7 acres in Phase 2 and 53 acres in Phase 2) permanently converted to upland habitat.

7.02 The aesthetic setting or appearance of the area would be permanently altered due to the creation of the refuse landform. This would constitute the irreversible and irretrievable commitment of a resource.

7.03 The refuse itself can be considered a resource in terms of the recycable materials it could yield. Burial in the landfill virtually eliminates the possibility of retrieving this resource.

7.04 The cover material taken from the Oat Hill borrow area can be considered an irreversible commitment of a resource in terms of loss of soil cover at the borrow area.

8.00 COORDINATION

8.01 Public Participation. The application for a Department of the Army permit concerning the American Canyon Sanitary Landfill Operation was first announced in Public Notice No. 74-0-105 on 8 March 1974. A draft environmental impact statement on Public Notice No. 74-0-105 was released to the public in March 1976. Subsequent to the release of the Draft EIS, the Corps issued Public Notice No. 9297-29 (revision of 74-0-105) on 20 April 1978 and conducted a public hearing on 26 April 1978 to receive comments on a revised plan which was not discussed in the Draft EIS. In response to comments generated on the Draft EIS and the public hearing on the plan revision, the permit applicant sponsored the current plan as stated in Public Notice No. 9297-29R issued 11 May 1981.

8.02 The significant comments received on Public Notice Nos. 74-0-105 dated 8 March 1974, and 9297-29 dated 20 April 1978, as well as the public hearing conducted on 28 April 1978 are summarized in the Project History section of the INTRODUCTION. Following are the comments and responses to the Draft EIS dated March 1976 and Public Notice No. 9297-29R dated 11 May 1981.

COMMENTS AND RESPONSES

TO

DRAFT ENVIRONMENTAL IMPACT STATEMENT

**American Canyon Sanitary Landfill Operation
Regulatory Permit Application
Napa County, California
Dated March 1976**



FN 74-3-105
(9297-09)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

REGIONAL OFFICE

50 FULTON STREET

SAN FRANCISCO, CALIFORNIA 94102

OFFICE OF ENVIRONMENTAL AFFAIRS

OFFICE OF
THE REGIONAL DIRECTOR

April 14, 1976

District Engineer
U.S. Army Engineer District
San Francisco
100 McAllister Street
San Francisco, California 94102

RE: Draft Environmental
Impact Statement;
American Canyon Sani-
tary Land Fill Opera-
tion, Regulatory Permit
Application, Napa
County, California

Dear Sir:

The above Draft Environmental Impact Statement has been reviewed in accordance with the interim procedures of the Department of Health, Education and Welfare as required by Section 102 (2) (c) of the National Environmental Policy Act, PL 91-190.

The material provided appears to describe adequately the impacts of the proposed action as well as the alternatives that were presented. The major concerns of this department are related to possible impacts upon the health of the population, services to that population and changes in the characteristics of the population which would require a different level or extent of services. Our review does not identify problems related to these specific concerns.

The opportunity to review this statement was appreciated.

Sincerely,

Evelyn Washel
for James D. Knochenhauer
Regional Environmental Officer

cc: OS/OEA
CEQ

RESPONSE TO COMMENT BY THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
(14 April 1976)

1. Comment noted.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WESTERN REGION
P. O. BOX 92007 WORLDWAY POSTAL CENTER
LOS ANGELES CALIFORNIA 90009



June 3, 1976

Colonel H. A. Flertzheim, Jr.
District Engineer
Department of the Army
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, Ca 94102

Dear Colonel Flertzheim:

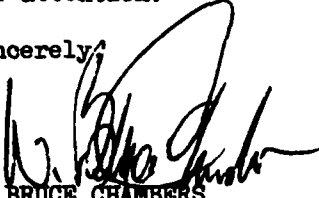
As requested, we have now completed a review of your draft Environmental Statement, American Canyon Sanitary Landfill Operation Regulatory Permit Application, Napa County, California and our review comments are as follows:

1. We are seriously concerned regarding the effects that a major expansion of a sanitary landfill would have on increasing the probability of bird strikes at Napa County Airport, Napa, California. The landfill is located approximately 10,000' south of the airport and within the FAR 77 imaginary surfaces.
2. FAA Order 5200.5 outlines our policy regarding sanitary landfills near airports. Based on the criteria in the order, the landfill might be considered incompatible with airport operations.
3. The Draft EIS does not describe the airport nor the impact that the landfill would have on the airport. An analysis should be included which would identify the existing number of birds and the expected increase and how it may affect the possibility of bird strikes.
4. The Environmental Impact Assessment Report recently prepared for the Airport Master Plan states that:
"Birds, particularly gulls, are found to have the greatest potential for colliding with aircraft. An extensive study of bird hazard to aircraft was performed by Prof. Howard L. Cogswell for the United States Public Health Service. He has found that a flightway exists between the sewage oxidation pond north of Napa County Airport and the garbage disposal site south of the airport. It can be concluded from his study that as long as these attractors remain open, the potential for bird strikes will

increase as aircraft operations and speeds increase."

We appreciate the courtesy extended in bringing this matter to our attention.

Sincerely,

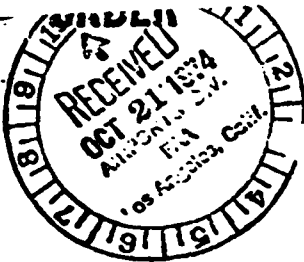
A handwritten signature in black ink, appearing to read 'W. Bruce Chambers', written in a cursive style.

W. BRUCE CHAMBERS
Regional Planning Officer

Enclosure

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

5200. 5



10/16/74

SUBJ: FAA GUIDANCE CONCERNING SANITARY LANDFILLS ON OR NEAR AIRPORTS

1. **PURPOSE.** This order provides guidance concerning the elimination or monitoring of open dumps, waste disposal sites, and sanitary landfills on or in the vicinity of airports.
2. **DISTRIBUTION.** This order is distributed to Washington headquarters and Regional Airports, Flight Standards and Air Traffic offices to division level; all Airports District Offices; and Flight Standards and Air Traffic field facilities.
3. **BACKGROUND.** Garbage dumps, sanitary landfills or whatever title is used for this type of operation attract rodents and birds, erodes the airport environment, and where the dump is ignited, creates smoke - all which are undesirable and are potential hazards to aviation.

While the chance of an unforeseeable, random bird strike in flight will always exist, it is nevertheless possible to define the high-risk conditions within fairly narrow limits. Those high-risk conditions exist in the take-off, climb-out, approach and landing areas on and in the vicinity of airports. The increasing number of bird strikes reported on aircraft has become a matter of concern to the FAA and to airport management. Various studies and observations have resulted in the conclusion that sanitary landfills are artificial attractants to birds. Accordingly, landfills located in the vicinity of an airport may be incompatible with safe flight operations. Those conditions that are not compatible must be eliminated, to the extent practicable. Airport owners need guidance in making this decision, and the FAA must be in a position to assist. Some airports are not under the jurisdiction of the community or local governing body having control of land usage in the vicinity of the airport. In these cases, the airport owner should use its influence and best efforts to close or control landfill operations within the general vicinity of the airport.

4. **ACTION.**

- a. Sanitary landfills located within the areas established for an airport by these guidelines as set forth in paragraph 5 of this order should be closed. If a sanitary landfill is determined as

Distribution: WRAS/AT/FS-2; FFS-0, FAT-0,
FAS-1 (Normal)

Initiated By: AAS-680

10/16/74

incompatible land use under guidelines of paragraph 5 and cannot be closed within a reasonable time, it should be designed and operated in accordance with the criteria and instructions issued by the Environmental Protection Agency, the Department of Health, Education and Welfare, and other such regulatory bodies that may have applicable requirements. FAA should advise airport owners against locating, permitting or concurring in the location of a landfill on or in the vicinity of airports.

- b. The operation of a sanitary landfill located beyond the areas described in paragraph 5 and designed in accordance with the guidelines identified in the foregoing paragraph must be properly supervised to insure compatibility with the airport. If at any time the landfill, by virtue of its operation, presents a potential hazard to aircraft operations, the owner shall take action to correct the situation or terminate operation of the landfill. Failure to take corrective action could place the airport owner in noncompliance with the commitments under a grant agreement.
- c. An inspection of current operations at existing landfill sites which have a reported potential bird hazard problem will periodically be made and evaluated. A Bird Hazard Group formed under Order 5200.4 dated 11/20/73 could appropriately be available for consultation regarding this activity. Should it be found that birds attracted to the landfill site do in fact constitute a potential hazard to aircraft, the condition will be reported to AAT-430, National Flight Data Center (NFDC), for possible inclusion in the Airman's Information Manual. The appropriate FAA office should immediately evaluate the situation to determine compliance with the grant agreement and take such action as may be warranted under the guidelines as prescribed in Order 5190.6, Airports Compliance Requirements.
- d. This order does not apply to landfills used exclusively for the disposal of rock and earth.
- e. This order is not intended to resolve all related problems, but is specifically directed toward eliminating sanitary landfills in the proximity of airports, thus providing a safer environment for aircraft operations.
- f. The airport operations manual should require landfill site inspections at least semi-monthly for those landfill operations that cannot be closed to assure that bird population is not increasing.

10/16/74

5200.5

- g. Additional information on solid waste disposal, bird hazard and related problems may be obtained from the following agencies:

Bureau of Sport Fisheries and Wildlife
U.S. Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20240

Office of Solid Waste Management
Programs (HM-562)
U.S. Environmental Protection Agency
1835 K Street, N.W.
Washington, D.C. 20406

U.S. Department of Health, Education & Welfare
330 Independence Avenue, S.W.
Washington, D.C. 20201 --

5. CRITERIA. Sanitary landfills will be considered as an incompatible use if located within areas established for the airport through the application of the following criteria:
- a. Landfills located within 10,000 feet of any runway used or planned to be used by turbojet aircraft:
 - b. Landfills located within 5,000 feet of any runway used only by piston type aircraft.
 - c. Landfills outside of the above perimeters but within the conical surfaces described by FAR Part 77 and applied to an airport will be reviewed on a case-by-case basis.
 - d. Any landfill located such that it places the runways and/or approach and departure patterns of an airport between bird feeding, water, or roosting areas.

William V. Vitale
WILLIAM V. VITALE, Acting Director
Airports Service, AAS-1

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**SAN FRANCISCO AIRPORT DISTRICT OFFICE
831 Mitten Road
Burlingame, California 94010**



FEB 15 1977

Colonel H. A. Flertzheim, Jr.
District Engineer
Department of the Army
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, CA 94102

Subject: American Canyon Sanitary Landfill, Napa County, California,
Draft Environmental Impact Statement

Dear Colonel Flertzheim:

We have reviewed the information and mitigating factors submitted by
EMCON Associates' letter of January 31, 1977 (copy attached).

6 Based on the following facts presented in the above letter, we have
no objection to the continued use of the American Canyon Sanitary
Landfill in Napa County:

1. The sanitary landfill operation is to continue at about the same rate and volume as in the past.
2. The size of the open face of the filling operation will conform with current EPA requirements.
3. The open face of the fill will be covered daily in conformance with current EPA requirements.

Sincerely,

A handwritten signature in cursive script, appearing to read "F. Isaac".

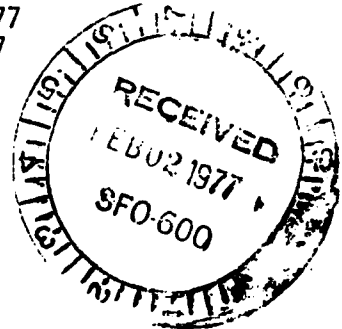
FREDERICK M. ISAAC
Chief, Airport District Office, SFO-600

Attachment

cc:
Mr. R. J. Leach w/o attachment



January 31, 1977
Project 106-1.7



Mr. Frederick M. Isaac
Chief, Airport District Office, SFO-600
831 Mitten Road
Burlingame, CA 94010

Dear Mr. Isaac:

Re: American Canyon Sanitary Landfill
Napa County, California

I enjoyed meeting with you and John Sodek to discuss the American Canyon Sanitary Landfill project. As we concluded during our discussion, the Environmental Impact Statement is rather brief in its coverage of the history of the landfill project, and this has led to an incorrect interpretation that the project is an expansion of a landfill operation. In fact, no expansion is proposed. The site will continue to serve the cities of Napa and Vallejo and the unincorporated areas of Napa County, as it has for more than 30 years.

As you know, the landfill was included in an evaluation of potential bird hazards to aircraft conducted by the Federal Aviation Administration in 1974. The evaluation was made in response to the Department of Transportation Federal Aviation Order No. 5200.5, titled, "FAA Guidance Concerning Sanitary Landfills on or Near Airports," dated October 16, 1974.

Handwritten notes in a column on the left margin, including a checkmark and some illegible scribbles.

An FAA committee, convened at the Napa County Airport on December 11, 1974, inspected the oxidation ponds north of the airport, the airport itself, and the American Canyon Sanitary Landfill located more than 10,000 feet south of the airport. After its inspection the committee concluded in a letter dated December 12, 1974 to Marshall Sears, Chairman of the Board of Supervisors, Napa County, "... that neither the birds from the oxidation ponds or the sanitary landfill will present a bird hazard to jet and/or propellor driven aircraft that will fly to and from the Napa County Airport currently and after the completion of the proposed runway extension." Since no expansion of the landfill project is proposed, the conditions observed by the FAA Bird Hazard Committee in December 1974 are representative of present conditions with the exception that operational techniques have been improved. The committee's evaluation therefore remains, today, a valid determination.

A This letter presents a brief history of the American Canyon Sanitary
B Landfill to assist you in understanding the Environmental Impact Report
C process currently underway with respect to the landfill operation and to

inform you of improvements made in operational techniques employed at the site, subsequent to your committee inspection, to comply with the Department of Transportation, Federal Aviation Administration Order No. 5200.5, "FAA Guidance Concerning Sanitary Landfills on or Near Airports," dated October 16, 1974.

History

Waste disposal operations commenced on the 300-acre American Canyon Sanitary Landfill site in 1942. Disposal was by open burning until November 1971, with landfilling also being practiced from about 1957 on. In January 1967, the Napa County Board of Supervisors granted a use permit for sanitary landfill operations on the entire 300-acre site. Waste Discharge Requirements were adopted for the entire site by the California Regional Water Quality Control Board in April 1968.

In 1973 the Army Corps of Engineers first claimed jurisdiction over the landfill project based on its administrative interpretation of authority granted to it by the River & Harbor Act of 1899. Subsequently, the Army Corps of Engineers ordered the preparation of an Environmental Impact Report for the ongoing landfill operation. It is the Environmental Impact Statement developed from the EIR that the FAA was requested to respond to.

In summary, the waste disposal operation conducted by the American Canyon Sanitary Landfill Co. is not a new landfill operation. It is a continuance of a landfill operation commenced in 1942 and upgraded to the status of a sanitary landfill operation in recent years in accordance with local and state permits that authorize landfilling of the entire 300-acre site.

Landfill Location and Operation

The north boundary of the landfill is located approximately 10,000 feet south of the Napa County Airport. Since the site will be filled from north to south in accordance with the site development plan, the distance between the airport and the active operation will increase as the site is developed.

The primary attraction to birds at a landfill is the potential food supply available in the wastes disposed of at the site. The American Canyon landfill is operated under the guidelines of local and state regulatory agencies which require the placement of soil cover over the refuse on a daily basis. This practice at the American Canyon site has minimized the area of exposed refuse and thus the attractiveness of the site as a food source for the birds. Operating procedures are more particularly described below.

Solid wastes are disposed of by the ramp method of arcal filling in lifts 10 to 15 feet in thickness. The wastes are deposited at the toe of a 100-foot-wide, west facing refuse fill slope. The wastes are then spread in thin layers on the slope or "working face" and compacted to a density of 1200 pounds per cubic yard by repeated passes with an 826 B Caterpillar compactor weighing 66,000 pounds. The top of the lift is

covered daily with a 1-foot compacted thickness of soil, and the Regional Water Quality Control Board requires that the working face be covered with 6 inches of soil each day after the last load of refuse has been compacted. A State of California registered inspector controls the width of the working face to the 100-foot maximum, inspects disposal and cover operations, and advises the equipment operators as necessary to maintain a true sanitary landfill operation in accordance with State of California guidelines.

The site is being filled in successive 100-foot-wide strips of fill which are advanced from east to west, and the site is being filled from north to south. The northerly 1200 feet of the site will be filled to final grade within 4 years, and the operation will be relocated at that time to more than 11,000 feet from the Napa County Airport runway.

Bird Control

The controlled sanitary landfill operation minimizes the exposure of refuse to scavengers. While gulls are present at the site, as noted in the report by the FAA Bird Hazard Committee, December 12, 1974, we believe that the current disposal operation is a model sanitary landfill operation, employing all available legal methods to discourage the attraction of gulls. We further believe that the improved operating techniques now utilized have brought the site into full compliance with FAA Order No. 5200.5.

Should you have further questions on the landfill operation please do not hesitate to call on me.

Very truly yours,

EMCON ASSOCIATES



Richard J. Leach
Chief Engineer
(CA) RCE 16111

RJL:pl

cc: Larry Zunino
Dwight Ely

RESPONSE TO COMMENTS BY DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION
ADMINISTRATION (3 June 1976 and 15 February 1977)

1. The north boundary of the landfill is located approximately 10,000 feet south of the Napa County Airport. Since the site will be filled from north to south in accordance with the site development plan, the distance between the airport and the active operation will increase as the site is developed. The possibility of bird strikes, therefore, should decrease as the site is developed.

The primary attraction to birds at a landfill is the potential food supply available in the wastes disposed of at the site. The American Canyon landfill is operated under the guidelines of local and state agencies which require the placement of soil cover over the refuse on a regular basis. This practice at the American Canyon site has minimized the area of exposed refuse and thus the attractiveness of the site as a food source for the birds.

Although the proposed project will increase the area that will ultimately be landfilled, the area of refuse exposed at any time will not increase due to the frequent placement of soil cover. Expansion of the landfill will not, therefore affect the attractiveness of the site to birds.

2. The landfill operation is not considered incompatible with airport operations. Refer to FAA comment letter dated 15 February 1977.

3. The airport is considered outside the scope of the EIS. The proposed project is not expected to have a significant impact on the airport.

4. Refer to response numbers 1 and 2.

5. Refer to response number 1 above and response number 2 to FAA comment in their 18 May 1981 letter in response to PN 9297-29R.

