DRAFT ENVIRONMENTAL IMPACT REPORT

Hugo Neu-Proler Lease Renewal

State Clearinghouse Number 93071074

Prepared by:

Environmental Management Division Los Angeles Harbor Department 425 S. Palos Verdes Street P.O. Box 151 San Pedro, CA 90733-0151

May, 1995

With assistance from:

Foster Wheeler Environmental Corporation
611 Anton Blvd, Costa Mesa, CA 92626

ADP 900607-599

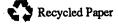


TABLE OF CONTENTS

	Page
TABLE (OF CONTENTSi
LIST O	
LIST O	T TIGORDS
LISI O	F TABLESiv YMS AND ABBREVIATIONSvi
ACRON	MS AND ABBREVIATIONS
EXECUT	TIVE SUMMARYES-1
CECTION	N 1 DESCRIPTION OF THE PROJECT1-1
	11 DESCRIPTION OF THE PROJECT
1.1	Project Location1-1
1.2	General Setting1-1
1.3	Project Objectives1-1
1.4	Historical Perspective-Project Site1-6
1.7	Description of Proposed Facility1-7
1.5	Description of Proposed Facility
SECTIO	N 2 EIR USE, RELATED PROJECTS, AND RELATIONSHIP TO
PLANS.	2-1
2.1	Intended Use of EIR2-1
2.2	Related Projects2-1
2.2	Relationship to State, Regional, and Local Plans and Statutes2-1
2.5	Relationship to State, Regional, and Local Flans and Statutes
	THE PARTY OF THE P
SECTIO	N 3 ENVIRONMENTAL SETTING, IMPACTS, MITIGATION,
AND MI	TIGATION MONITORING
3.1	Geology
3.2	Soil and Groundwater
-	Soil and Ordinal Air Ordinal
3.3	Meteorology and Air Quality
3.4	Hydrology, Water Quality, and Oceanography
3.5	Biota and Habitats
3.6	Transportation and Circulation
3.7	Noise
	Public Health and Safety/Risk of Upset
3.8	Public Services
3.9	Public Services
3.10	_ 2 10 1
5.10	Energy
3.11	Energy
3.11	Utilities and Waste Management
3.11 3.12	Utilities and Waste Management
3.11 3.12	Utilities and Waste Management
3.11 3.12	Energy
3.11 3.12	Utilities and Waste Management
3.11 3.12	Utilities and Waste Management
3.11 3.12 3.13 3.14	Energy
3.11 3.12 3.13 3.14	Energy
3.11 3.12 3.13 3.14 SECTIO	Utilities and Waste Management
3.11 3.12 3.13 3.14 SECTIO 4.1	Utilities and Waste Management
3.11 3.12 3.13 3.14 SECTIO	Energy

SECTIO	N 5 LONG TERM IMPLICATIONS OF THE PROJECT5-1
SECTIO	N 6 REFERENCES 6-1
SECTIO	N 7 PERSONS AND AGENCIES CONSULTED7-1
SECTIO	N 8 PREPARERS OF THE EIR 8-1
APPENI	DICES
Α.	Notice of Preparation
В.	Air Quality Special Study Report *
C.	Traffic Special Study Report *
D	Noise Special Study Report *

^{*(}These appendices are bound in a separate document and are available upon request from the Port of Los Angeles)

LIST OF FIGURES

Figure 1.1-1 Figure 1.1-2 Figure 1.1-3 Figure 1.1-4	Project Location	1-3 1-4
Figure 1.5-1 Figure 1.5-2	Proposed Railway Access	1-14
Figure 2.2-1	Related Projects in the Vicinity of the Project	2-5
Figure 3.1-1 Figure 3.1-2 Figure 3.1-3	Geologic Setting Geological Cross Section Seismicity of Southern California	3.1-3
Figure 3.2-1. Figure 3.2-2. Figure 3.2-3.	Paved Areas of HNPC Site	5.2-4
Figure 3.3-1 Figure 3.3-2	South Coast Air Basin	3.3-2 3.3-5
Figure 3.4-1 Figure 3.4-2	Hydrologic Features of the Project Area	3.4-2 3.4-5
Figure 3.6-1 Figure 3.6-2	Existing Traffic VolumesRegional Rail System	3.6-5 3.6-8
Figure 3.7-1 Figure 3.7-2	Noise Monitoring Locations Leq Noise Levels- Ship Loading	3.7-3
Figure 3.8-1	Receptor Locations	3.8-9