6. Comment noted.



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230

May 21, 1976

Colonel H. A. Flertzheim, Jr.
San Francisco District, Corps of Engineers
Department of the Army
100 McAllister Street
San Francisco, California 94102

Dear Colonel Flertzheim:

This is in reference to your draft environmental impact statement entitled "American Canyon Sanitary Landfill Operation, Regulatory Permit Application, Napa County, California." The enclosed comments from the National Oceanic and Atmospheric Administration are forwarded for your consideration.

Thank you for giving us an opportunity to provide these comments, which we hope will be of assistance to you. We would appreciate receiving eight copies of the final statement.

Sincerely,

Sidney R. Galler
Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Enclosures Memo from: Mr. Robert Kifer
CZ6





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, Md. 20852

Date: May 13, 1976

Reply to
Att'n of:

Robert Kifer, CZ6 *R.K.K.*

Subject: DEIS 7604.08 American Canyon Sanitary Landfill Operation

MAY 14 1976

To: William Aron
EE

The proposers of this DEIS have adequately discussed the relevant policies of the Bay Conservation and Development Commission (BCDC), an agency having permit authority over dredge and fill operations in San Francisco Bay and surrounding wetlands. While the proposers acknowledge the possibility of serious degradation of coastal waters (Section 4.44), and relate BCDC policies (Section 3.03-3.06) which appear to be in conflict with the proposed action, they state correctly in Section 3.07 that the action will not occur within BCDC jurisdiction.

BCDC, however, has applied to the Office of Coastal Zone Management for Section 306 program approval. With Secretarial approval, the Federal consistency provisions (summary attached) of the Coastal Zone Management Act of 1972 will become effective. Because of the possibility that BCDC will receive program approval before approval of this permit is made, and because the action could be construed as inconsistent by BCDC, the Office of Coastal Zone Management suggests that the Corps of Engineers establish direct contact with BCDC. While the Corps requested BCDC to review and comment upon the DEIS, they were previously not aware of the proposal.

Again, the Office of Coastal Zone Management appreciates the opportunity to comment.

Attachments

RESPONSE TO COMMENT BY THE U. S. DEPARTMENT OF COMMERCE, THE ASSISTANT
SECRETARY FOR SCIENCE AND TECHNOLOGY (21 May 1976)

1. Comment noted. The Corps has been in contact with BCDC and the permit applicant is aware that a permit from BCDC for the dredging portion of their project would be required.



ER 76/325

UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF THE SECRETARY

PACIFIC SOUTHWEST REGION

BOX 36098 • 450 GOLDEN GATE AVENUE

SAN FRANCISCO, CALIFORNIA 94102

(415) 556-8200

May 14, 1976

Colonel H. A. Flertzheim, Jr.
District Engineer
San Francisco District, Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Flertzheim:

The Department of the Interior has reviewed the draft environmental statement for American Canyon Sanitary Landfill Operation Regulatory Permit Application, Napa County, California.

1
The proposed project would result in permanent loss of about 250 acres of restorable wetland by continuation of landfill operations. Consequently it is anticipated that the Department of the Interior will, as a minimum in subsequent review of the permit application under present agreements and authorities, recommend to the Corps of Engineers that the applicant develop a fish and wildlife plan to compensate for resource losses.

2
Although the proposed landfill project is located immediately south of large solar salt evaporating ponds, production of salt is not mentioned in the text. Salt ponds are shown in cross-section in Plate 15. Since salt is an important industrial mineral in the project vicinity, the document should acknowledge the proximity of the evaporating ponds and indicate whether project operation would affect salt production.

3
In discussion of socio-economic impacts, we suggest additional emphasis be directed to the affirmative results of a properly managed landfill. The ultimate disposal of organics on land can substantially stimulate vegetative growth and result in marked improvement in physical surroundings.

4
The final statement should include a copy of the State Historic Preservation Officer's comments on project impacts on historical and archeological resources.

5 Portions of the project site contain marsh plants not mentioned in text or referred to in appendix tables. Plants including California bulrush and cordgrass are indicative of marsh and wetland conditions. They are on the project site but are not noted in the document.
A more detailed description of plant communities would be helpful.

6 On page 11, a fourth habitat which should be recognized is the slough in the area of phase 3, which supports border vegetation of high wildlife value.

The narrative discussion of shore and water birds could be improved. The Department of the Interior has on several occasions censured several hundred waterfowl utilizing the site and the adjacent portion of Napa River. Therefore, the term "several ducks" does not satisfactorily acknowledge the important waterfowl use that this area receives.

7 Even though CH₄ (Methane Gas), a product of general oxidation, is not an air pollutant, it is potentially dangerous due to its volatile nature if allowed to compress. We suggest the document discuss plans for dispersion or consumption if the need arises. Also, hydrogen sulfide gas (H₂S) will be formed when layers of fill become anaerobic creating an odor problem upon their escape.
This is not a special condition but a general condition. This matter should be addressed in the narrative.

8 Leaching NH₄ or nutrients is not a problem because the ultimate receiving body is well within tidal influence. However, the materials add to the ultimate estuary load that may become excessive at some future time. We suggest this possibility be discussed in the text.

9 The narrative indicates that the only alternatives available to the Corps are to either grant or deny the permit. Corps of Engineers regulations in "Permits for Activities in Navigable Waters or Ocean Waters," published in the July 25, 1975, Federal Register state that a permit may be conditioned to eliminate or mitigate any damages to fish and wildlife resources. As a third alternative, therefore, the permit could contain stipulations designed to achieve maximum reduction in project caused fish and wildlife losses.

We appreciate the opportunity to review and comment on the draft statement.

Cordially,



Webster Otis
Special Assistant to the Secretary

cc: OEPR w/c incoming
Regional Director, FWS, Portland
Regional Director, BOR, San Francisco
Regional Director, NPS, San Francisco
USGS, Reston, Attn: Bonham
Director, BOM, Washington, D.C.
State Director, BLM, Sacramento
Regional Director, BuRec, Sacramento

RESPONSE TO COMMENTS BY THE UNITED STATES DEPARTMENT OF THE INTERIOR -
OFFICE OF THE SECRETARY (14 May 1976)

1. Under Alternative #2R the current proposed project would result in approximately 130 acres (48 acres which have already been filled with refuse, 60 acres to be filled with refuse, and 22 acres of flood control and containment levees) of restorable wetland being permanently converted to upland. The permit applicant has a signed mitigation agreement with the State Resources Agency to preserve approximately 170 acres of which approximately 33 acres would be returned to tidal action. Also, please refer to page 11 paragraph 4.12 of the FEIS for additional information on the proposed project mitigation.

2. The landfill site is located approximately 0.5 mile south and downstream from the solar evaporating ponds used for the production of salt. The use of the site as a sanitary landfill will not affect salt production in these ponds.

3. In addition to this comment, a properly managed landfill such as the American Canyon site is vital to the maintenance of public health in that it provides a convenient, reliable and environmentally safe depository for wastes.

The convenience offered by the sanitary landfill site location encourages the frequent collection and disposal of refuse, thereby avoiding the attraction of rodents and preventing the maturing of disease carrying flies that breed in home refuse containers.

Operation of the landfill as a true sanitary landfill where wastes are compacted to the smallest practicable volume and covered daily with a layer of soil prevents the development or harboring of flies, rodents, and other disease carrying vectors, and completes the public health cycle with respect to refuse. The American Canyon site has the capacity to serve the disposal needs of its service area to the benefit of public health to the year 1990. Completion of the landfill would provide flood-free land for use as open space.

4. By letter dated 27 August 1981, the Corps formally coordinated with the State Historic Preservation Officer (SHPO) concerning a cultural resource survey information request on the American Canyon Landfill project. By mutual agreement SHPO is required to respond with additional information or objections within 30 days of our formal request for information. Since SHPO did not respond to our request, either informally or formally, it is presumed that SHPO concurs in our determination of no effect.

5. Comment noted.

6. Comment noted.

7. Methane gas is potentially dangerous if confined in concentrations between 5 and 15 percent in the presence of free oxygen. Under these conditions the potential of an explosion exists if the gas is ignited. Methane production

RESPONSE TO COMMENTS BY THE UNITED STATES DEPARTMENT OF THE INTERIOR -
OFFICE OF THE SECRETARY (14 May 1976) - Continued

within a landfill occurs under anaerobic conditions however, and since oxygen is not present, the potential of an explosion within the fill does not exist.

The methane gas will vent harmlessly through the landfill soil cover. This natural venting can be accelerated by pumping from extraction wells drilled into the fill.

Hydrogen sulfide gas is produced in quantity in landfills only under special conditions such as when refuse is dumped into sea water or when large quantities of gypsum are incorporated into the wastes. Neither of these conditions exist at the site.

8. Materials from the American Canyon landfill operation which may be added to the ultimate estuary load are not considered significant. It is beyond the scope of this EIS to address the future possibility of an excessive ultimate estuary load.

9. In essence Alternative #2R may be considered "conditioned" in that it incorporates the proposed project as well as mitigation for biological resources.



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION NINE

Two Embarcadero Center, Suite 530
San Francisco, California 94111

ARIZONA
CALIFORNIA
NEVADA
HAWAII
GUAM
AMERICAN SAMOA

IN REPLY REFER TO

9ED

May 6, 1976


Colonel H. A. Flertzheim, Jr.
San Francisco District Engineer
U.S. Army Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Flertzheim:

We have reviewed the Draft Environmental Impact Statement for the American Canyon Sanitary Landfill Operation, Regulatory Permit Application in Napa County, California, and find that the proposed operation will have a minimal impact on the existing road system in the area. Therefore, we have no comments to offer.

We appreciate this opportunity to review the subject Draft Statement.

Sincerely yours,


F. E. Hawley
Regional Administrator

RESPONSE TO COMMENT BY THE U. S. DEPARTMENT OF TRANSPORTATION - FEDERAL
HIGHWAY ADMINISTRATION (6 May 1976)

1. No response required.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

Colonel H. A. Flertzheim, Jr., District Engineer
U.S. Army Engineer District
100 McAllister Street
San Francisco CA 94102

MAY 20 1976

Dear Colonel Flertzheim:

The Environmental Protection Agency has received and reviewed the draft environmental statement for the American Canyon Sanitary Landfill Operation, Napa County, California.

EPA's comments on the draft environmental statement have been classified as Category ER-2. Definitions of the categories are provided on the enclosure. The classification and date of the EPA's comments will be published in the Federal Register, in accordance with our responsibility to inform the public of our views on proposed Federal actions under Section 309 of the Clean Air Act. Our procedure is to categorize our comments on the environmental consequences of the proposed action, and the adequacy of the environmental statement.

EPA appreciates the opportunity to comment on this draft environmental statement, and requests one copy of the final statement when available.

Sincerely,

Paul De Falco, Jr.
Paul De Falco, Jr.
Regional Administrator

Enclosure

cc: Council on Environmental Quality

Comments On the Draft EIS for the American Canyon Landfill Operation, Napa County, California.

1. The final environmental impact statement should describe in greater detail the impact of the proposed action on food chain disruption, inhibition of movement, and wetlands destruction. Assuming a modification of the project to eliminate Phase III development, to what extent would the impact on wetland areas be reduced?

2. The final impact statement should address the impact on rare and endangered species, particularly with respect to existing populations, and the probability of relocation of existing habitats by reducing the size of the proposed project.

3. The draft statement does not support the proposed project as being the least environmentally-damaging alternative regarding destruction of wetlands. The final statement should address this problem in greater detail. Permanent destruction of a total of 255 acres of restorable wetlands is an irreversible commitment requiring a detailed analysis.

EIS CATEGORY CODES

Environmental Impact of the Action

LO--Lack of Objections

EPA has no objection to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all).

Adequacy of the Impact Statement

Category 1--Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2--Insufficient Information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3--Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

RESPONSE TO COMMENTS BY THE U. S. ENVIRONMENTAL PROTECTION AGENCY
(20 May 1976)

1. The present role of the project site in the food chain is fully described in paragraphs 2.008 through 2.026 of the Draft EIS. The value that would be lost by the project site as a landfill is discussed in paragraphs 6.04 through 6.06 of the Final EIS. The reduced impact on wetland areas as a result of eliminating phase 3 from further development as a landfill is discussed in paragraphs 4.03 and 4.04 of the Final EIS.

2. Paragraph 4.10 of the Final EIS discusses endangered and threatened species. To quote the U. S. Fish and Wildlife Service in their Biological Opinion dated 13 August 1980 ". . . the proposed fill at the American Canyon Sanitary Landfill site is not likely to jeopardize the continued existence of the salt marsh harvest mouse and/or its habitat."

3. The current proposed revised project (i.e. Alternative #2R) as described in paragraph 2.03 of the Final EIS is considered the environmental alternative which results in the minimal destruction of wetland.

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

30 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102
PHONE: 557-3686



April 26, 1976

U. S. Army Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Attention: Barney M. Opton

Re: Draft EIS, American Canyon Sanitary Landfill Operation (SCH #76040596)
BCDC Inquiry File No. NP. BI. 6701.1

Gentlemen:

We appreciate the opportunity to comment on the Draft EIS for the American Canyon Sanitary Operation. While the Commission has not had an opportunity to review the report, the staff has read it in light of the Commission's policies and jurisdiction, as stated in the McAteer-Petris Act and the San Francisco Bay Plan, and would like to offer some comments.

1. BCDC jurisdiction and policy in reference to this project are correctly stated in paragraphs 1.06, 3.05, 3.06, and 3.07. However, BCDC jurisdiction may include an approximate five-acre portion of the northern part of the Phase 3 area. This area is shown on the USGS Quadrangle Map entitled "Cuttings Wharf, Calif." as an existing tidal marsh. This area also is shown on Plate 4 in the Draft EIS. If a levee has already been constructed across the opening of this tidal marsh as indicated from the other Plates in the Draft EIS, then when did construction take place and what permits were obtained? If construction occurred after September, 1965, then a BCDC permit may have been required.

2. The Draft EIS does not contain any discussion of proposed off-site mitigation, for example, restoring nearby wetlands to tidal action. In addition the extent of the proposed mitigation under paragraphs 1.32 and 1.33 is not adequate.

3. Levees made of Bay mud (see paragraph 4.32) will tend to crack from wind and solar evaporation due to the high water content of Bay mud. How will leachate be prevented from seeping out through the Bay mud dikes if cracks and deterioration occur during and after completion of the landfill operation? Who will be responsible for any possible leachate problems after the landfill operation is completed? In paragraph 4.16, it is stated that little erosion will occur of Bay mud to be placed as an intermediate cover over the refuse. Since Bay mud has such a high water content it is easily eroded; and if left to dry out, which would take a considerable time, it would crack and not seal the refuse. In addition (see paragraph 1.24) how

U. S. Army Corps of Engineers
Attention: Barney M. Opton
Page Two
April 26, 1976

5 will heavy equipment be able to compact the soft Bay mud since it has such
6 a low strength (negligible bearing capacity). Bay mud dredged from the
7 Napa River for upgrading the levees (paragraph 1.27) and for spreading over
8 the refuse (paragraph 1.24) may undermine the stability of adjacent dikes
and fills. How will this stability problem be minimized?

4. An alternative of a new upland site for refuse disposal is not
discussed under section 6.00, "Alternatives to the Proposed Action." Such
alternatives should be discussed.

5. What are the future uses for the filled area? What would be the
likely impacts on the remaining wetlands, tidelands and the Napa River, if
this landfill area is developed?

I hope our comments will help the City in its preparation of a final
environmental impact report that fully complies with the California Environ-
mental Quality Act of 1970, with the State Guidelines and with the Commission's
regulations. If I can be of any further help, please give me a call.

Very truly yours,

William M. Schwarz

WILLIAM M. SCHWARZ
Environmental Planner

WMS/bbs

cc: L. Frank Goodson
Resources Agency
w/Notice of Intent

RESPONSE TO COMMENTS BY THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT
COMMISSION (26 April 1976)

1. The American Canyon Sanitary Landfill Company reports that the levee in question was in place at the time disposal operations commenced in 1942.
2. The current proposed project (i.e. Alternative #2R) includes on-site mitigation, reference paragraph 4.12 for a discussion of project mitigation.
3. The levees along the perimeter of the landfill will be constructed of a substantial width of bay mud. The levees will have a minimum top width of 12 feet, an interior slope of 2.5:1 (horizontal to vertical), and an exterior slope of 4:1. When constructed to these slopes, the inland levees (top elevation 8.5 feet) will have a base width of over 65 feet and the river levees (top elevation 10.0 feet) will have a base width of over 75 feet.

The interior slopes of the perimeter levees will eventually be buttressed with refuse sealed with soil cover. These covered slopes will not be exposed to the drying effects of wind and sun.

The exterior slopes of the levee will require periodic maintenance to seal shrinkage cracks that would tend to erode if left open. Due to the extensive thickness of the levees there is no concern that cracking would prevent the levees from functioning as designed.

The primary function of the levee system is to prevent flood waters from contacting the refuse. Any leachate that collects within the refuse fill will be contained within the disposal area excavation, bounded by the levee system, and the impermeable bay mud deposits that underlie the landfill site. The containment of the leachate within the fill is not dependent upon the levee system but is controlled by a leachate monitoring and control system. The system consists of a leachate collection trench around the perimeter of the fill in the bottom of the landfill excavation, and sumps and riser pipes extending from the sumps to the surface of the fill.

The operating plan calls for periodic monitoring of leachate levels in the riser pipes. The risers provide conduits for the removal of leachate for treatment and to control the height to which it rises within the excavation. This system insures that leachate will be contained within the site.

The California Regional Water Quality Control Board's issuance of discharge requirements for operation of the disposal site is conditional upon the land owner entering into a written contract that obligates him for perpetual monitoring and maintenance of the site. Correction of any leachate problem is, therefore, the responsibility of the land owner.

4. The Bay mud would be spread out in thin layers and dried to a workable consistency before it is used as cover material. The drier Bay mud will be compacted

RESPONSE TO COMMENTS BY THE SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION (26 April 1976) Continued

to form a seal which will not readily be eroded. The mud will crack however, if allowed to dry out. On intermediate fill surfaces, the Bay mud cover will require periodic maintenance to assure the refuse is properly sealed.

The Bay mud cover placed over the final lift of refuse would be overlain by less expansive imported soil which would minimize moisture loss from the Bay mud.

5. The text of paragraph 1.24 of the Draft EIS incorrectly states that soft Bay mud excavated from the Napa River will be spread over the refuse fill slope and will be compacted over the lift as the fill progresses. Bay mud would be excavated from the river only for the purpose of upgrading the Napa River levees to provide protection against a 100-year flood. Bay mud for cover material would be excavated from within the proposed landfill area. This material would be pre-excavated and spread in thin layers to dry before it is used as cover material. The drier Bay mud can readily be compacted to form a seal over the refuse.

6. The original site design report by Emcon Associates (February, 1972) established a 4:1 outboard slope for perimeter levees, based on an evaluation of soil shear strength and analyses of levee performance under static and seismic loadings. The Bay mud required for upgrading the river levees would be dredged sufficiently outboard of the levee so as not to undermine the 4:1 outboard slope of the levees, and therefore the stability of the levees and perimeter refuse fill slopes would not be affected by the dredging operation.

7. Refer to paragraphs 2.05 through 2.09 of the Final EIS for a discussion of alternative disposal sites.

8. As specified in the formal agreement between the permit applicant and the Resources Agency of California (see Document A-4 of Appendix A), use of the site following completion of sanitary landfill operations shall be limited to open space purposes only. If the site is left as an area of open space there would be no likely impacts on the remaining wetlands, tidelands, and the Napa River.



NAPA COUNTY

FLOOD CONTROL AND WATER CONSERVATION DISTRICT

JOSEPH V. REYNOLDS
DISTRICT ENGINEER

1125 FIRST STREET - NAPA, CALIFORNIA 94558
AREA CODE 707/ [REDACTED] 253-4588

April 7, 1976

Colonel H.M. Flertzheim
District Engineer
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Dear Colonel Flertzheim:

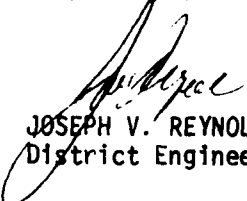
This is in response to your March 26, 1976 transmittal of a draft environmental statement on the proposed American Canyon sanitary landfill operation in southern Napa County.

We have reviewed the draft only for those aspects which pertain to the Flood Control District's interests. Based upon this review we have the following brief comments:

1. On page 7, paragraph 1.40, the last sentence should read "However, the channel enlargement is not designed to provide flood protection below Imola Avenue."
2. Page 20, paragraph 2.064, the last sentence indicates that the Napa groundwater basin has an estimated safe yield of 12,000 acre feet per year. The report "Groundwater Hydrology of Northern Napa Valley, California", issued by the U.S. Geological Survey in 1973, concluded that groundwater uses ranging up to 35,000 acre feet should be possible in the northern valley area under proper management conditions.

We appreciate the opportunity to comment on this draft environmental statement. If you have any questions regarding our comments please contact us.

Very truly yours,


JOSEPH V. REYNOLDS
District Engineer

JVR/mc

RESPONSE TO COMMENTS BY THE NAPA COUNTY FLOOD CONTROL AND WATER CONSERVATION
DISTRICT (7 April 1976)

1. Comment noted.
2. Comment noted.



Association of Bay Area Governments

Hotel Claremont • Berkeley, California 94705 • (415) 841-9730

April 27, 1976

Mr. H. A. Flertzheim, Jr. District Engineer
Department of the Army
San Francisco District, Corps of Engineers
100 Mc Allister Street
San Francisco, CA 94102

Subject: Draft Environmental Statement - American Canyon
Sanitary Landfill Operation Regulatory Permit
Application

Dear Colonel Flertzheim:

We appreciate the opportunity to review the Corps' Draft Environmental Statement for the American Canyon Sanitary Landfill project in Napa County. ABAG staff recognizes that the American Canyon Landfill site is a key feature of both Napa and Solano Counties' Solid Waste Management Plans.

The Final Napa County Plan, which has been approved by the four cities in the County and submitted to the State Solid Waste Management Board for approval, proposes that the American Canyon site receive wastes from the City of Napa through the year 2000. In the 1990-2000 planning period, means of extending the life of the site beyond the year 2000 will be considered. Napa County has granted a use permit to operate indefinitely.


The preliminary Solano County Solid Waste Management Plan and DEIR propose to use the American Canyon site for wastes from the City of Vallejo and surrounding areas until about 1995. A materials recovery facility serving this site is proposed to be in operation by 1985 with abandonment 10 years later. The DEIR notes the possibility that the landfill could not be expanded to accommodate wastes from the whole county--for environmental and institutional reasons. In addition, the DEIR reports that a reconnaissance of potential alternative sites revealed two locations that would offer sufficient space to establish a landfill with minimum environmental impacts. However, neither County's Plan nor the Solano County DEIR describes the adverse impact on 250 acres of restorable wetlands by operation of the American Canyon Landfill site through the year 2000 as proposed.

We would appreciate receiving a copy of any correspondence the Corps has received from the State Solid Waste Management Board on this proposal.

It should be noted that these comments are based on a technical review by the staff of the Association of Bay Area Governments and should in no way be construed as an indication of Association support or non-support of the project.

If you have any questions about these comments, please call Yvonne San Jule at ABAG offices, (841-9730).

Sincerely,


Charles Q. Forester *by lds*
Assistant Director of
Planning and Programming

RESPONSE TO COMMENT BY THE ASSOCIATION OF BAY AREA GOVERNMENTS (27 April 1976)

1. No response is required as the comment is not on the Draft EIS for American Canyon. This comment is on the Solano County Solid Waste Management Plan and Draft EIR.

Harry L. Silcocks
1143 Lambaren Ave.
Livermore, Ca 94550
April 12, 1976

Department of the Army
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, California 94102

Gentlemen:

1 I would like to comment on the Draft Environmental Statement for the American Canyon Sanitary Landfill Operation. In item 4 of the Summary, "modified permit" and "Alternative means of disposal" are listed as alternatives. If I am correct, and item 6.01 supports my view, the Corps of Engineers can only grant or deny the permit. To include alternatives in the EIS which can not be made a part of the permit can only confuse the issue.

2 In item 1.31, Mitigating measures incorporated in the project, and the word "could" in the second sentence causes one to wonder whether "incorporated" or "could" is correct. Both are not correct. If could is correct then the mitigating measures have not been incorporated in the project. If incorporated is correct then I have failed to find in this EIS an agreement by the applicant to incorporate in the application the mitigation measures discussed. I therefor feel that item 1.31 is unnecessary and adds more confusion to the issue.

3 In item 1.32, I am not sure if the alternative that is suggested has been agreed to by the applicant, if this alternative can be made a part of the permit by the Corps of Engineers or if it is just another paragraph that has no meaning. When read with 4.20 and 4.22 I still am not sure what the wetland mitigation measures are. It does appear however that rip-rap has not been proposed by the applicant, thus no need to mention its use.

4 I must protest most strongly the discussion of taxes in items 2.080 and 4.51. A discussion of taxes has nothing to do with the environment. If, and I fail to see how, \$12,016 plays a "significant role" in the local tax structure, that "significant role" should be documented. While the landfill site itself would not utilize services such as schools, it is entirely possible that the employees of the company who work at the site might have children who would attend local schools. It might also be pointed out that the site might require on rare occasion police or fire services, that the roads to the site might require repairs more frequently than if the site was elsewhere. Again, I can not see, and protest, any discussion of taxes. I can not see how taxation plays a part in environmental considerations.

5 In item 5.02a, I would like to see the word "restorable" inserted between "of" and "wetland".

6 Alternative disposal sites (6.03-6.08) should be expanded to include other sites that, while not being presently used for dumps, could be used for such purposes. This EIS should discuss and point out other areas that are suitable for dumps that will not use up restorable wetlands. Any discussion of alternative sites should not restrict itself to only those areas presently being used. If the Corps of Engineers truly believes in the protection of the bays wetland areas then it should discuss areas that are not wetlands that could be used for dumps.

7 In item 6.22, it should be pointed out that the site could be restored to wetland status thereby returning to the bay area a small fraction of that which has been lost and can never be restored. It also appears from the last sentence that the present fill is being contained improperly. If so is the applicant liable for this condition, and can the applicant be made to correct this problem if the permit is denied?

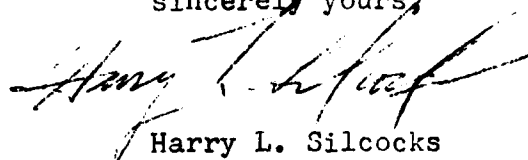
8 In item 6.23, it is not for the Corps of Engineers to decide if a piece of property should be placed under the Williamson Act. Since this act has been discussed in both 6.23 and 6.24, it should also be mentioned how the act operates and is administered along with the purpose of the act.

(3)

9 In items 6.30-6.38 I have been unable to find where the applicant has agreed to any of these alternatives. Discussion about alternatives, unless the applicant has agreed to modify his application in order to obtain the permit, is inappropriate. If the Corps of Engineers can issue a permit with modifications fine, discuss them, if not, there should be no discussion.

10 In item 6.38d. I thought that the Corps of Engineers often did "the work necessary to modify flood protection works...." This statement seems to have been added to discourage any effort to restore the area in question to wetland status. It is but one of many statements that have appeared through out this EIS that have had the same effect. Your bias is showing.

sincerely yours,



Harry L. Silcocks

RESPONSE TO COMMENTS BY MR. HARRY L. SILCOCKS (12 April 1976)

1. The Final EIS considers planning alternatives and decision alternatives. Paragraph 2.13 of the Final EIS relates the decision alternatives to the considered planning alternatives.
2. American Canyon Sanitary Landfill Company has incorporated (via Alternative #2R) project mitigation through a signed agreement with the Resources Agency of California. Refer to paragraph 4.12 of the main report and Document A-4 of Appendix A.
3. See response number 2 above.
4. An environmental impact statement should address a proposed activity's impact on the total environment. Generally the environment may be classified into three categories: physical, biological, and social. Taxes are considered a part of the social environment and in this particular project are considered relevant.
5. Comment noted. See paragraph 5.00 of the Final EIS.
6. No other such sites were identified in the course of the study. To undertake a search for new unidentified sites would be beyond the scope of this permit application and EIS.
7. Part of the proposed project under Alternative #2R is to provide a return to tidal action for approximately 33 acres of the 170 acres to be preserved. The present fill area is not being contained improperly. The last sentence of paragraph 6.22 of the Draft EIS refers to improvements of the area if the area were used for something other than landfill.
8. Comment noted.
9. The impact of the initially proposed 300-acre landfill project on the existing wetlands has been mitigated as a result of the agreement between the applicant and the State Resources Agency (See Document A-4, Appendix A). The agreement reduces the area to be used for landfilling to the remainder of the Phase 1 area and 53 acres at the northern end of Phase 2. That portion of the 300 acres south of the landfill area is designated as mitigation lands and will be deeded to the California Department of Fish and Game by the applicant upon approval of the project and issuance of all necessary permits. A portion of these mitigation lands will ultimately be returned to tidal action as part of the project.

The agreement on the above modified project alternative was the culmination of six years of negotiations with concerned regulatory agencies, including: U. S. Fish and Wildlife Service; California Department of Fish and Game; California Regional Water Quality Control Board; California State Solid Waste

RESPONSE TO COMMENTS BY MR. HARRY L. SILCOCKS (12 April 1976) Continued

Management Board; California State Lands Commission and Napa County. During the course of these negotiations numerous modified project alternatives were evaluated, and ultimately rejected due to a variety of environmental, technical and economic considerations. The above agencies have provided input to the proposed mitigation alternative and have agreed that the alternative provides a suitable balance between two vital interests; protecting wetlands and other environmental values for future generations, and the need to provide a means of solid waste disposal for the Napa Valley area.

10. The Corps only works on those flood control structures for which it is authorized. The levees along the sanitary landfill are not Corps levees.

COMMENTS AND RESPONSES

TO

PUBLIC NOTICE NO. 9297-29R

Dated 11 May 1981



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MAY 18 1981

AIRPORTS FIELD OFFICE
831 Mitten Road
Burlingame, CA 94010

Colonel Paul Bazilwich, Jr.
District Engineer
Department of the Army
San Francisco District
Corps of Engineers
211 Main Street
San Francisco, CA 94105

Subject: Public Notice No. 9297-29R dated May 11, 1981; American Canyon
Sanitary Landfill

Dear Colonel Bazilwich:

The FAA's position on the American Canyon Sanitary Landfill remains as stated in our letter of February 15, 1977 to Colonel Flertzheim, Jr. Corps of Engineers, San Francisco (letter attached).

In the past four years other Sanitary Landfills have obtained excellent results in bird dispersal.

This has been accomplished through persistent scare tactics with the use of crack-
er shells. It is recommended that the American Canyon Sanitary Landfill Company
consider this additional safety measure to reduce the attractiveness of the sani-
tary landfill to seagulls in order to further decrease the potential of bird
hazards to the Napa County Airport.

Sincerely,


MICHAEL J. MAVRAKIS
Chief, Airports Field Office

Enclosure

SAN FRANCISCO AIRPORT DISTRICT OFFICE
831 Mitten Road
Burlingame, California 94010

Colonel P. A. Flertzheim, Jr.
District Engineer
Department of the Army
San Francisco District
Corps of Engineers
100 McAllister Street
San Francisco, CA 94102

Subject: American Canyon Sanitary Landfill, Napa County, California,
Draft Environmental Impact Statement

Dear Colonel Flertzheim:

We have reviewed the information and mitigating factors submitted by
EMCON Associates' letter of January 31, 1977 (copy attached).

Based on the following facts presented in the above letter, we have
no objection to the continued use of the American Canyon Sanitary
Landfill in Napa County:

1. The sanitary landfill operation is to continue at about the
same rate and volume as in the past.
2. The size of the open face of the filling operation will
conform with current EPA requirements.
3. The open face of the fill will be covered daily in confor-
mance with current EPA requirements.

Sincerely,

DM
FREDERICK M. ISAAC
Chief, Airport District Office, SFO-600

Attachment

cc:
Mr. R. J. Leach w/o attachment
AWE-600 w/o attachment
LAX-602 w/o attachment

SFO-602:JASOELF;psf:February 16, 1977

CONCURRENCES
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FORM 6-1
FILE:

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WESTERN REGION
P O BOX 92007 WORLDWAY POSTAL CENTER
LOS ANGELES CALIFORNIA 90009



May 18, 1981

Colonel Paul Bazilwich, Jr.
District Engineer
Department of the Army
San Francisco District, Corps of Engineers
211 Main Street
San Francisco, CA 94105

Dear Colonel Bazilwich:

2 We have reviewed the Public Notice No. 9297-29R dated May 11, 1981 concerning the application by the American Canyon Sanitary Landfill Company for the existing fill and proposed fill permits. The Federal Aviation Administration's previous comments on the Draft Environmental Impact Statement remain valid and accurate as the project pertains to our functional responsibility and expertise.

Thank you for the opportunity to review this subsequent document.

Sincerely,

Royal W. Mink
ROYAL W. MINK
Planning and Appraisal
Officer

RESPONSE TO COMMENTS BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION
ADMINISTRATION (2 letters each dated 18 May 1981)

1. In addition to EMCON Associates (engineers for American Canyon), the landfill site is routinely inspected by local and state agencies. A prime concern during the inspections is to ensure nuisance factors, such as birds, are being adequately controlled. The periodic employment of bird scare tactics has been effective at the landfill and, as a result, no bird problems have been documented.

2. Comment noted. Refer to comments and responses to the Draft EIS section.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

In Reply E-4-2
Refer to: PEA 3-5-1

JUN 16 1981

District Engineer
San Francisco District
Corps of Engineers
211 Main Street
San Francisco, CA 94105

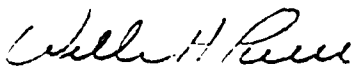
Re: PN No. 9297-29R, American Canyon Sanitary Landfill
Company, 11 May 1981

Dear Sir:

This is in response to the above referenced Corps Public Notice regarding the discharge of dredged or fill material into U. S. waters.

The proposed activities have been reviewed in accordance with the provisions of Regulations 40 CFR 230 promulgated pursuant to Section 404 of the Clean Water Act of 1977. The Environmental Protection Agency has no objections to issuance of the permit, pending review of final Environmental Statement.

Sincerely yours,


William H. Pierce
Chief, Permits Branch
Enforcement Division

RESPONSE TO COMMENT BY U. S. ENVIRONMENTAL PROTECTION AGENCY (16 June 1981)

1. Comment noted.



16.11
UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
300 South Ferry Street
Terminal Island, California 90731

June 9, 1981

F/SWR33:PL

Colonel Paul Bazilwich, Jr.
District Engineer
San Francisco District
Corps of Engineers
211 Main Street
San Francisco, CA 94105

Dear Colonel Bazilwich:

We have reviewed Public Notice No. 9297-29R (American Canyon Sanitary Landfill Company, 5/11/81) to retain 48 acres of fill, to place an additional 60 acres of fill material and to construct 22 acres of levees in and around Phases I and II of the sanitary landfill site along the east bank of the Napa River, Napa County, California. The National Marine Fisheries Service (NMFS) will not object to issuance of a permit for the proposed activity if the following conditions are made a written part of the permit:

1. Fill material for levee construction shall not be dredged from the Napa River but shall be excavated from the authorized fill area in Phases I or II, or be obtained from an upland site.

2. The applicant shall restore 33 acres of land in Phase II to tidal action. The applicant shall install a tidal gate in the Phase II levee, such that the 33 acre area will flood and drain twice daily to a depth of 1.5 feet above 70 percent of the existing vegetation. The applicant shall construct a slough and connect lateral ditches in this 33 acre area, subject to approval by the California Department of Fish and Game (CDF&G) and the NMFS.

3. The applicant shall preserve and deed to the CDF&G 137 acres of land in Phase III. The applicant shall install a tidal gate in the Phase III levee subject to approval by the CDF&G and NMFS.

If you wish to contact us further on this matter, please direct comments to Ms. Paget Leh at: National Marine Fisheries Service, 3150 Paradise Drive, Tiburon, CA 94920; phone (415) 556-0565.