LIST OF TABLES

Table 1.5-1 Table 1.5-2	Existing (1992) one-way truck trips1-9 Proposed one-way truck trips1-17
Table 2.1-1	Responsibilities of Agencies Expected to Use This EIR2-2
Table 2.2-1	Projects in the Proposed Project Vicinity2-6
Table 3.1-1	Mean sediment concentrations of metals3.1-5
Table 3.1-2	Mean sediment concentrations of organic constituents3.1-6
Table 3.1-3	Characteristics of Major Regional Faults
Table 3.2-1	Site groundwater quality at monitoring well MW-13.2-6
Table 3.2-2	Summary of Organic Chemicals in Groundwater Samples
Table 3.2-3	Summary of Metals in Groundwater Samples3.2-9
Table 3.2-4	Summary of Soil and Groundwater Investigations at Hugo Neu-Proler3.2-10
Table 3.2-5	Vertical Extent of Petroleum Hydrocarbon Contaminants3.2-11
Table 3.2-6	Vertical Extent of Metal Contaminants
Table 2.2.1	Monthly Asserted Dainfall at Long Baseh Airmont 3.3.3
Table 3.3-1	Monthly Average Rainfall at Long Beach Airport
Table 3.3-2	National and California Ambient Air Quality Standards
Table 3.3-3	Summary of Air Quality Data - Long Beach
Table 3.3-4	Summary of Existing HNPC Fugitive Emissions
Table 3.3-5	Summary of Existing HNPC Point Source Emissions
Table 3.3-6	Summary of Existing HNPC Mobile Source Exhaust Emissions
Table 3.3-7	Summary of Emissions from Existing Operations
Table 3.3-8	
Table 3.3-9	Project Schedule for Activities Involving Construction
	Construction Activity
Table 3.3-10	Estimated Fugitive Émissions Based on Proposed Increase
	in Scrap Handling Capacity
Table 3.3-11	Estimated Point Source Emissions Based on Proposed Increase
14010 5.5 11	in Scrap Handling Capacity
Table 3.3-12	Estimated Mobile Source Exhaust Emissions Based on
14010 3.3-12	Proposed Increase in Scrap Handling Capacity3.3-17
Table 3.3-13	Summary of Estimated Operational Emissions for
14016 3.3-13	Proposed Increase in Scrap Handling Capacity3.3-17
	-
Table 3.4-1.	Dissolved Oxygen (DO) of Harbor Water Near Hugo Neu-Proler3.4-4
Table 3.4-2.	Temperature of Harbor Water at Two Stations Near Hugo Neu-Proler3.4-6
Table 3.4-3.	Transparency of Harbor Water at Two Stations Near Hugo Neu-Proler3.4-6
Table 3.6-1	Existing Daily Traffic Volumes-Terminal Island Roadways3.6-3
	Existing Daily Traffic Volumes-Regional Access Routes
Table 3.6-2	Existing Intersection Levels of Service
Table 3.6-3	Level of Service for Signalized Intersections
Table 3.6-4	Desired Conserved Traction 2 6-13
Table 3.6-5	Project Generated Traffic
Table 3.6-6	Project Impact on Intersection Levels of Service
Table 3.6-7	Project Impact on Daily Traffic-Terminal Island Roadways
Table 3.6-8	Project Impact on Daily Traffic-Regional Access Routes

LIST OF TABLES (Cont.)

Table 3.7-1.	City of Los Angeles Noise Ordinance	3.7-1
Table 3.7-1.	Long-Term Equivalent Noise Levels (dBA)	3.7-5
Table 3.7-3.	Maximum 1- Hour Leq During Ship Loading Operations at HNPC	3.7-5
Table 3.8-1	Hazardous Materials Used by HNPC	3.8-2
Table 3.8-2	Risk Criticality Matrix	3.8-5
Table 3.8-3	Maximum Modeled Impacts of PM10	3.8-10
Table 3.8-4	Predicted PM10 Concentrations	3.8-10
Table 3.8-5	Predicted Worst-Case Air Toxics Concentrations	3.8-11
Table 3.8-6	Summary of Risk Parameter Calculations	3.8-12
Table 3.8-7	PM10 Ambient Air Quality Standards and Background	3.8-13