Sincerely yours,

J. Gary Smith
Acting Regional Director

cc:
USFWS, J. McKevitt
CDF&G, D. Lollock
CRWQCB, N. Rial
USEPA, G. Baker



RESPONSE TO COMMENTS BY U. S. DEPARTMENT OF COMMERCE NATIONAL MARINE FISHERIES SERVICE (9 June 1981)

1. Of the estimated 80,000 cubic yards of Bay mud required for upgrading and constructing levees to protect the project site against a 100-year frequency flood, only 20,000 cubic yards would be dredged from the Napa River. The fill material for the remainder of the project levee system (approximately 60,000 cubic yards) would be excavated from within the authorized fill area. The dredged material would be used to upgrade the existing Napa River levee only. The dredging operation would be similar to those routinely utilized throughout the Bay Area and Sacramento Delta to upgrade and maintain the vital levee system of these areas.

The impact of dredging the Napa River for the purpose of providing material for upgrading the Napa River levee adjacent to the project boundary has been evaluated in the Draft EIS for the initially proposed project. Even though the project as proposed in the Draft EIS would have involved dredging four times more (i.e., 80,000 cubic yards) Bay mud than the current proposed project (i.e., Alternative #2R), the evaluation concluded the impact from dredging would be minimal.

Based on the above, the permit applicant maintains that the approximately 20,000 cubic yards of Napa River dredging should be retained as an integral part of Alternative #2R.

2. & 3. These conditions are included in a signed agreement between American Canyon Sanitary Landfill Company and the Resources Agency of California.

Resources Building
1416 Ninth Street
95814

(916) 445-5656

Department of Conservation
Department of Fish and Game
Department of Forestry
Department of Boating and Waterways
Department of Parks and Recreation
Department of Water Resources

EDMUND G. BROWN JR.
GOVERNOR OF
CALIFORNIA



THE RESOURCES AGENCY OF CALIFORNIA
SACRAMENTO, CALIFORNIA

Air Resources Board
California Coastal Commission
California Conservation Corps
Colorado River Board
Energy Resources Conservation
and Development Commission
Regional Water Quality
Control Boards
San Francisco Bay Conservation
and Development Commission
Solid Waste Management Board
State Coastal Conservancy
State Lands Commission
State Reclamation Board
State Water Resources Control
Board

JUN 12 1981

Colonel Paul Bazilwich, Jr.
District Engineer
San Francisco District
U.S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105

Public Notice 9297-29R (American Canyon Sanitary Landfill Co.)
Proposed authorization for both existing fill and proposed fill
on portions of a 300 acre parcel of unincorporated land located
along the east bank of the Napa River in southern Napa County,
California

Dear Colonel Bazilwich:

The State agencies listed below have reviewed the subject public notice and
provided the comments used in the preparation of this response.

1
2
The Resources Agency requests that issuance of the proposed permit be held
in abeyance until we have been able to work out some technical issues.
These issues include: (1) State Lands Commission title settlement; and
(2) San Francisco Bay Conservation and Development Commission permit require-
ment for dredge and fill.

The Applicant is working with the State to resolve these issues.

Sincerely,

Handwritten signature of James W. Burns in cursive.

JAMES W. BURNS
Assistant Secretary for Resources

cc: Department of Boating and Waterways
Department of Parks and Recreation
SWRCB
Department of Fish and Game
Wildlife Conservation Board
DWR
Department of Health

State Lands Commission
BCDC
National Marine Fisheries Service
U.S. Fish and Wildlife Service
Applicant - American Canyon
Sanitary Landfill Co.

RESPONSE TO COMMENTS BY THE RESOURCES AGENCY OF CALIFORNIA (12 June 1981)

1. The attorney for American Canyon has contacted the State Lands Commission and resolved the title settlement issue.
2. The engineer for American Canyon has contacted the San Francisco Bay Conservation and Development Commission (BCDC) regarding permit requirements for dredging approximately 20,000 cubic yards of Bay mud from the Napa River for levee upgrading. Discussions between BCDC staff and the engineer for American Canyon indicated that while the proposed dredging must be evaluated and approved by BCDC, they (BCDC) did not propose to oppose issuance of the Corps' permit. EMCON Associates, representing American Canyon, has filed an application with BCDC.

STATE SOLID WASTE MANAGEMENT BOARD

1020 NINTH STREET, SUITE 300
SACRAMENTO, CALIFORNIA 95814
(916) 323-6246



JUN 25 1981

Colonel Paul Bazilwich, Jr.
District Engineer
Department of the Army
San Francisco District Corps
of Engineers
211 Main Street
San Francisco, CA. 94105

Dear Colonel Bazilwich:

This letter is in response to your Public Notice No. 9297-29R, an addendum to the Draft EIS on the American Canyon Sanitary Landfill, Corps of Engineers Permit.

The State Solid Waste Management Board has review authority to concur or object to the issuance of any new or modified Solid Waste Facility permit granted by the Napa County Department of Health Environmental Health Division. If Napa County requires a modification of the facilities permit for the American Canyon Sanitary Landfill, this Draft EIS may serve as the environmental documentation for the decision on a modified facility permit. We have reviewed the Draft EIS under the assumption that the Board will be using this document for a decision on a facility permit modification.

1. If the EIS covers the agreement between the Resources Agency and American Canyon Sanitary Landfill Co., this should be so stated in the Project Description. Any height, area, or operational limitations outlined in the agreement should be indicated in the Project Description Section.
2. The site life shown under "Proposed Project" should reflect the site life of the current project, i.e. Phase I and 53 acres of Phase II of the landfill.
3. The alternatives section on resource recovery should be updated to reflect current status and feasibility of materials recovery and waste-to-energy facilities for the landfill's service area.
4. Mitigation measures should be updated to reflect current and planned resource recovery activities connected with the landfill or activities designed to reduce the amount of waste entering the landfill.
5. Under "Impacts-community": have there been any change in land uses or zoning surrounding the site since the original Draft EIS was written? Has the distance between the landfill and the nearest residence decreased? Has traffic increased?



100% POST-CONSUMER
RECYCLED PAPER

Page two
Colonel Paul Bazilwich, Jr.
JUN 20 1981

6. Under Aesthetics (i-1) the statement is made that the site will be eventually rising some 25 feet above the surrounding flats, yet the Resources Agency/American Canyon agreement places a height limit on Phase II of 60 feet. These numbers should be reconciled. What effect would a 60 foot landfill height have on views from nearby residences or public areas?

Our technical review staff has not had a chance to review this Draft EIS or the Geotechnical Report by EMCON. Final Review of this project for technical feasibility will take place when the revised facility permit comes to this Board.

Thank you very much for the opportunity to review this addendum to the Draft EIS. We apologize for the lateness of our response, but we did not receive the notice until May 21, 1981 as it was sent to the wrong address. Please check to make sure that you have our correct address:

State Solid Waste Management Board
1020 Ninth Street, Suite 300
Sacramento, CA. 95814
c/o Christal Waters

Sincerely,

A. K. Amundson
Arlo K. Amundson, Chief
Office of Planning Services

CWaters:mc

RESPONSE TO COMMENTS BY THE STATE SOLID WASTE MANAGEMENT BOARD (25 June 1981)

1. The agreement between the Resources Agency and American Canyon Sanitary Landfill Company has been addressed in the Final EIS. For a project description please refer to Alternative #2R in the ALTERNATIVES section.
2. The proposed project (Alternative #2R) would provide waste disposal facilities to the year 1990. (Reference paragraph 1 of the SUMMARY).
3. Alternative disposal sites and alternative means of disposal while considered in the Draft EIS have now been rejected from further consideration for the reasons discussed in the ALTERNATIVES section.
4. This appears to be beyond the scope of the EIS both in terms of planning alternatives and decision alternatives. The issue is permitting or not permitting a current as well as proposed landfill activity. Such an area has a finite "life" given the operational and height parameters. While activities designed to reduce the amount of wastes entering the landfill serve to increase the site "life" a landfill site is still needed.
5. a. We do not know of any changes in land uses or zoning surrounding the site since the Draft EIS.
b. The distance between the landfill and the nearest residence has not decreased.
c. As the Napa-Vallejo region develops, the population and its refuse will also increase resulting in more disposal site-related traffic. Assuming the increase in landfill trips for the year 1990 (life of site) to be proportional to the increase in population projected for the cities of Napa and Vallejo between 1973 and 1990 the average number of vehicles entering the site each day is estimated to increase from 600 to 790. However, since the population increase produces more traffic as well as more refuse, the proportional impact upon regional traffic circulation may not change.

An increase in per capital refuse production would cause a disproportionate increase in site traffic. If this were to occur, it would possibly be offset by increased efficiency and capacity of collection vehicles, by more commercial haulage (meaning greater efficiency) of refuse now delivered by the public, and by increased emphasis on resource recovery. The Napa Garbage Service is currently engaged in a limited paper recovery and recycling program, and the Vallejo Garbage Service may institute a similar program in the near future. Should these limited programs prove economically feasible, they may be expanded and could significantly reduce the quantity of waste delivered to the disposal site. The long-range impact of this recovery program would be to partially offset the anticipated increase in regional refuse production and thereby reduce the projected increase in traffic.

The connecting roads between State Route 29 and the working area of the site would probably not present a congestion problem throughout the lifetime of the landfill operation. All of these are two-lane, county standard, undivided roads which have a capacity of 10,000 average daily trips (ADT). Eucalyptus Drive, the main access road to the site, is currently at 15 percent of this capacity. The most likely point of congestion along this network is Del Mar Drive (6056 ADT), just to the west of its intersection with Highway 29. However, unless there is expansion of the Del Mar subdivision or of commercial facilities in the immediate vicinity, the projected increase in landfill-related trips passing this point would not put this collector over design capacity.

Assuming that the heaviest traffic on Highway 29 is during the morning and afternoon rush hours, it is improbable that landfill related trips aggravate the peak hour flow because they are spread throughout the day and are not correlated with the peak commute hours and because the overall contribution of disposal site trips is a relatively small fraction of total trips on the highway.

6. The proposed project (Alternative #2R) would have a height limit of 60 feet unlike the height limit of 25 feet in the Draft EIS. Whether the site height was 25 feet or 60 feet the view beyond the river would be blocked for much of the residential development located to the east. The increased height of the site under Alternative #2R would block a view of several miles beyond the site. However, Alternative #2R would also allow for the preservation of the southern portion of the project area and would preserve about 3,500 linear feet of viewing area.

July 10, 1981

Department of the Army
San Francisco District
Corps of Engineers
211 Main Street
San Francisco, California 94105

Re: American Sanitary Landfill Company
Public Notice No. 9297-29R, 11 May 1981

Dear Colonel Bazilwich,

I have completed my review of all the American Canyon Sanitary Landfill documents and submit the following comments.

In my opinion, the proposed project will irretrievably destroy the present environmental setting. Flora and fauna will be sacrificed; aesthetics will be permanently altered - (open space will be replaced by a man-made landform at a higher elevation); and eventually the remaining wetlands will become upland. A great environmental loss.

The site area appears to have already been subjected to intensive use by man, over the past fifty years. I cannot see why we should continue to destroy the environment. I believe that we should remove the levees and allow the remaining area to return to a wetlands environment. Therefore, I will have to take a firm stand and recommend NO PROJECT.

In closing, Colonel Bazilwich, thank you for allowing me to review the referenced documents. If I can be of further assistance in the future, please feel free to contact me.

Sincerely,



Thomas M. Corneto, M.S.
2903 Rising Star Drive
Diamond Bar, California 91765

RESPONSE TO COMMENT BY MR. THOMAS M. CORNETO, M.S. (10 July 1981)

1. Comment noted.

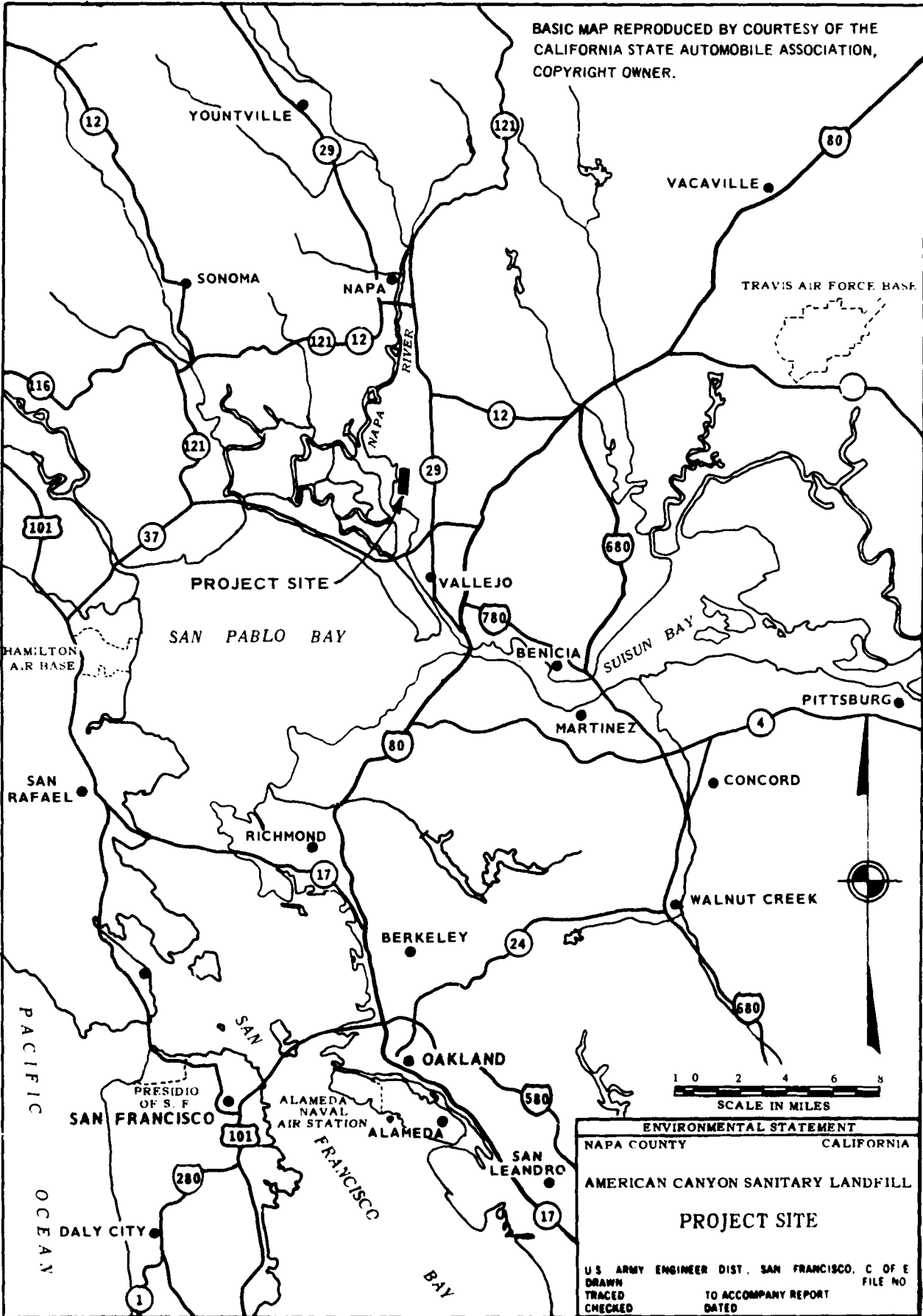
LIST OF PREPARERS

The following people were primarily responsible for preparing this Environmental Impact Statement.

<u>Name</u>	<u>Discipline/ Expertise</u>	<u>Experience</u>	<u>Role in Preparing EIS</u>
Rod Chisholm	Biology/ Environmental Planning	12 years, Environmental Branch, S. F. District Corps of Engineers	Review
Roger Golden	Social Science/ Environmental Planning	4 years, Environmental Branch, S. F. District Corps of Engineers	Project Manager - Preparation of Final EIS
Scott Miner	Biology/ Environmental Planning	3 years, Environmental Branch, S. F. District Corps of Engineers	Review/ Coordination
Barney Opton	Physical Science/Envir- onmental Plan- ning	8 years, Environmental Branch, S. F. District Corps of Engineers	Project Manager - Preparation of Draft EIS/Review of Final EIS
Elaine Wong	Biology/ Biology	1 year, Environmental Branch, S. F. District Corps of Engineers	Biological Resource Analysis/Research

PLATES

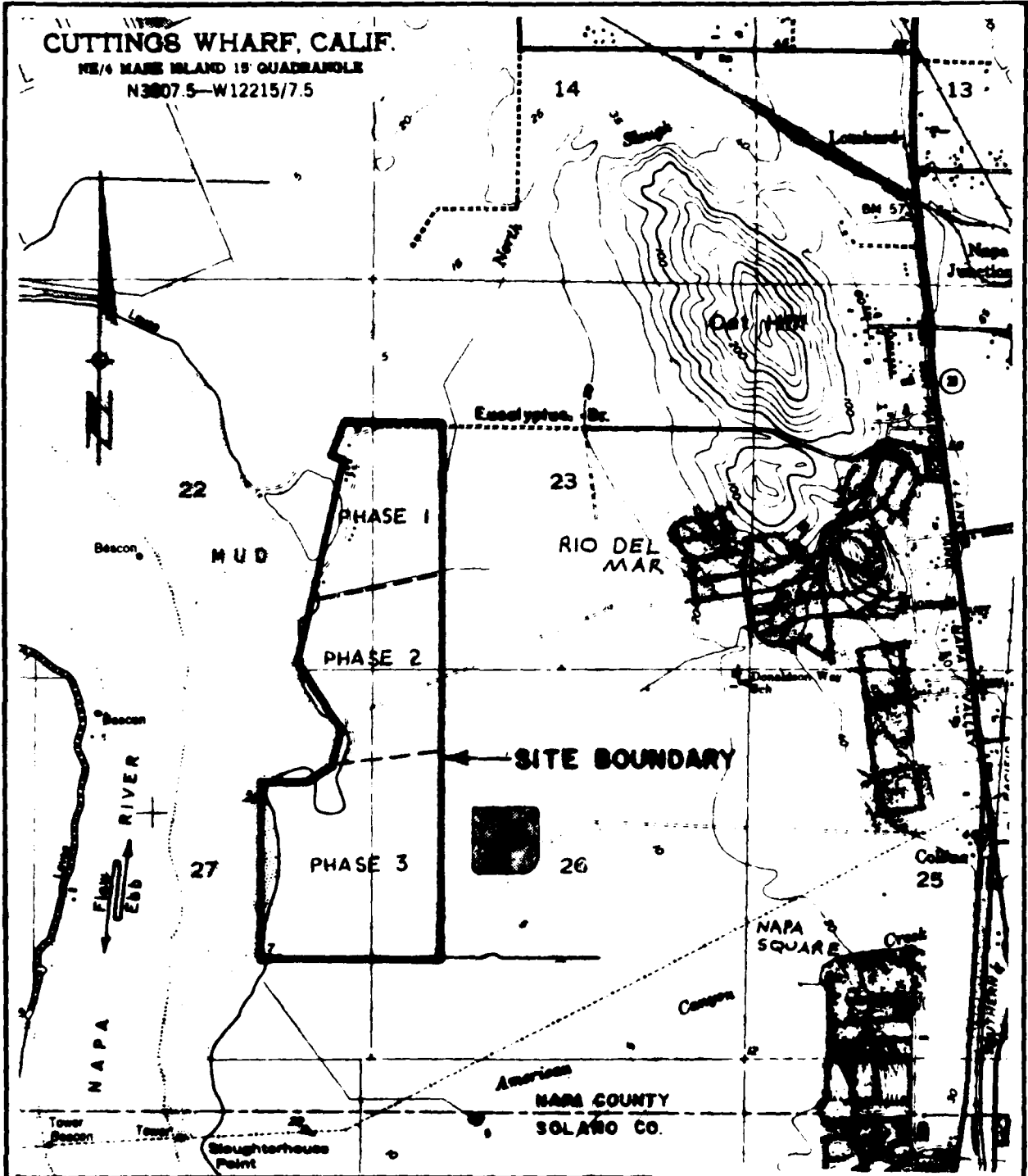
BASIC MAP REPRODUCED BY COURTESY OF THE CALIFORNIA STATE AUTOMOBILE ASSOCIATION, COPYRIGHT OWNER.