-

ACRONYMS AND ABBREVIATIONS

Agencies/Organizations

Abbreviations

ADD	(O 1) () () () () ()		
ARB	(California) Air Resources Board	AADT	annual average daily traffic
AT&SF	Atchison, Topeka, and Santa Fe	ADT	average daily traffic
CCC	California Coastal Commission	ac	acre-foot
CCW	Clean Coastal Waters	afy	acre-feet per year
CDFG	California Department of Fish and Game	AQAP	Air Quality Attainment Plan
DMV	Department of Motor Vehicles	AQMA	Air Quality Management Area
DOT	Department of Transportation (preceded	ASBS	Areas of Special Biological Significance
	by U.S. or California)	BACT	Best Available Control Technology
DTSC	California Department of Toxic	CAA	Clean Air Act
	Substances Control	CAAQS	California Ambient Air Quality
DWP	(Los Angeles) Department of Water and		Standards
	Power	CAP	Coastal Act Policy
DWR	(California) Department of Water	CEQ	Council on Environmental Quality
	Resources	CEQA	California Environmental Quality Act
EPA	U.S. Environmental Protection Agency	CFR	Code of Federal Regulations
FEMA	Federal Emergency Management Agency	cm	centimeters
FHA	Federal Highway Administration	CO	carbon monoxide
FRA	Federal Railroad Administration	CZM	Coastal Zone Management
HBL	Harbor Belt Line Railroad	ďΒ	decibel
HNPC	Hugo Neu-Proler Company	dBA.	decibel with an A-weighting
JPA	Joint Planning Authority	EIR	environmental impact report
LACoFD	Los Angeles County Fire Department	EIS	environmental impact statement
LAFD	Los Angeles City Fire Department	ft	feet
LAHD	Los Angeles Harbor Department	g	gram
LAPD	Los Angeles Police Department	g/m ²	grams per square meter
MWD	Metropolitan Water District (of Southern	gal	gallon
	California)	gpd	gallons per day
NMFS	National Marine Fisheries Service	gpm	gallons per minute
NOAA	National Oceanographic and Atmospheric	H ₂ S	hydrogen sulfide
	Administration	_	• •
NWS	U.S. National Weather Service	HBL	Harbor Belt Line
OSHA	Occupational Safety and Health	ICTF	Intermodal Container Transfer Facility
ODILI	Administration	in	inches
POLA	Port of Los Angeles	ISCST	Industrial Source Complex Short Term
POLB	Port of Long Beach		(model)
RWQCB	Regional Water Quality Control Board	kg/m ²	kilograms per square meter
SCAG	Southern California Association of	km	kilometer
SCAU	Governments	kV	kilovolt
SCAOMD	South Coast Air Quality Management	kW	kilowatt
SCAQIVID	District	kWh	kilowatt-hour
SCE	Southern California Edison Company	1	liter
SCG	Southern California Gas Company	LCP	Local Coastal Plan
	Southern California Ocean Studies	L _{eq}	equivalent sound level
SCOSC	Consortium	Lmax	maximum sound level
CM TO CD		LOS	level of service
SWRCB	(California) State Water Resources	LUS	ICTOLOL SOLVICO
770 4 005	Control Board		
USACOE	U.S. Army Corps of Engineers		
USCG	U.S. Coast Guard		
USFWS	U.S. Fish and Wildlife Service		
USGS	U.S. Geological Survey		

ACRONYMS AND ABBREVIATIONS

Abbreviations (Cont.)

EXECUTIVE SUMMARY

This Executive Summary addresses the environmental effects of proposed lease renewal for 30 years and planned improvements and operational changes to the Hugo Neu-Proler Company (HNPC) facility at Berths 210-211, on Terminal Island in the Port of Los Angeles (Figure ES-1). A table summarizing environmental impacts and mitigation measure is included at the end of the summary.

ES 1.0 Intended Use of the EIR Document

This Environmental Impact Report (EIR) document has been prepared in accordance with the California Environmental Quality Act (CEQA) Statutes and Guidelines (June 1986), pursuant to Section 21151 of CEQA. The City of Los Angeles Harbor Department is the local lead Agency for the project, and has supervised preparation of this EIR. The EIR is an informational document drafted to inform members of the general public, responsible agencies, and public agency decision makers of the significant environmental effects of the project, identify ways to minimize the significant effects, and describe reasonable alternatives to the project. This document assesses the short-term, long-term, and cumulative impacts of the proposed project.