ENVIRONMENTAL STATEMENT
 NAPA COUNTY CALIFORNIA
 AMERICAN CANYON SANITARY LANDFILL
 PROJECT SITE
 U.S. ARMY ENGINEER DIST. SAN FRANCISCO, C OF E
 DRAWN TO ACCOMPANY REPORT
 TRACED FILE NO
 CHECKED DATED

CUTTINGS WHARF, CALIF.

NE/4 MARE ISLAND 15' QUADRANGLE
N3807.5-W12215/7.5



Scale 0 2000 4000 6000 Feet

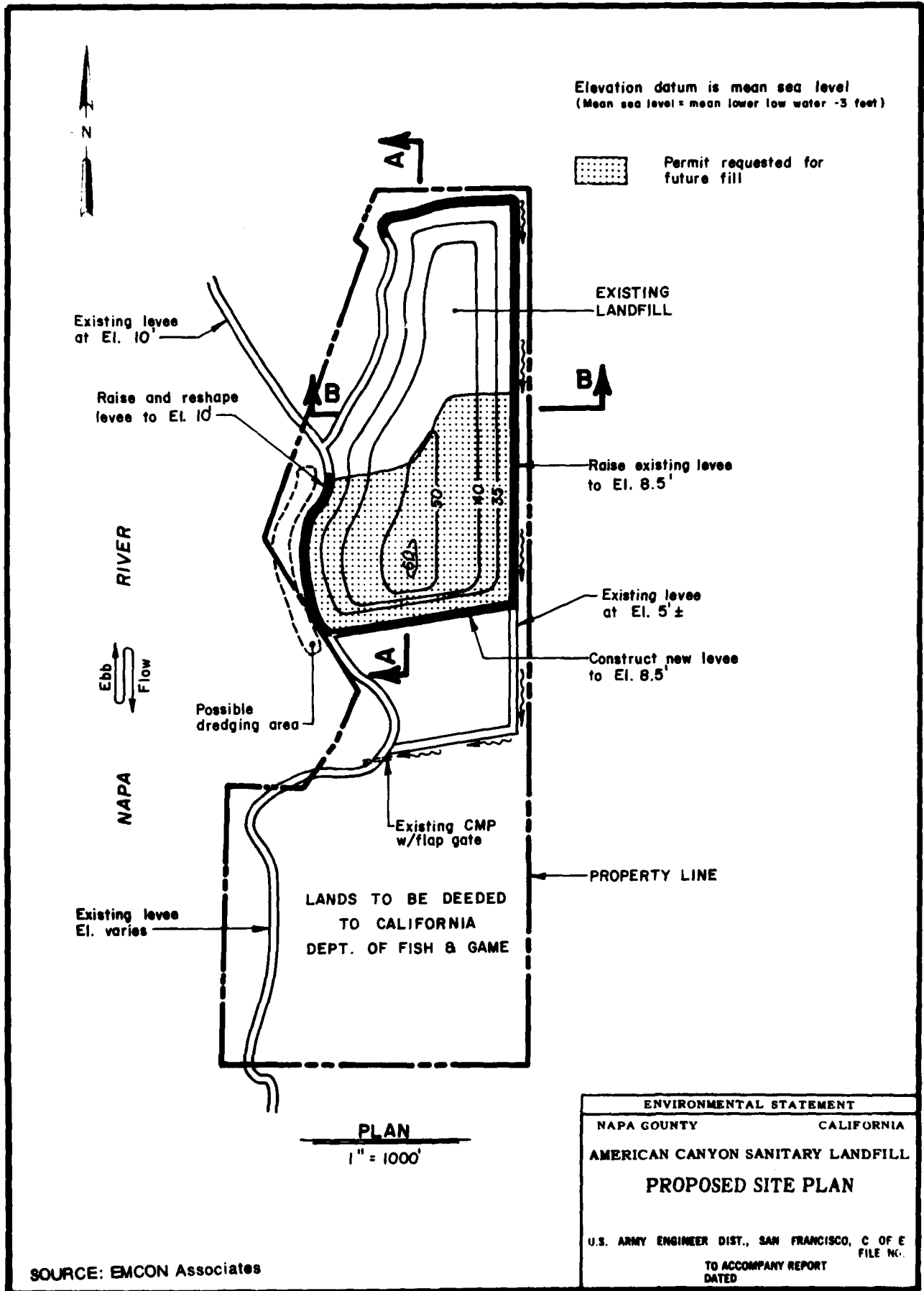
SOURCE: EMCON Associates, 1974

ENVIRONMENTAL STATEMENT

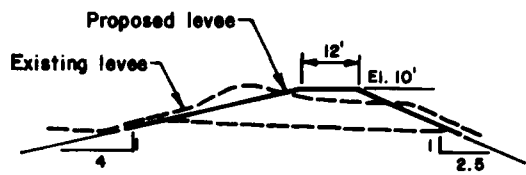
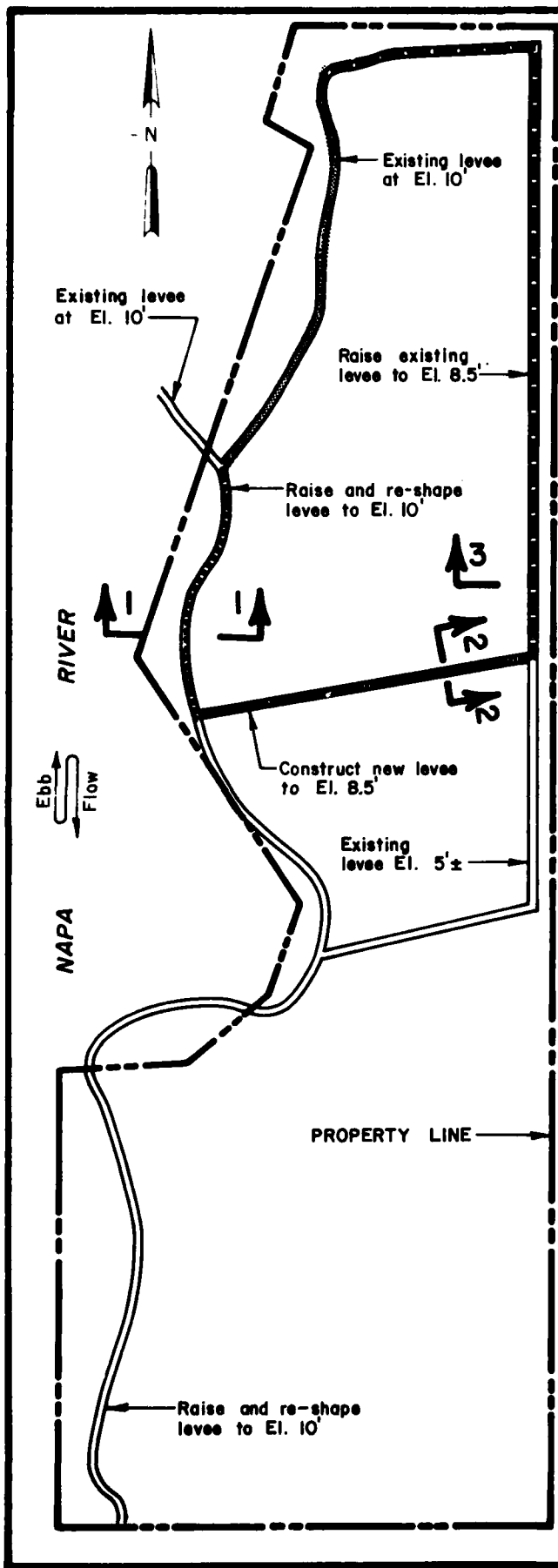
NAPA COUNTY CALIFORNIA
AMERICAN CANYON SANITARY LANDFILL

PROJECT SITE AND VICINITY

U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E
TO ACCOMPANY REPORT FILE NO.
DATED



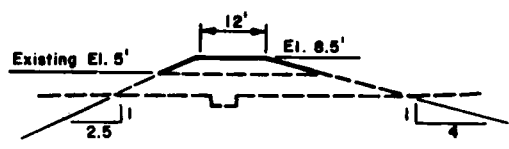
SOURCE: EMCON Associates



SECTION 1
NAPA RIVER LEVEE
Not to scale

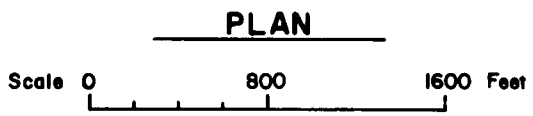


SECTION 2
INLAND LEVEE
Not to scale



SECTION 3
INLAND LEVEE
Not to scale

Note: Elevation datum is mean sea level



ENVIRONMENTAL STATEMENT	
NAPA COUNTY	CALIFORNIA
AMERICAN CANYON SANITARY LANDFILL	
LEVEE DETAIL	
U.S. ARMY ENGINEER DIST., SAN FRANCISCO, C OF E	
TO ACCOMPANY REPORT	FILE NO.
DATED	

APPENDIX A

MISCELLANEOUS DOCUMENTS

APPENDIX A

MISCELLANEOUS DOCUMENTS

<u>Document</u>		<u>Page</u>
A-1	Public Notice No. 9297-29R by American Canyon Sanitary Landfill Company	A-1
A-2	Public Notice No. 74-0-105 by American Canyon Sanitary Landfill Company	A-11
A-3	Public Notice No. 9297-29 (Revision of 74-0-105) by American Canyon Sanitary Landfill Company	A-14
A-4	Agreement Between American Canyon Sanitary Landfill Company and the Resources Agency of California	A-22



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
211 MAIN STREET
SAN FRANCISCO, CALIFORNIA 94105

SPNCO-RE

11 May 1981

PUBLIC NOTICE NO. 9297-29R

RESPONSE REQUIRED BY: 12 June 1981

TO WHOM IT MAY CONCERN:

1. The American Canyon Sanitary Landfill Company, c/o Kilpatrick and Peterson, 922 Tennessee Street, Vallejo, California 94590, (telephone 707-644-1444), has applied for Department of the Army authorization for both existing fill and proposed fill on portions of a 300 acre parcel of unincorporated land located along the east bank of the Napa River in southern Napa County, California. The revision of plans is being processed pursuant to the provisions of Section 10 of the River and Harbor Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (CWA)(33 U.S.C. 1344). (The subject permit application was first announced in 1974 (Public Notice No. 74-0-105). The applicant then revised the project in 1978 as noted in Public Notice No. 9297-29. The applicant, pursuant to comments received on the 1978 proposed plan, has again revised their proposed project as noted in this Public Notice. Given the length of time since the initial application and subsequent revisions to the project the Corps deems it appropriate to recirculate the project history and current plan revision for public comment. A portion of the existing fill and the proposed fill for which a Corps permit is required is shown on Sheet 2 of the drawings. The 170 acres indicated on Sheet 2 as "Lands to be Deeded to California Department of Fish and Game" is an area which would be set aside in accordance with a plan developed by the applicant in cooperation with the California State Department of Fish and Game (CA F&G).

2. As shown on Sheet 1 of the drawings, the 300-acre parcel was previously divided into three phases. Sanitary landfill operations are currently being conducted on a portion of the Phase I area (48 acres). A permit is requested for the proposed placement of refuse fill on the remainder of Phase I (approximately seven acres) and on 53 acres at the northern end of Phase 2, with construction of flood protection and containment levees around these areas. Of the 300 acres, 130 acres would ultimately be used for the deposition of refuse. The approximate proposed fill limits which would allow use of the disposal site through the year 1990, for the current plan are shown on Sheet 2. The estimated refuse and earthwork volumes are as follows: Volume of refuse: 3,900,000 cubic yards; volume of earth cover: 1,200,000 cubic yards; volume of Bay mud for levee construction and repair: 80,000 cubic yards. Approximately 170 acres (33 acres in Phase 2 and 137 acres in Phase 3) south of the area to be used for landfilling and construction of levees are designated as mitigation lands and will be deeded to the California Department of Fish and Game by the American Sanitary Landfill Company upon approval of the project and issuance of all necessary permits. Approximately 33 acres of these lands will ultimately be returned to tidal action as part of the project. A written agreement guaranteeing the above actions has been signed by the applicant and the California State Resources Agency. (See paragraph 5i of this notice for additional information regarding the mitigation agreement.) The quantities discussed above assume that the fill will be constructed to the elevation shown on Sheet 3. Final fill elevations may vary, depending upon the final end use selected for the site. All construction

SPNCO-RE

PUBLIC NOTICE NO. 9297-29R

procedures, materials, precautions, and protective works described in the Corps Draft Environmental Statement (DES) dated March 1976, will be adhered to in the modified project. The disposal area will be excavated to depths ranging from 5 to 10 feet to generate the levee fill material and material to cover the refuse. The precise depth of excavation will depend upon difficulties encountered in the excavation effort. Approximately 20,000 cubic yards of Bay mud, to be used to improve a portion of the Napa River levee, will be excavated from the disposal area or dredged from the river bottom in the area shown on Sheet 2.

3. Project History. The American Canyon site was historically part of the marshland area of the Napa River. For a brief period around 1930, the site was used as a barging point for cement ships and had a rail connection which was later dismantled. Solid municipal wastes have been disposed of on a portion of the 300-acre site since 1942. Open-burning practices were supplemented by modified sanitary landfilling from about 1957. The disposal site was operated as a combined open-burning dump and a modified sanitary landfill until November 1971, when open burning was discontinued. On 31 October 1973 application was made for a Department of the Army permit for the landfill configuration which essentially paralleled the Napa River. (This earlier proposal was announced in a previous San Francisco District Public Notice No. 74-0-105, dated 8 March 1974).

4. Public Review Process. Comments on Public Notice No. 74-0-105 were received from the U.S. Environmental Protection Agency (US EPA), the U.S. Fish and Wildlife Service (US F&WS), the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (US NOAA), and the California State Resources Agency (CA SRA). The most significant agency comments received were concerned with the irreversible commitment of 300 acres of restorable wetlands to landfill operations. Letters of comment emphasizing the same issues were also received from the general public and conservation groups.

a. After determining that an Environmental Statement would be required, the San Francisco District circulated a Working Paper (September 1974) to various Federal, State, and local agencies and citizen groups for their informal review and comment. A document entitled Interim Draft Environmental Impact Statement prepared for the applicant by EMCON Associates, San Jose, California, served as the working paper. Comments on the Working Paper were received for the US F&WS, US NOAA, U.S. Department of Health, Education and Welfare (US HEW), and the CA SRA. The Golden Gate Audubon Society and the Napa Valley Fly Fisherman also commented on the Working Paper. In general, comments on the Public Notice and the Working Paper dealt with: loss of the possibility of restoring the project area to marshland; the elimination of existing wildlife use areas; seismic hazards; land use plans; endangered species; growth; the project's effect on stream flow characteristics; and the impact on water quality and migrating fish species in the Napa River.

SPNCO-RE

PUBLIC NOTICE NO. 9297-29R

b. The Draft Environmental Statement (DES) for the project was released by the San Francisco District for review in March of 1976. Letters of comments concerning the DES were received from the US EPA, US F&WS, US NOAA, the U.S. Department of Transportation (Federal Aviation Administration (FAA) and Federal Highway Administration (FHA)), US HEW, the Association of Bay Area Governments (ABAG), the San Francisco Bay Conservation and Development Commission (BCDC), and Napa County. The comments received were concerned with essentially the same topics brought out earlier in the review process (as discussed above). Among new items brought out was the proximity of the landfill operation to the Napa County Airport and the possible effect birds attracted by the landfill might have on the airport. The FAA has since determined that they would not object to the project. This determination was based on the fact that the landfill operation would be carried out more than 10,000 feet from the airport and was based on the requirement that the operation conform with basic FAA requirements. It should also be noted that the FAA approval was based on the landfill configuration as presented in the DES.

c. On 28 April 1978, a public hearing was held at the Donaldson Way School Building in Napa County to receive comments on a subsequent plan not discussed in the DES but which involved an eastward expansion of the current landfill operation to a point approximately 2,000 feet eastward and closer to the community of American Canyon. Significant comments and objections were received concerning operational, aesthetic, health, and nuisance factors as a result of the landfill operation's potential impact on the community. A consensus objected to the eastward expansion plan presented at the public hearing. The plan as presented in this public notice is the latest proposed project for the southerly expansion of the landfill.

d. The current proposed plan revisions appear to address the primary issues of the Draft Environmental Statement and comments received at the Corps public hearing. The San Francisco District therefore intends to process the subject permit application to completion. Preparation of the final Environmental Statement will take into consideration any comments received on this Public Notice.