This EIR is also intended to support the permitting processes of all agencies whose discretionary approvals must be obtained for particular elements of the project.

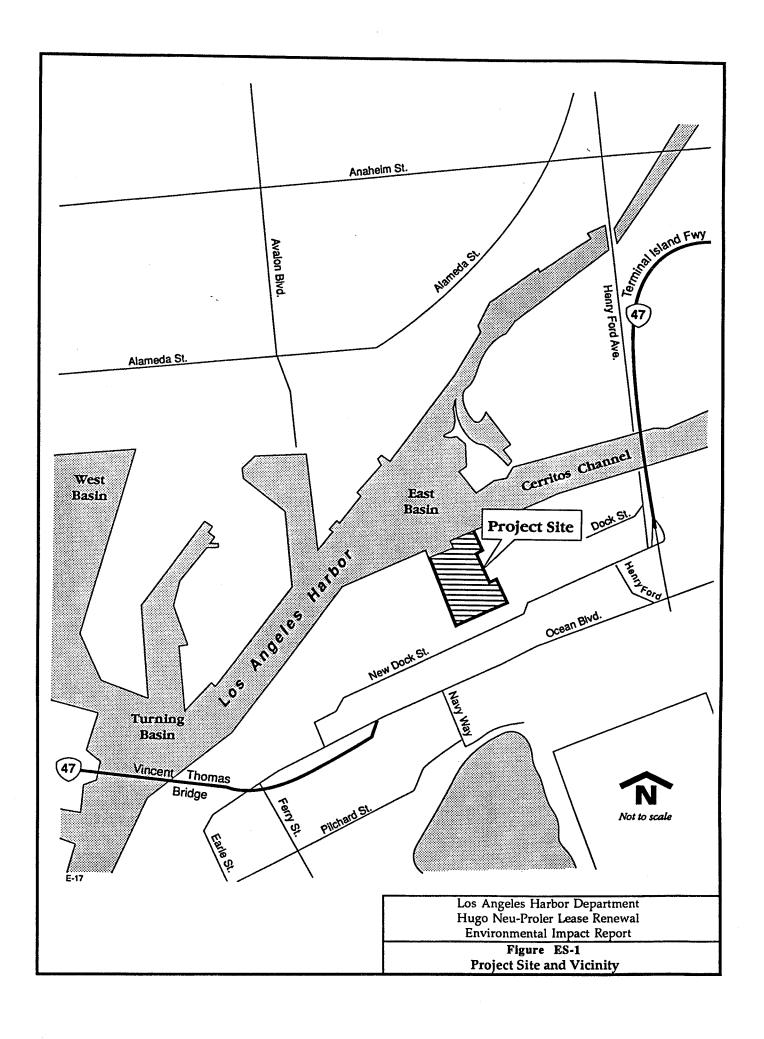
ES 2.0 Project Background

Hugo Neu-Proler Company (HNPC) leases a 26.7-acre (25.5 acres of land and 1.2 acres of wharf) site from the Port for the purpose of receiving, processing, storing and loading various types of ferrous metals, non-ferrous metals (such as aluminum, brass, and copper) for recycling, e.g., for use in the manufacturing of steel, electrical components and wiring, and other raw materials used by a variety of industries. The project site is in the middle of a highly industrial area including the Matson Container Terminal immediately east of the facility; with the Yusen Container Terminal immediately to the west. The Union Pacific railroad yard is across New Dock Street which is immediately to the south of the site.

ES 3.0 Project Objectives

HNPC's primary objective is the renewal of its lease for a 30 year term.

In addition to the renewal of the lease and continuation of current operations, HNPC will be remediating the soil and groundwater contamination at the site, upgrading or replacing current facilities and equipment, and proposes to add new facilities and equipment to the operation. HNPC will remediate soil and groundwater contamination pursuant to a Remedial Action Plan which will be approved by the Regional Water Quality Control Board - Los Angeles Region, the California Department of Toxic Substances Control Division, and the Los Angeles City Harbor Department. Remediation of the soil and groundwater contamination would be performed whether or not the lease is renewed for continued use of the site by HNPC.



The purpose of the proposed changes to the facility are to: remediate existing soil and groundwater contamination at the site, reduce the opportunity for future occurrences of soil and groundwater contamination, improve the aesthetics of the facility by landscaping and/or other measures, control noise, reduce dust emissions, manage storm water runoff at the facility, and improve the efficiency, capacity, reliability, and general environmental compatibility of the operation. With the planned new facilities and equipment modifications, the maximum capacity of the facility would be increased from approximately 950,000 to 1,300,000 gross tons of scrap per year.

ES 4.0 Project Description

ES 4.1 Existing Operations

HNPC, through a purchasing network and deliveries from five feeder operations in Los Angeles and San Bernardino Counties, receives various types of recyclable ferrous and non-ferrous metals for processing and shipping. The primary sources of scrap are recycling dealers, automobile wrecking yards, manufacturers, and building demolition purveyors. Some of the metals are processed (shredded or sheared) prior to receipt. Some metals are processed at the site, i.e., shredded, crushed, torched, or sheared and then stockpiled for export, while other metals are stockpiled for export without processing (e.g. motor blocks) (Figure ES-2).

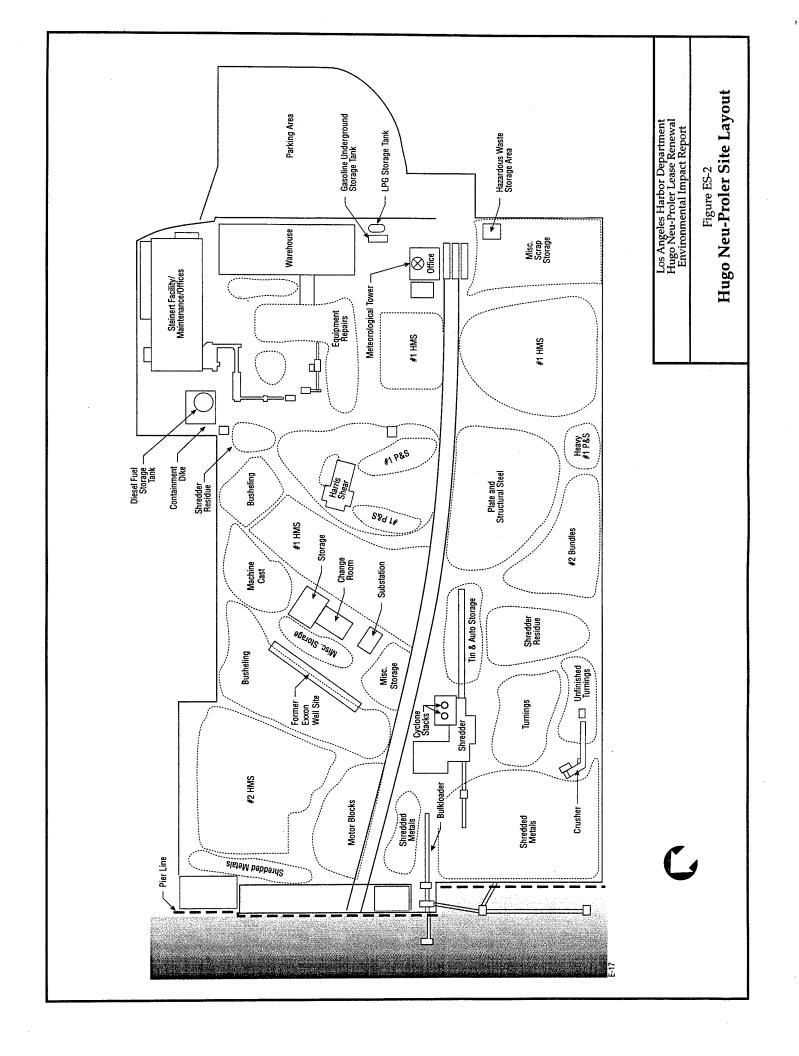
The facility processed approximately 787,500 gross tons of metals during 1992. About 22 percent of that total is shredded prior to receipt at the facility and about 32 percent is shredded at the site. The metals are separated for storage, processing and shipment according to grade (defined by appearance and type of scrap) and need for further processing.