5. Environmental Impact. The March 1976 DES presented the anticipated impacts of the American Canyon Sanitary Landfill project. The proposed plan revisions (ie, retention of refuse fill on 48 acres of Phase I, placement of refuse fill on the remaining 7 acres of Phase I, placement of refuse fill on 53 acres on the northern end of Phase 2 and 137 acres in Phase 3) as mitigation lands to be deeded to the California Department of Fish and Game, would likely have the effect of decreasing some impacts, not changing some impacts, and possibly increasing others relative to the information presented in the DES. A discussion of those significant impacts which may or may not change due to the proposed plan revisions follows.

a. The DES indicated that the project site was historically a marshland area. The site still contains areas of marshland, and considering the elevations of unfilled portions of the site much of the area could be restored to wetland. Wetlands are considered a unique, valuable, and irreplaceable water resource and serve as a habitat for many species of fish and waterfowl. Such areas moderate extremes in water flow, aid in natural purification, and provide unique recreational values. The subject proposed plan revisions would permit the southernmost 170 acres of the site (ie, part of Phase 2 and all of Phase 3) to be preserved and not filled. Also, approximately 33 acres of the 170 acres to be preserved will ultimately be returned to tidal action as part of the proposed project. Of the remaining acreage (ie, 108 acres proposed for refuse fill plus 22 acres proposed for flood protection and containment levees) in the proposed plan revisions, approximately 48 acres have already been filled. The remaining 60 acres (7 acres in Phase I and 53 acres in Phase 2) to be filled with refuse are relatively less valuable in terms of supporting wildlife given their proximity to the existing fill area in Phase I.

b. Nuisance Factors. Nuisance factors such as odor, debris, unsightliness, dust, etc., are items which must be considered in the development of any sanitary landfill project. Implementing the proposed plan revisions could reduce the impact of these nuisance factors compared to the information presented in the DES since the proposed plan revisions would require filling 108 acres plus 22 acres for flood protection and containment levees instead of the filling of 257 acres under the old plan. If proper protective measures are taken by the landfill operator, these impacts could be minimized. The key to successful control of nuisance factors is constructing the sanitary landfill in accordance with an operational plan that allows for the control of nuisance factors as part of everyday operations. Nuisance factors associated with refuse disposal, such as odor, unsightliness, fire and dust can be controlled by placement and compaction of refuse as it is delivered to the site, placement of daily cover, and proper maintenance of access roads (paving, oiling, and watering). Blowing debris can be contained by controlled wetting of the refuse as it is dumped and by surrounding the work area with properly placed debris fences.

c. Land Values. Proximity to the American Canyon Sanitary Landfill has apparently not had a significant effect on land values in the past. The disposal site pre-dates adjacent subdivisions by at least 10 years, and many homes were purchased when the site was being used as a dump with open burning. Since the proposed site configuration (especially the eastern boundary as discussed in the DES) is the same as the current proposed plan revisions no change in land values is expected.

d. Noise. Noise and its impact on people is usually measured in decibels (dBA). Generally, 80 dBA at a distance exceeding 200 feet is considered the maximum acceptable limit. There are two primary sources of noise resulting from the existing landfill operation: (1) heavy equipment involved in extracting

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and transporting cover material and in compacting and covering the fill; and (2) vehicles bringing solid waste to the disposal area. Under existing conditions it is expected that normal daytime noise levels in the residential area to the east of the site would be about 40 to 45 dBA. The homes which are closest to the landfill operation (those on the western edge of the Rio Del Mar) are roughly 3,000 feet from the edge of the site and could experience noise levels resulting from the landfill operation of about 40 to 60 dBA. However, because the machinery on the site does not operate at full power for extended periods, and because the operation is planned so that the working area will face away from the residential area, equipment would not produce these noise levels, and noise levels may not increase significantly over existing levels. The noise impact resulting from vehicles entering and leaving the site is currently limited to the daytime hours of 8 a.m. to 5 p.m., the hours of site operation.

e. Aesthetics. The continuation of the landfill operation with either the current proposed plan revisions or the proposed plan in the DES would result in blocking out the view of the river area for much of the residential development located to the east. The primary change due to the proposed plan revisions could create a plateau up to 60 feet in height compared to a plateau height of approximately 25 feet considered in the DES proposed project. The current proposed plan revisions would also allow for the preservation of the southernmost portion of the project area and would preserve about 3,500 linear feet of viewing area.

f. Taxation. The proposed plan revisions as indicated in the agreement between the American Sanitary Landfill Company and the Resources Agency of California would transfer title of 170 acres of land to the State. This would result in loss of tax revenue to local governments from these lands.

g. Endangered or Threatened Species. The Corps requested formal consultation with the U.S. Fish and Wildlife Service (US F&WS) pursuant to Section 7 of the Endangered Species Act as amended in 1979. The US F&WS indicated the following five species may occur within the project area: salt marsh harvest mouse (Reithrodontomys raviventris), California clapper rail (Rallus longirostris obsoletus), American peregrine falcon (Falco peregrinus anatum), soft bird's-beak (Cordylanthus mollis ss. mollis), and California black rail (Laterallus jamaicensis ss. coturniculies). After further consultation, the only species in question was the salt marsh harvest mouse and the US F&WS provided the Biological Opinion (letter dated 13 August 1980) "...that the proposed fill at the American Canyon Sanitary Landfill site is not likely to jeopardize the continued existence of the salt marsh harvest mouse and/or its habitat."

h. Other Impacts. The other impacts resulting from the landfill operation are expected to be similar in magnitude to those presented in the DES.

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i. Project Mitigation. In order to satisfy wetland concerns expressed by other agencies the applicant has entered into a signed formal agreement (dated 7 October 1980) with the Resources Agency of California to provide the following mitigation measures:

(1) Preservation of approximately 170 acres (33 acres in Phase 2 and 137 acres in Phase 3 (see Sheet 2)) by deeding such land to the California Department of Fish and Game (CA F&G).

(2) Install a tidal gate in the Phase 2 levee such that the portion of Phase 2 deeded to CA F&G will flood and drain twice daily to a maximum depth of 1.5 feet above 70 percent of the existing vegetation. CA F&G would operate and maintain the tidal gate.

(3) Install a tidal gate in the Phase 3 levee; the location of the tidal gate would be mutually selected by the applicant and CA F&G; the tidal gate would be operated and maintained by CA F&G.

(4) Install as much fencing around Phase 3 and the remainder of Phase 2 as is required to prevent cows and horses from entering the area.

(5) The land area surrounding the embayment to the west of the project site will be graded, covered, and compacted by the applicant in a manner deemed aesthetically sound.

(6) Provide all necessary leachate controls for Phase I and the 53 acres of Phase 2.

(7) Construct (with the review and approval of CA F&G) a slough and connect lateral ditches within the existing levees surrounding the remainder of Phase 2.

(8) Provide a nonexclusive route for public access to the river in the areas of the disposal operation and to the mitigated lands referred to in item (1) above.

(9) Upon closure of the landfill operation, the project site will be utilized for open space purposes only.

6. Authorizations obtained include a Waste Discharge Requirements Order No. 79-115 from the California Regional Water Quality Control Board, and a Solid Waste Facilities Permit No. 28-AA-001, dated 11 August 1978, from the California Solid Waste Management Board, in conjunction with the Napa County Environmental Health Department.

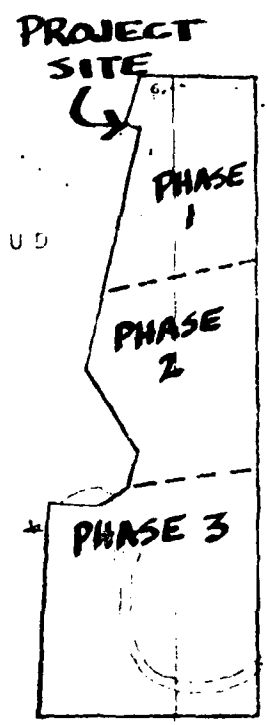
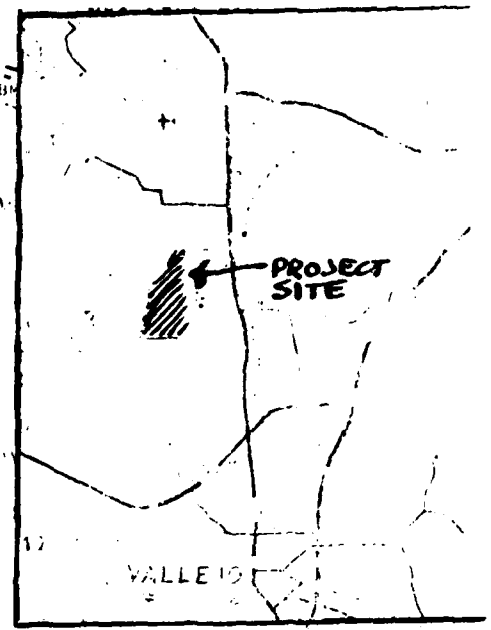
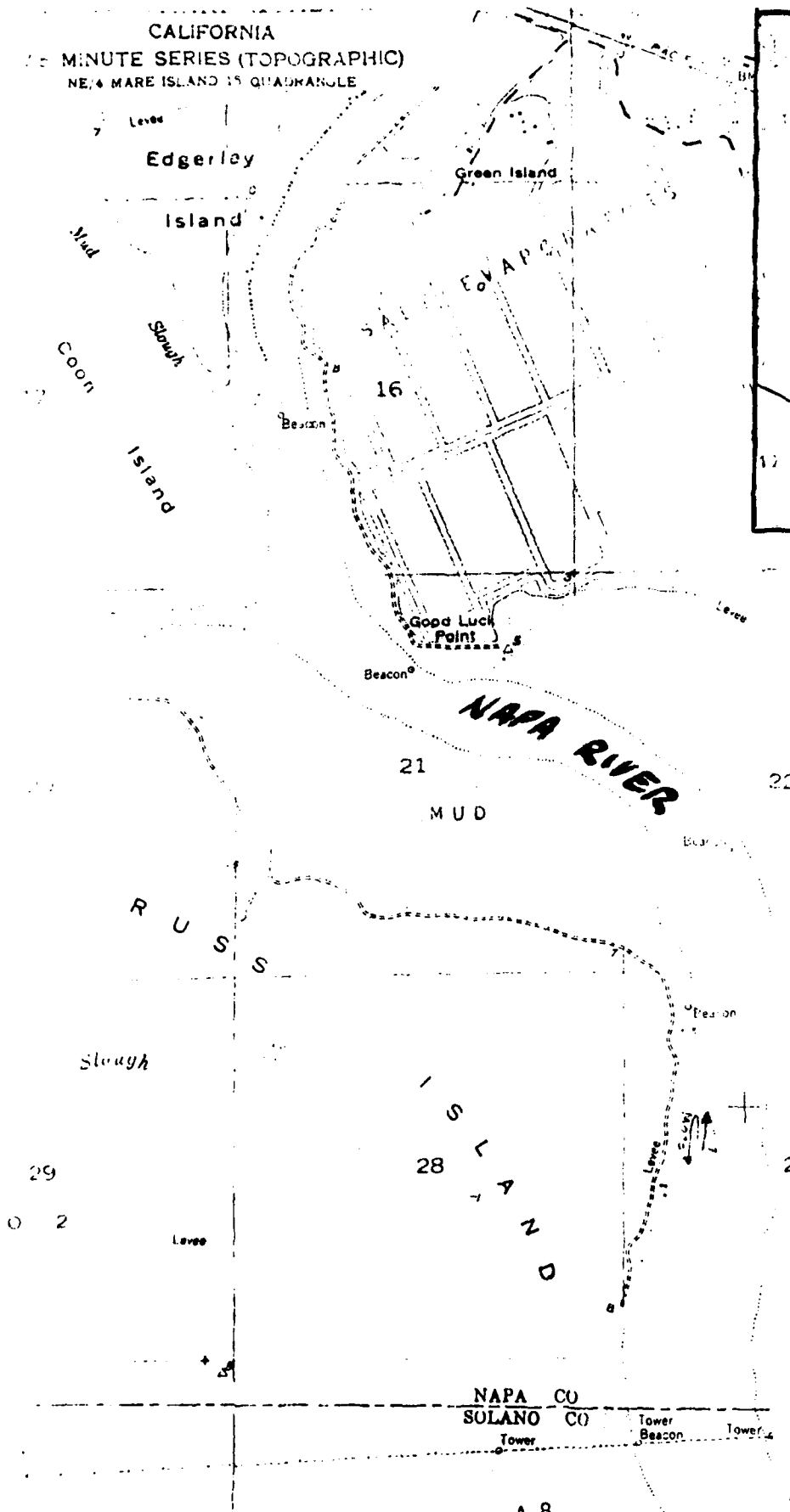
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PUBLIC NOTICE NO. 9297-29R

7. A permit issued by the Department of the Army does not give any property rights either in real estate or materials, or any exclusive privileges; and does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it eliminate the necessity of obtaining State assent to work authorized. The decision by the Corps of Engineers whether to issue a permit will be based on an evaluation of the probable impact of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among those are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

8. Evaluation of this activity's impact on the public interest will also include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (CWA)(33 U.S.C. 1344(b), and (if applicable) Section 102(a) of the Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. Section 1412(a).

9. Interested parties may submit in writing any comments that they may have on this activity. Comments should include the applicant's name, the number and date of this notice and should be forwarded so as to reach this office within the commenting period. Comments should be sent to: Colonel Paul Bazilwich, Jr., District Engineer. It is Corps policy to forward any such comments which include objections to the applicant for resolution or rebuttal. Additional details may be obtained by contacting the applicant whose address and telephone number are indicated in the first paragraph of this notice, or by contacting Ms. Karen Mason of our office (telephone 415-556-6980). Details on any changes of a minor nature which are made in the final permit action will be provided on request.

CALIFORNIA
 15 MINUTE SERIES (TOPOGRAPHIC)
 NE 1/4 MARE ISLAND 15 QUADRANGLE



NAPA CO
 SOLANO CO

PROPOSED SANITARY LANDFILL
 ADJACENT TO NAPA RIVER
 IN CITY AND COUNTY OF NAPA
 STATE OF CALIFORNIA
 APPLICATION BY: AMERICAN
 CANYON SANITARY LANDFILL CO.
 Sheet 1 of 3 Date: March 1981

A-8

Copy available for permit fully lighted

AD-A113 562

CORPS OF ENGINEERS SAN FRANCISCO CA SAN FRANCISCO DI--ETC F/G 13/2
AMERICAN CANYON SANITARY LANDFILL OPERATION REGULATORY PERMIT A--ETC(U)
MAR 82

UNCLASSIFIED

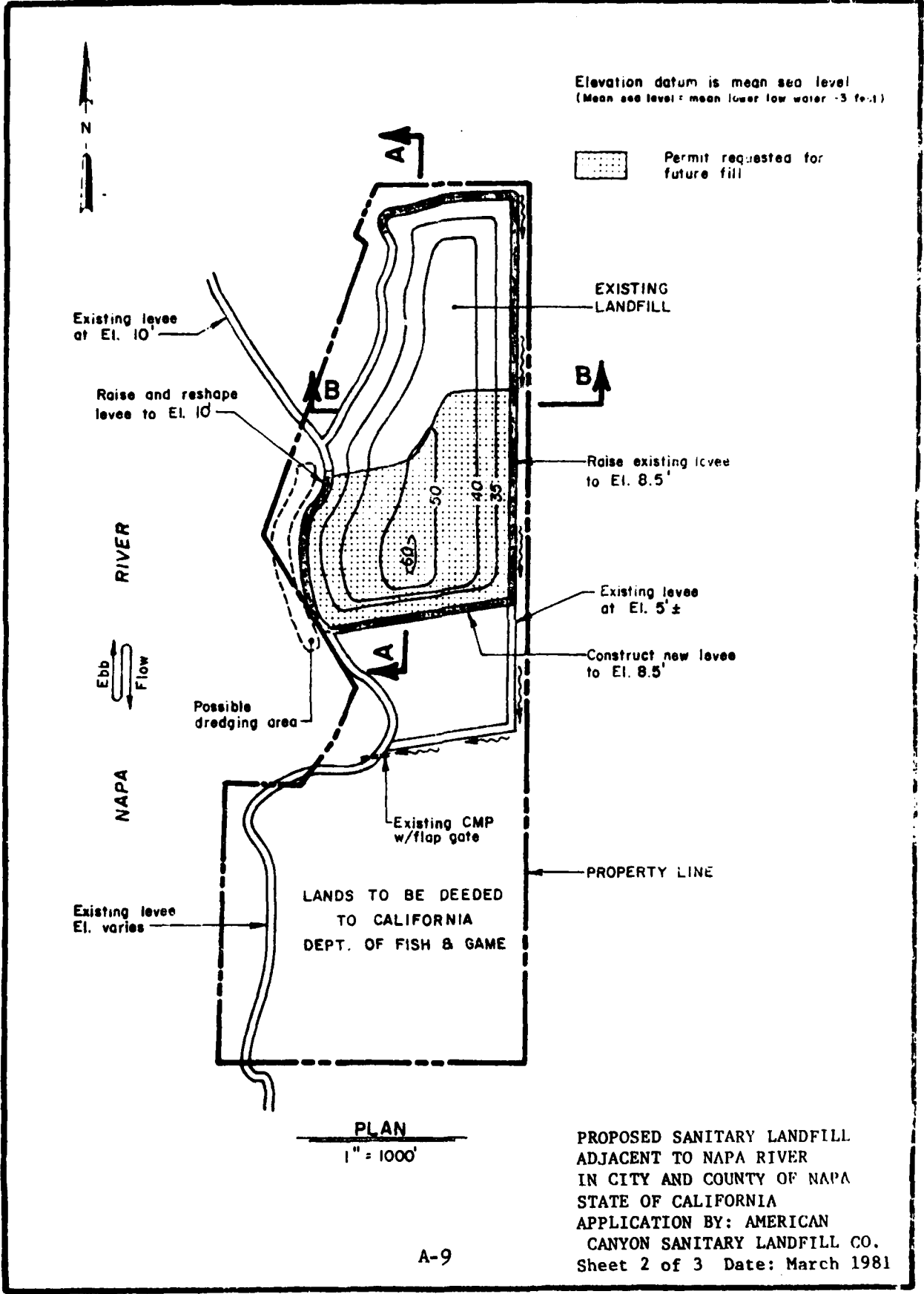
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2 of 2

AD-A
113562



END
DATE
FILMED
05-82
DTIC



Elevation datum is mean sea level
(Mean sea level = mean lower low water -3 feet)

Permit requested for future fill

EXISTING LANDFILL

Existing levee at El. 10'

Raise and reshape levee to El. 10'

B

Raise existing levee to El. 8.5'