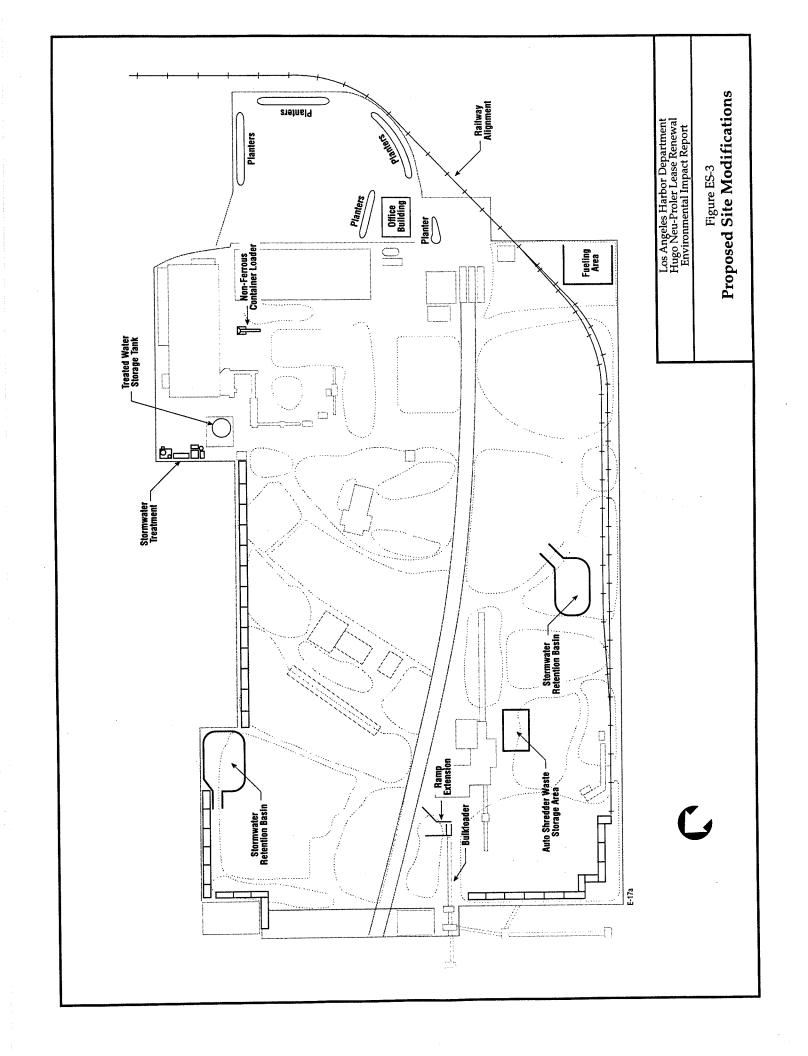
ES 4.2 Facility Improvements

In addition to the renewal of the lease and continuation of current operations, HNPC will be remediating the soil and groundwater contamination at the site, upgrading or replacing current facilities and equipment, and proposes to add new facilities and equipment to the operation (Figure ES-3). HNPC will remediate soil and groundwater contamination pursuant to a Remedial Action Plan which will be approved by the Regional Water Quality Control Board - Los Angeles Region, the California Department of Toxic Substances Control Division, and the Los Angeles City Harbor Department. Remediation of the soil and groundwater contamination would be performed whether or not the lease is renewed for continued use of the site by HNPC.

Proposed new facilities and equipment include:

- 1. Rail tracks and associated structures to allow reintroduction of rail service to the facility.
- 2. Landscaped 4,000-square-foot single story office building and parking area at the south end of the facility.
- 3. Fully pave the scrap processing, handling, and storage area with asphalt or concrete.
- 4. Additional lighting in storage, loading, and parking areas.
- 5. Storm water runoff control and treatment system.
- 6. Noise barriers at strategic locations, as required.
- 7. Perimeter wall around the facility to improve aesthetics of facility.
- 8. Bin walls located around scrap handling area to help control scrap piles.
- 9. Auto shredder residue storage facility





The upgrades or replacements being proposed include:

- 1. Upgrade the bulk shiploading structure, used to load scrap into ships, to increase its loading rate.
- 2. Water re-circulation system and feed system changes to the non-ferrous metal recovery equipment.
- 3. Improvement to the ferrous and non-ferrous metals storage and handling equipment
- 4. Replace the existing diesel fuel storage tank and provide new dispensing equipment.
- 5. Replace the existing underground gasoline storage tanks with new aboveground gasoline storage tank and provide new dispensing equipment.
- 6. Addition of a new scale to the existing scale system to accommodate rail service.
- 7. Conversion of existing office building into a changing room, shower room, and conference rooms.
- 8. Replacement of a dockside gantry crane, used to load ships, with a larger duty cycle dockside crane.

ES 5.0 Alternatives

No Project

Under the No Project alternative, the lease renewal would not be approved; the project objectives identified in Section 1.3 of this EIR would not be met; the shipment of scrap metals through this facility would be eliminated, HNPC would remove their improvements, remediation of the soil and groundwater contamination would begin, and HNPC would vacate the site within two years. The Port would not be able to efficiently meet existing and projected increases in scrap metal cargo demand due to limitations in available unused land and limitations in existing facilities and infrastructure.

Remediation of the soil and groundwater contamination at the site would begin immediately.

No Facility Operation Modifications

Under the No Facility Modifications alternative, HNPC's lease would be renewed for Berths 210-211 and the facility would operate in a manner similar to previous operations. The scrap metal processing operations would be similar to those previously conducted and the overall facility throughout would not increase above previous levels. Implementation of the soil and groundwater remediation would proceed in the same manner as for the proposed project.

Alternatives Found Infeasible

Relocating the existing scrap metal handling and shipping facility to another location was considered. Under the relocation alternative, existing or similar equipment would be installed at another location within the Port. Environmental controls would be similar to those currently provided or proposed for the existing facility.

There are very few sites suitable for water-dependent operations such as those now available at Berths 210-211. The California Coastal Act (Chapter 8) designates certain areas for harbor uses, of which the Port of Los Angeles is one.

Within the Port, a scrap metal facility can only be located in five of the ten Port planning areas. In two of these areas, a scrap metal operation would require a Conditional Use Permit from the Los

Angeles City Planning Commission, and the Harbor Department has already allocated these areas for container terminal development, leaving no space for a scrap metal operation. A third planning area has all available land occupied by marine oil terminals holding long term leases. Available land in a fourth planning area (Area 9 on Terminal Island) is currently being developed as coal and container terminals, and there is no available land for a scrap metal operation. The last area, in which HNPC is currently located, has no vacant land available for relocation of the HNPC operation. In the future, HNPC could request to be relocated to this or other available land which may become available in planning areas allowed to support scrap metal operation. At this time, however, no such locations exist.

In considering alternative locations outside the Port of Los Angeles, the opportunities for siting the facility are limited. The California Coastal Act (Section 30701(b)) calls for ports to "... be encouraged to modernize and construct necessary facilities within their boundaries in order to minimize or eliminate the necessity for future dredging and filling to create new ports in new areas of the state." Therefore, the facility would need to be located within an existing port. Location of the facility in a port outside the Los Angeles Basin would remove the facility from its major suppliers, increasing the difficulty and environmental impact of transportation of scrap to the facility. There are vacant areas within the Port of Long Beach, including the former Naval Station; however, any alternative site would require more extensive construction to develop the site as a scrap metal facility and the project could be expected to have similar operational impacts.

Regardless of the site chosen for the proposed facility, the existing Berths 210-211 project site will still be developed for some sort of water related use. Available waterfront like Berths 210-211 is scarce and its continued use as a scrap metal terminal is in keeping with the Port's responsibility for "modernizing and construction [of] necessary facilities to accommodate deep-draft vessels and to accommodate the demands of foreign and domestic waterborne commerce . . . " (LAHD 1979).

In conclusion, there are no better sites within or outside the Port area to accommodate the uses as in the proposed lease renewal. The development of other existing or potential sites would entail environmental impacts similar to the proposed action at Berths 210-211. Therefore, Berths 210-211 is the only site considered for analysis in this EIR.

ES 6.0 Summary of Adverse Significant Impacts and Mitigation Measures

Table ES-1 summarizes significant impacts of the proposed project and proposed mitigation measures in each environmental area.

Impacts in environmental areas not shown in the table were found to be insignificant, as discussed in the remainder of this document.

ES 7.0 EIR Contents

A detailed project description is presented in Section 1. The relationship of this EIR to other projects and plans is discussed in Section 2. A comprehensive discussion of project impacts and mitigation measures is included in Section 3. Project alternatives are identified and discussed in Section 4, and long-term implications of the proposed project are discussed in Section 5. References and organizations and persons consulted during the preparation of the EIR are presented in Sections 6 and 7, respectively. Persons who assisted in EIR presentation are listed in Section 8. Support documentation is included in the Appendices.