RIVER

Existing levee at El. 5'±

Ebb Flow

Construct new levee to El. 8.5'

NAPA

Possible dredging area

Existing CMP w/flap gate

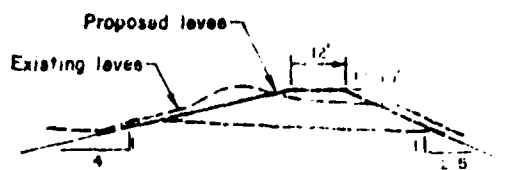
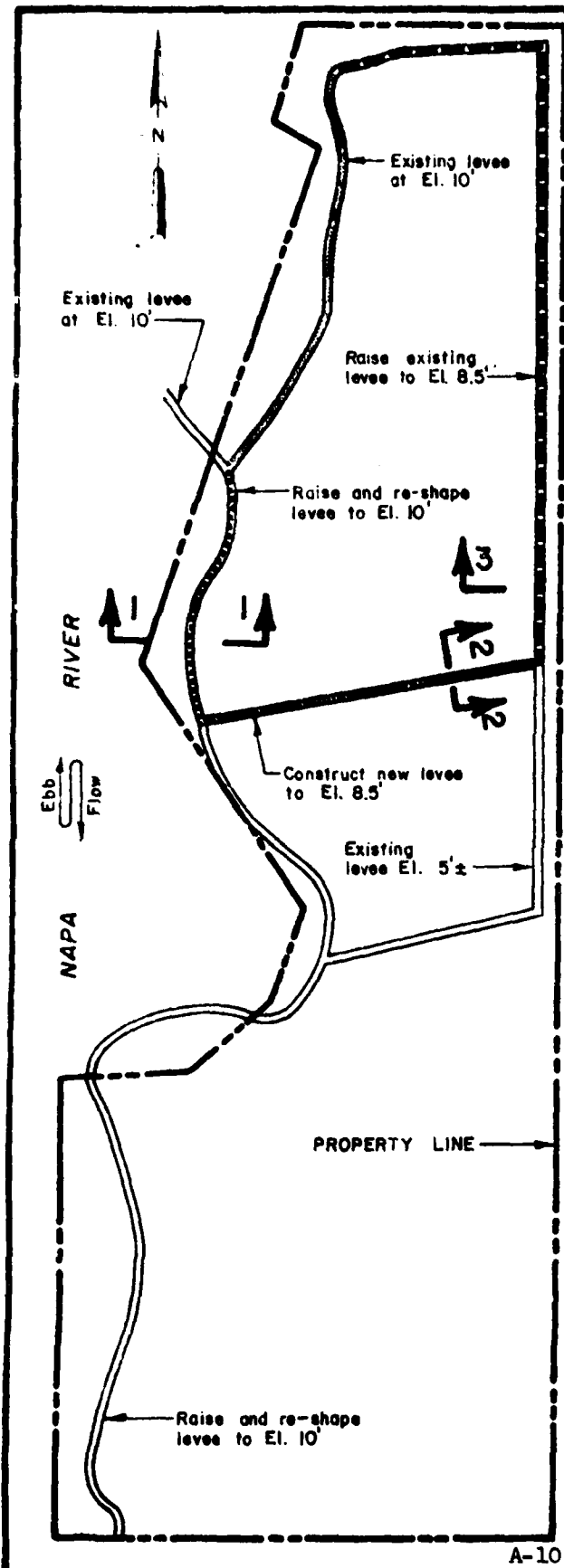
PROPERTY LINE

Existing levee El. varies

LANDS TO BE DEEDED TO CALIFORNIA DEPT. OF FISH & GAME

PLAN
1" = 1000'

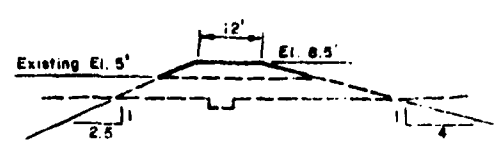
PROPOSED SANITARY LANDFILL
ADJACENT TO NAPA RIVER
IN CITY AND COUNTY OF NAPA
STATE OF CALIFORNIA
APPLICATION BY: AMERICAN
CANYON SANITARY LANDFILL CO.
Sheet 2 of 3 Date: March 1981



SECTION 1
NAPA RIVER LEVEE
Not to scale

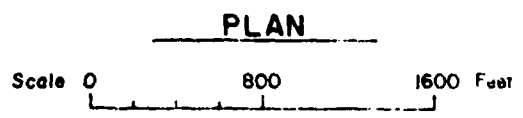


SECTION 2
INLAND LEVEE
Not to scale



SECTION 3
INLAND LEVEE
Not to scale

Note: Elevation datum is mean sea level



PROPOSED SANITARY LANDFILL
ADJACENT TO NAPA RIVER
IN CITY AND COUNTY OF NAPA
STATE OF CALIFORNIA
APPLICATION BY: AMERICAN
CANYON SANITARY LANDFILL CO.
Sheet 3 of 3 Date: March 1981

U. S. ARMY ENGINEER DISTRICT, SAN FRANCISCO
CORPS OF ENGINEERS
100 McALLISTER STREET
SAN FRANCISCO, CALIFORNIA 94102

PUBLIC NOTICE NO. 74-0-105

TO WHOM IT MAY CONCERN:

8 March 1974

The American Canyon Sanitary Landfill Company, c/o Kilpatrick, Peterson, and Ely, 922 Tennessee Street, Vallejo, California 94590 (telephone: 707-644-0444), has applied for a Department of the Army permit for both existing fill and proposed fill in a 300-acre site shoreward of an existing levee on the east bank of the Napa River approximately two miles south of the Napa County Airport in southern Napa County, California. The site in question has been used as a disposal site since World War II. The sanitary landfill method of disposal was adopted in 1956 and has been used ever since. Those portions of the site not specifically in use for the disposal operation at any given time have been regularly used for cattle grazing at all times since World War II. The location of the site is shown on sheet 1, and details of the existing and proposed work are shown on sheets 2 and 3 of the drawings which accompany this notice.

That portion of the existing fill for which a Corps permit is required is that which was placed on areas below the level of mean higher high water after 18 January 1972, the date of our Public Notice No. 71-22(a) which defined the Corps' limits of jurisdiction in navigable waters. The existing fill which is in this category is shown by the cross hatched areas on sheet 2. The proposed fill for which a Corps permit is requested is shown by the cross hatched areas on sheet 3 of the accompanying drawings. The future filling would be accomplished in three phases as shown on this drawing and discussed in a later part of this notice.

In addition to the filling mentioned above, the work for which a permit is requested includes the following:

1. Excavation of bay mud to a depth of 1 to 6 ft., beneath the proposed fill areas, with the excavated material to be used for refuse cover and possibly for levee construction and repair. The limits of this excavation are shown by the dashed lines on the sections views of sheet 3.
2. The construction of new levees and the raising and re-shaping of existing levees as shown on sheets 2 and 3. The material for the levee work would be obtained from the bay mud excavated beneath the disposal areas and/or material dredged from the Napa River bottom along the westerly levee as shown on the plan view of sheet 3.

The refuse in the existing fill consists partially of burnt-out refuse accumulated prior to the discontinuation of open burning in November 1971. The remainder of the existing fill consists of municipal refuse and earth cover, the refuse having been collected by the Vallejo Garbage Company and the Napa

Garbage Service from portions of Solano and Napa Counties. The nature of the proposed fill would be the same except that it would include no burnt-out refuse. The earth cover in the proposed fill would consist of a daily six-inch cover, a possible one-foot intermediate cover, and a two-foot final cover. The areas, volumes, and expected site life for the above-described work are as shown in the following table. The applicant states that the data shown are estimates and in the case of the proposed work the quantities shown are minimums.

Any increased in the quantities shown in this public notice would require revisions of any permit which might be issued as a result of this notice.

Existing Sanitary Land Fill (since January 1972)

Area of fill: 8 acres
 Volume of refuse: 148,400 cubic yards
 Volume of earth cover: 32,400 cubic yards
 Vol. of mud for levee construction and repair: 60,000 cu. yd.

Proposed Work (estimated)

	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>
Area of fill, acres:	55	82	120
Vol. of refuse, cubic yards:	806,500	2,100,000	3,280,000
Vol. of earth cover, cubic yards:	275,000	694,000	1,100,000
Volume of mud for levee construction and repair, cubic yards:	160,000 (total for 3 phases)		

The applicant states that the area to be filled would be used for grazing or other agricultural purposes on an interim basis and that ultimate use of the land would be of a more intensive nature to be established in accordance with whatever local ordinances and planning regulations exist at that time.

The applicant received a use permit for the operation of a sanitary landfill operation on the entire 300 acre site from the Board of Supervisors of the County of Napa on January 10, 1967. The site has been operated with the advice and consent of the Napa County Health Department.

Waste discharge requirements were adopted for the site by the Water Quality Control Board by Resolution No. 68-24 dated April 30, 1968. The applicant has applied to the California Regional Water Quality Control Board for the certificate required by the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500), and to the San Francisco Bay Conservation and Development Commission for a permit authorizing the proposed work.

A permit issued by the Department of the Army does not give any property rights either in real estate or materials, or any exclusive privileges; and does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining State assent to the work authorized. The decision by the Corps of Engineers whether to issue a permit

will be based on an evaluation of the probable impact reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, among those are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use classification, navigation, recreation, water supply, water quality and, in general, the needs and welfare of the people. No permit will be granted unless its issuance is found to be in the public interest:

It appears that the nature of the proposed project is such that the preparation of an Environmental Impact Statement (EIS) by the Corps of Engineers would be required before a decision could be made on the issuance of the requested permit. The draft of this statement will be prepared for initial distribution after additional environmental information is provided by the applicant.

Any person who has an interest which may be adversely affected by the issuance of a Corps of Engineers' permit for the work described in this notice may request a public hearing. The request must be submitted in writing to the District Engineer within thirty (30) days of date of this notice and must clearly set forth the interest which may be adversely affected by the activity.

Interested parties may also submit in writing any objections that they may have to the proposed work. Objections should be forwarded so as to reach this office not later than thirty (30) days from date of this notice. It is Corps' policy to forward such objections to the applicant for resolution or rebuttal. If the objecting party so requests, his name will be deleted from the forwarded letter or the objections will be paraphrased in summary form. In such cases, however, it should be noted that the applicant cannot be requested to resolve such objections directly but can only rebut them by responding to the District Engineer.

J. L. LAMMIE
Colonel, CE
District Engineer

**THE THREE FOLD-OUT MAPS ORIGINALLY DISTRIBUTED WITH THIS
PUBLIC NOTICE HAVE NOT BEEN INCLUDED IN THIS APPENDIX.
THEY ARE AVAILABLE FOR REVIEW IN THE SAN FRANCISCO DISTRICT,
U.S. ARMY CORPS OF ENGINEERS.**



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
211 MAIN STREET
SAN FRANCISCO, CALIFORNIA 94105

SPNCO-RE

RESPONSE REQUIRED: 20 APRIL, 1978

PUBLIC NOTICE NO. 9297-29 (Revision of 74-0-105)

1. The American Canyon Sanitary Landfill Company, c/o Kilpatrick, Peterson, and Ely, 922 Tennessee Street, Vallejo, California 94590 (telephone 707-644-0444), has applied for a Department of the Army permit for both existing fill and proposed fill on portions of a 755-acre parcel of unincorporated land located along the east bank of the Napa River in southern Napa County, California (please refer to Sheet 1).
2. The attached two drawings show the portions of the existing fill for which a Corps permit is required which was placed on areas below the elevation of mean high water after 18 January 1972, the date of our Public Notice No. 71-22(a), which defined the Corps' limits of jurisdiction in navigable waters. The existing fill which is in this category is shown on Sheet 2. The proposed fill for which a Corps permit is requested is also shown on Sheet 2. This proposed fill area includes about 275 acres. The 384-acre area indicated on Sheet 2 as "Open Space for Wildlife Purposes" is an area which would be set aside in accordance with a plan developed by the applicant in cooperation with the California State Department of Fish and Game (CDF&G) and the U.S. Fish and Wildlife Service (USF&WS).
3. Project History. The American Canyon site was historically part of the marshland area of the Napa River. For a brief period around 1930, the site was used as a barging point for cement ships and had a rail connection which was later dismantled. Solid municipal wastes have been disposed on a portion of the 300-acre site since 1942. Open-burning practices were supplemented by modified sanitary landfilling from about 1957. The disposal site was operated as combined open burning dump and modified sanitary landfill until November 1971, when open burning was discontinued. On 31 October 1973, application was made for a Department of the Army permit for the landfill configuration which essentially paralleled the Napa River. This earlier proposal was announced in San Francisco District Public Notice No. 74-0-105, dated 8 March 1974. Sheet 2 indicates the area which has been filled and which is being allowed to be filled during the permit review process.
4. Public Review Process. Comments on Public Notice No. 74-0-105 were required from the U.S. Environmental Protection Agency (EPA), USF&WS, U.S. Department of Commerce, (NOAA), and the California State Resources Agency (CSRA). The most significant agency comments received were concerned with the irreversible commitment of 300 acres of restorable

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PUBLIC NOTICE NO. 9297-29 (Revision of 74-0-105)

wetland to landfill operations. Letters of comment concerning the Public Notice were also received from the general public and conservation groups with the same issue emphasized.

a. After determining that an Environmental Statement would be required, the San Francisco District circulated a Working Paper (September 1974) to various Federal, State, and local agencies and citizen groups for their informal review and comment. A document entitled Interim Draft Environmental Impact Statement prepared for the applicant by EMCON, Associates, San Jose, California, served as the Working Paper. Comments on the Working Paper were received from the USF&WS, NOAA, U.S. Department of Health, Education and Welfare (USHEW), and the CSRA. The Golden Gate Audubon Society and the Napa Valley Fly Fisherman also commented on the Working Paper. In general, comments on the Public Notice and the Working Paper dealt with loss of the possibility of restoring the project area to marshland; the elimination of existing wildlife use areas; seismic hazards; land use plans; endangered species; growth; the project's effect on stream flow characteristics; and the impact on water quality and migrating fish species in the Napa River.

b. The Draft Environmental Statement (DES) for the project was released by the San Francisco District for review in March of 1976. Letters of comments concerning the DES were received from the EPA, USF&WS, NOAA, the U.S. Department of Transportation (Federal Aviation Administration (FAA) and Federal Highway Administration (FHA)), USHEW, the Association of Bay Area (ABAG), the San Francisco Bay Conservation and Development Commission (BCDC), Napa County, and one individual. The comments received were concerned with essentially the same topics brought out earlier in the review process (as discussed above). Among new items brought out was the proximity of the landfill operation to the Napa County Airport and the possible effect birds attracted by the landfill might have on the airport. The FAA has since determined that they would not object to the project. This determination was based on the fact that the landfill operation would be carried out more than 10,000 feet from the airport and was based on the requirement that the operation conform with basic EPA requirements. It should also be noted that the FAA approval was based on the landfill configuration as presented in the DES, and not the proposed new eastward extension. The easterly extension maintains the 10,000 feet clearance from the airport.

5. Environmental Impact. The March 1976 DES presented the anticipated impacts of the American Canyon Sanitary Landfill project. The proposed relocation of the project boundaries, with a significant change being the movement of the easternmost edge of the fill area about 2,000 feet ← further to the east, would likely have the effect of decreasing some

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PUBLIC NOTICE NO. 9297-29 (Revision of 74-0-105)

impacts and perhaps increasing others relative to the information presented in the DES. A discussion of those impacts which may change due to the revised proposal follows.

a. The DES indicated that the project site was historically a marshland area. The site still contains areas of marshland, and considering the elevations of unfilled portions of the site, much of the area could be restored to wetland. Wetlands are considered a unique, valuable, irreplaceable water resource. They serve as a habitat for many species of fish and waterfowl. Such areas moderate extremes in water flow, and aid in natural purification and provide unique recreational values. The subject relocation of the project boundaries would permit the southernmost 137 acres of the site to be preserved and not filled. This southern area has significant wetland value. In addition, the preservation of this area would allow the remainder of the lands which the applicant would dedicate for wildlife purposes to be connected to the Napa River system and hence also be available as wetland habitat. The 135 acres in the northeast corner of the site which would be filled to replace the 137 acre area are essentially uplands and are relatively less valuable in terms of supporting wildlife.

b. Nuisance Factors. Nuisance factors such as odor, debris, unsightliness, dust, etc., are items which must be considered in the development of any sanitary landfill project. Again, the residential area to the east of the site appears to be the area which could be most effected by these impacts, and the eastward movement of the site could magnify the impact. If proper protective measures are taken by the landfill operator, then these impacts could be minimized. The key to successful control of nuisance is planning, i.e., constructing the sanitary landfill in accordance with an operational plan that allows for the control of nuisance factors as a part of everyday operations. Nuisance factors associated with refuse disposal, such as odor, unsightliness, fire and dust can be controlled by placement and compaction of refuse as it is delivered to the site, placement of daily cover, and proper maintenance of access roads (paving, oiling, and watering). Blowing debris can be contained by controlled wetting of the refuse as it is dumped and by surrounding the work area with properly placed debris fences.

c. Land Values. Proximity to the American Canyon Sanitary Landfill has apparently not had a significant effect on land values in the past. The disposal site pre-dates adjacent subdivisions by at least ten years, and many homes were purchased when the site was being used as a dump with open burning. Most homeowners in the area were probably aware of

SPNCO-RE

PUBLIC NOTICE NO. (Revision 74-0-105)

the existing eastern limit of the site when they bought their property and, therefore, the site configuration discussed in the DES would not have constituted a change from what was expected. The fact that the new proposal would allow the eastern boundary to move about 2,000 feet further east, might have some impact on land values. It is noted that the protective measures proposed by the applicant (Page 5) may conceal the site and protect adjacent land owners to the degree that the impact on land value would be minimal.

d. Noise. Noise and its impact on people is quite often measured in decibels (dBA). In general, 80 dBA at a distance exceeding 200 feet is for many situations considered the maximum acceptable limit. There are two primary sources of noise resulting from the existing landfill operation: (1) Heavy equipment involved in extracting and transporting cover material and in compacting and covering the fill; and (2) vehicles bringing solid waste to the disposal area. Under existing conditions it is expected that normal daytime noise levels in the residential area to the east of the site would be about 40 to 45 dBA. The homes which are closest to the landfill operation, those on the western edge of the Rio Del Mar, are roughly 3,000 feet from the edge of the site and should theoretically experience noise levels resulting from the landfill operation of about 40 to 60dBA. The subject proposal would reduce this minimum distance from 3,000 to about 1,000 feet and based on this an increase in noise would be expected. At 1,000 feet heavy equipment such as is used in the landfill operation can be expected to produce noise levels of 44 to 69 dBA. However, because the machinery on the site does not operate at full power for extended periods, because the operation is planned so that the working area will face away from the residential area, and because disposal operations in the east area would be conducted behind a protective berm, equipment would not produce these noise levels, and may not increase significantly over existing levels. The noise impact resulting from vehicles entering and leaving the site is currently limited to the daytime hours of 8 a.m. to 5 p.m., the hours of site operation.

e. Aesthetics. The continuation of the landfill operation with either the currently proposed configuration or with the previous would result in blocking out the view of the river area for much of the residential development to the east. The primary change due to the eastward movement of the site, would be that the plateau which would be created would be 2,000 feet closer to the residential area and would likely seem more imposing. The planting of trees which the applicant intends to carry

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out would likely soften the impact and would provide a more pleasing perspective. The current proposal would allow for the preservation of the southern-most portion of the site and thereby would preserve about 2,500 linear feet of viewing area.

f. Cultural Resources. The portions of the site which were announced for filling in the previous public notice dated 8 March 1974, were surveyed on foot and no archaeological resources were discovered. The applicant has indicated that the proposed new eastern portion of the site has also been surveyed for cultural resources, with the same negative results. No previously recorded or reported archeological sites exist within the project area.

g. Other Impact. The other impacts resulting from the landfill operation are expected to be similar in magnitude to those presented in the Draft Environmental Statement. Copies of the DES will be available for review at the April 12, 1978 public hearing.

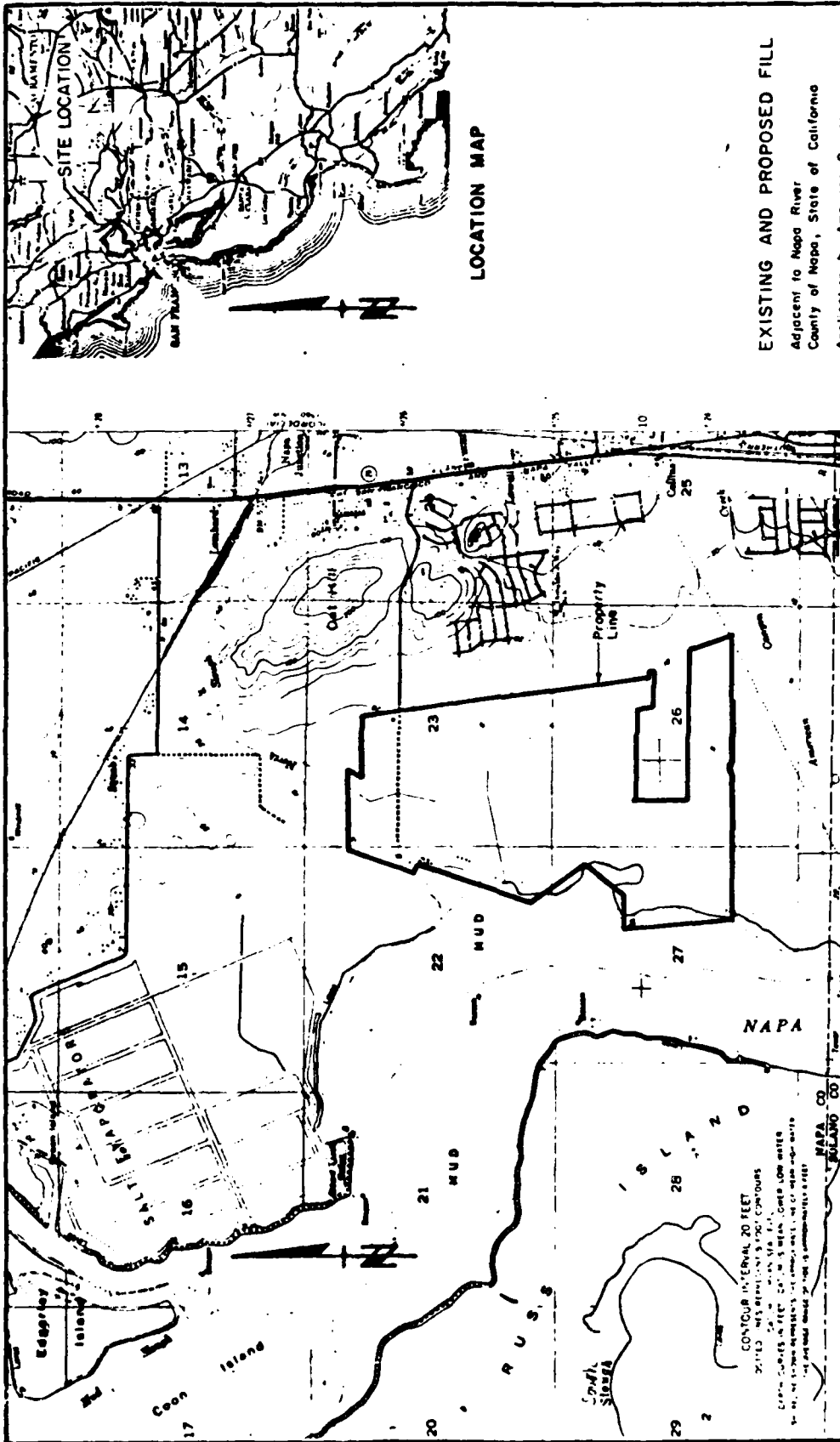
h. Project Mitigation. In order to satisfy wetland concerns expressed by other agencies and to lessen the impact of moving the eastern boundary of the landfill closer to the residential area, the applicant has proposed the following mitigation measures:

1. The preservation of about 384 acres for wildlife purposes (see sheet 2 for location).
2. A 100-foot setback between the toe of the landfill a property line along the east perimeter.
3. The planting of rapid growing trees within the 100-foot setback. Primary consideration in the selection of the type of trees and in the spacing of the trees would be given to providing a visual buffer between the subdivision and the landfill. The landfill operation would be staged so that the eastern 135 acres of fill would be placed last to allow for the maturing of the trees. Based on estimated fill rates, the landfill operation would not progress to the eastern sector for at least 10 years.
4. Disposal operations in the east area would be conducted behind a berm that would provide an additional visual and noise buffer between the landfill and the residential area.
5. The final surface of the landfill would be seeded to improve the appearance of the landform during construction and thereafter.

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6. Litter fencing will be installed along the east perimeter of the site and in the active work area. The fences will be policed on a regular basis to contain litter on the landfill site and prevent the development of unsightly conditions.



EXISTING AND PROPOSED FILL

Adjacent to Napa River
County of Napa, State of California

Application by: American Canyon
Sanitary Landfill Co

Prepared by: EMCON ASSOCIATES

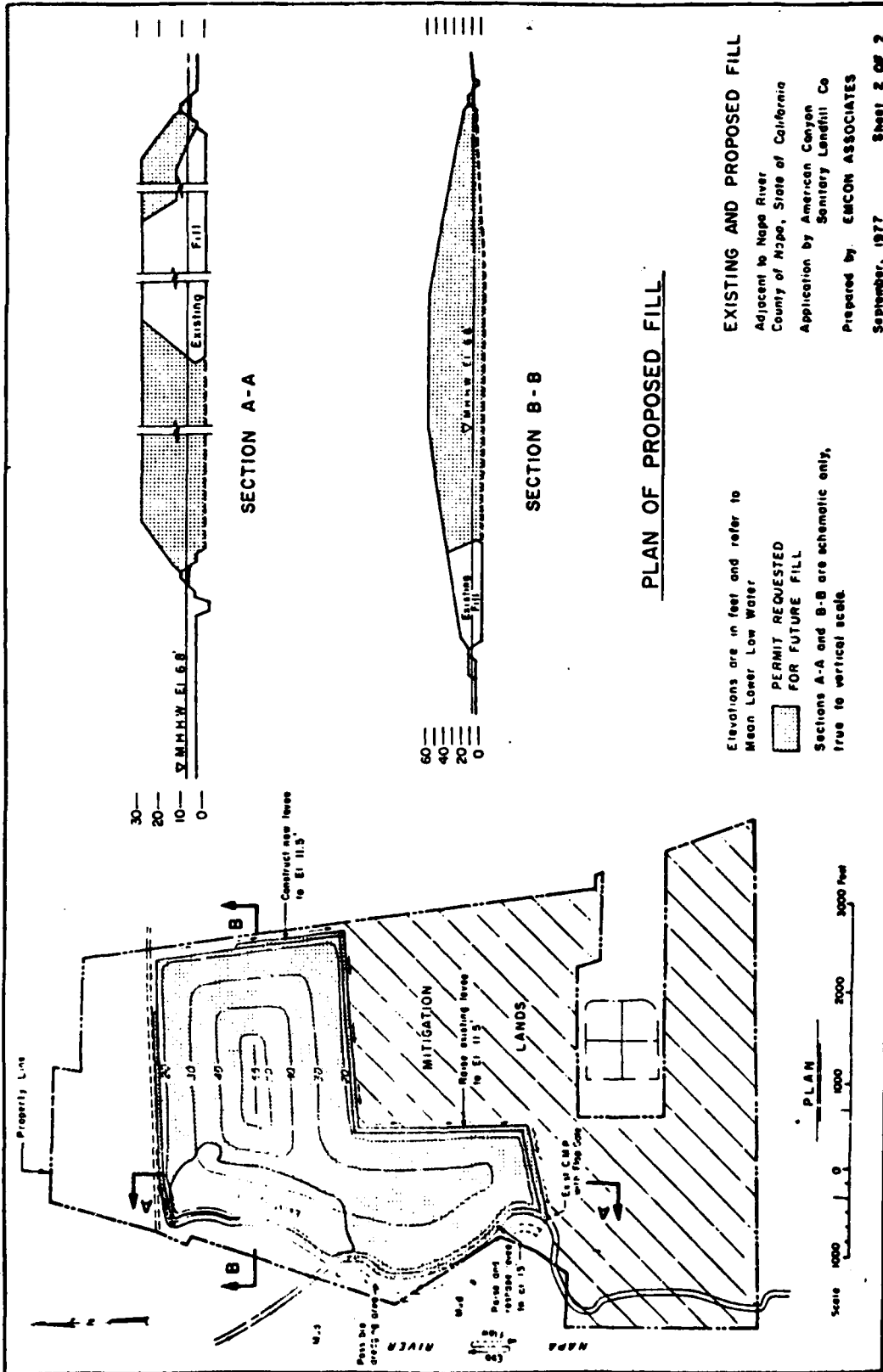
September, 1977 Sheet 1 OF 2

SCALE 2 000 0 2 000 4 000 6 000 FEET

PLAN

CUTTINGS WHARF, CALIF.

NO. 13888 JULIANO IS BOUNDARIES
N 3075-W 12215/75



PLAN OF PROPOSED FILL

EXISTING AND PROPOSED FILL

Adjacent to Napa River
 County of Napa, State of California
 Application by American Canyon
 Sanitary Landfill Co
 Prepared by: **EMCON ASSOCIATES**

Elevations are in feet and refer to
 Mean Lower Low Water

PERMIT REQUESTED
 FOR FUTURE FILL

Sections A-A and B-B are schematic only,
 true to vertical scale.

September, 1977 Sheet 2 OF 2

AGREEMENT

THIS AGREEMENT is made and executed this 7th day of October, 1980, by and between the AMERICAN SANITARY LANDFILL COMPANY, INCORPORATED, a California corporation, hereinafter called "AMERICAN CANYON", and the RESOURCES AGENCY OF CALIFORNIA, hereinafter called "AGENCY".

WHEREAS, AMERICAN CANYON and its predecessors in interest have been operating a sanitary landfill disposal operation in the County of Napa in the American Canyon area since 1943;

WHEREAS, the landfill operation has been conducted in a location which is below mean higher-high tide and is seasonal wetlands;

WHEREAS, the State of California objects to the filling of these wetlands;

WHEREAS, the County of Napa objects to the abandonment of the landfill operation at this site until an alternative upland site is acquired;

WHEREAS, the County of Napa opposes expansion of the landfill operation to the east of the existing landfill, but supports expansion to the south;

WHEREAS, it is in the best interests of the parties to this agreement that there be a balancing of two vital interests; to wit, the need to protect wetlands and other environmental values for

future generations and the need to provide a means of solid waste disposal for the Napa-Vallejo area; and

WHEREAS, AMERICAN CANYON has made an application to the UNITED STATES CORPS OF ENGINEERS, hereinafter called "CORPS", for a permit to continue its solid waste disposal operation on lands subject to CORPS jurisdiction;

THEREFORE, IT IS AGREED:

1. The AGENCY hereby approves and recommends approval to the CORPS, the continued operation of the AMERICAN CANYON solid waste disposal site, hereinafter called "site", on the terms and conditions and subject to the limitations set forth herein.

2. AMERICAN CANYON shall be permitted to utilize the balance of Phase I as described on the map attached hereto, marked Exhibit A, and incorporated herein as though fully set forth; and shall be permitted to expand said site in a southerly direction to encompass and utilize 53 acres of Phase II as described on said Exhibit A.

3. Upon the execution of this agreement, AMERICAN CANYON shall undertake an effort, in good faith, to locate, develop, and have approved an upland site for waste disposal which is away from this location and which will meet all the environmental considerations of the various agencies; provided this paragraph shall in no way vary or interfere with the operation, use, and expansion of said site as described in paragraph 2, hereof.

4. AMERICAN CANYON may continue its disposal operation within Phase I and the expansion of said site into said 53 acres of Phase II until it has completed this fill to a maximum height of 60' or less if determined by Napa County.

5. AMERICAN CANYON will not seek expansion of its sanitary landfill disposal operation into the wetlands located immediately east of the existing Phase I, II, and III site.

6. AMERICAN CANYON agrees to deed to the DEPARTMENT OF FISH AND GAME OF THE STATE OF CALIFORNIA, hereinafter called "DEPARTMENT", but will retain all gas and mineral rights to the following property:

a. The remainder (approximately 33 acres) of Phase II not utilized for said site as provided in paragraph 2 hereof.

b. Phase III (approximately 137 acres) of Exhibit A, excepting therefrom that portion of Phase III accepted by the STATE LANDS COMMISSION, hereinafter called "COMMISSION", in full satisfaction of its claim to lands situated within Phase I and Phase II.

This conveyance shall be made when all final and necessary governmental approvals, federal and state, for use of said site and its expansion into said 53 acres of Phase II have been obtained; and when all final and necessary governmental approvals, federal and state, for use of said site and its expansion into said 53 acres of Phase II have been obtained; and when all permits required for AMERICAN CANYON under the terms hereof have been obtained; and when the identity of lands to be conveyed to the COMMISSION in Phase III have been finally agreed to by the COMMISSION.

7. AMERICAN CANYON shall, at its own expense, install a tidal gate of the kind described on Exhibit B, which is attached hereto and incorporated herein as though fully set forth, in the Phase II levee; the location of said tidal gate shall be mutually selected by the parties hereto based upon consideration of the cost and the reasonable requirements of the DEPARTMENT. Said gate shall be installed so that the portion of Phase II deeded to the DEPARTMENT will flood and drain twice daily to a maximum depth of 1.5 feet above 70% of the existing vegetation. Said gate shall become the property of the AGENCY and be operated and maintained by the AGENCY or its designated agent.

8. AMERICAN CANYON shall, at its own expense, install a tidal gate of the kind described in Exhibit B in the Phase III levee; the location of said tidal gate shall be mutually selected by the parties hereto based upon consideration of the cost, and reasonable requirements of the DEPARTMENT. Said gate shall become the property of the AGENCY and be operated and maintained by the AGENCY or its designated agent.

9. AMERICAN CANYON shall erect as much fencing around Phase III and the remainder of Phase II, as shown in Exhibit A, as is required to prevent cows and horses from entering the area. If something less than complete fencing will accomplish said goal, it shall be deemed sufficient to meet this requirement.

10. AMERICAN CANYON retains the right to elect which direction it shall cause the natural surface drainage over the total site to be diverted.

11. The land areas surrounding the embayment to the west of said site will be graded, covered, and compacted by AMERICAN CANYON, at its sole expense, in a manner deemed by the parties hereto to be esthetically sound. Said work shall be performed in the manner to be agreed upon by the DEPARTMENT and AMERICAN CANYON as a result of on-site inspection.

12. AMERICAN CANYON shall provide all necessary leachate controls for Phase I and the 53 acres of Phase II.

13. AMERICAN CANYON shall, with the review and approval of the DEPARTMENT, construct a slough and connecting lateral ditches within the existing levees surrounding the remainder of Phase II (that portion deeded to the DEPARTMENT).

14. AMERICAN CANYON shall provide a nonexclusive route for public access to the river in the area of the disposal operation and to the mitigation lands referred to in paragraph 6 of this agreement. Said access shall be along the shoreline of the said 53 acres of Phase II and Phase I to the embayment. In no case, shall the public be permitted to cross said site until the AGENCY and AMERICAN CANYON agree that this may be accomplished in a manner deemed safe and reasonable for both the public and AMERICAN CANYON.

15. Upon closure of said site, it shall be utilized for open space purposes only. Any future process of recovery of oil, gas, minerals, or other materials from the site shall not unreasonably interfere with the open space purpose to which the surface is placed. Ownership of the final completed project (Phase I and 53 acres in Phase II) shall remain with AMERICAN CANYON SANITARY LANDFILL CO., INC., or their successors and assigns. A-26

16. AMERICAN CANYON shall be responsible, at its sole expense, for the maintenance of the levee along the Napa River and Phases I, II, and III, from the date of this agreement to the time that disposal operations have ceased and the site has been closed. Thereafter, AMERICAN CANYON and AGENCY shall each be responsible for the levees adjacent to their respective lands.


17. This agreement is intended to satisfy, and satisfies, the mitigation requirements of the AGENCY for the uses by AMERICAN CANYON provided herein.

18. This agreement is binding on the successors and assigns of the parties hereto.

AMERICAN CANYON SANITARY LANDFILL,
INCORPORATED, A CALIFORNIA CORPORATION


"AMERICAN CANYON"

RESOURCES AGENCY OF CALIFORNIA


"AGENCY"



FILMED
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