Environmental Management Division Port of Los Angeles 425 South Palos Verdes Street San Pedro, California 90733-0151

Mitigation Measures and Reporting Requirements Hugo Neu-Proler Company — Lease Renewal Summary of Significant Adverse Impacts,

Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Geology	Earthquake Liquefaction, ground shaking, and ground accelerations from major earthquakes would damage facilities.	1-1 Earthquakes No feasible mitigation measures available.	Significant	N.A. N.A.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Soil and Groundwater	Petroleum Leaks To Soil And Groundwater. Leaks from petroleum storage tanks entering the soil and groundwater.	2-1 Source Control Program Institute a Source Control Program requiring immediate leak detection, inspection and maintenance of tanks to prevents leaks into soil and eventually groundwater.	Insignificant	HNPC Annually, at the first of the year. Before lease to HNPC is renewed. HNPC shall submit the Mitigation Monitoring Report on status of activities undertaken with approved Source Control
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx And ROG Construction Emissions. NOx and ROG emissions during contruction.	3-1 Equipment Tune Maintain equipment engines in proper tune in accordance with manufacturers specifications.	Significant ·	HNPC Annually during construction and operation phases of the project. HNPC shall submit the Mitigation Monitoring Report certifying that equipment were maintained in proper tune.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx And ROG Construction Emissions. NOx and ROG emissions during contruction.	3-2 Construction Phasing Minimize concurrent use of equipment during peak construction hours.	Significant	HNPC Prior to construction by Hugo Neu-Proler HNPC shall submit the completed Mitigation Monitoring Report with construction schedule.

Environmental Management Division Port of Los Angeles 425 South Palos Verdes Street San Pedro, California 90733-0151

Mitigation Measures and Reporting Requirements Hugo Neu-Proler Company — Lease Renewal Summary of Significant Adverse Impacts,

Emironmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx And ROG Construction Emissions. NOx and ROG emissions during contraction.	3-3 Carpool Encourage construction workers to	Significant	HNPC Annually, at first of year, during construction phase only.
		carpool.		HNPC shall submit the Mitigation Monitoring Report showing efforts to encourage construction workers to carpool.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx And ROG Construction Emissions.	3-4 Low NOx Construction Equipment	Significant	HNPC Prior to construction.
	contruction.	Encourage the use of low-NOx engines, alternative fuels, and electrification whenever feasible.		Hugo Neu-Proler shall submit the completed Mitigation Monitoring Report with a report on use of low emission construction equipment.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx And ROG Construction Emissions. NOx and ROG emissions during	3-5 Fuel Delivery	Significant	HNPC Annually, at the first of the year.
	confruction.	Schedule fuel truck deliveries for off-peak traffic hours, when feasible.		HNPC shall submit the completed Mitigation Monitoring Report certifying that, when feasible, delivery of fuel will take place during off-peak traffic hours.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx, ROG, And CO Operational Emissions. NOx, ROG, and CO emissions during	3-6 Equipment Tune Maintain equipment engines in proper	Significant	HNPC Annually during construction and operation phases of the project.
	facility operation.	tune in accordance with manufacturers specifications.		HNPC shall submit the Mitigation Monitoring Report certifying that equipment were maintained in proper tune.

Environmental Management Division Port of Los Angeles 425 South Palos Verdes Street San Pedro, California 90733-0151

Mitigation Measures and Reporting Requirements Hugo Neu-Prolet Company — Lease Renewal Summary of Significant Adverse Impacts,

Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx, ROG, And CO Operational Emissions.	3-7 Operational Schedule	Significant	HNPC Annually, at the first of the year.
	NOx, ROG, and CO emissions during	When feasible, operate facility on a		The state of the s
	racility operation.	24-nour schedule, to spread emissions from support operations and transport		HNPC shall submit the the completed Mitigation Monitoring Report with a
		of scrap over a greater time period and avoid peak traffic hours.		report listing dates of 24-hour operation.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx, ROG, And CO Operational	3-8 Fuel Delivery	Significant	HNPC
مد در	Emissions. NOx. ROG, and CO emissions during	Schedule fuel truck deliveries for		Annually, at the first of the year.
	facility operation.	off-peak traffic hours, when feasible.		HNPC shall submit the completed
				that, when feasible, delivery of fuel will take place during off-peak traffic hours.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Air Quality	NOx, ROG, And CO Operational	3-9 Low Emission Engines	Significant	HNPC
	Emissions.		•	With purchase of vehicles or major
	NOx, ROG, and CO emissions during	Encourage use of low emission		equipment.
	racinty operation.	engines, innovanve technologies, and		HNDC shall submit the Mitigation
		feasible and use these criteria in the		Monitoring Report with a statement of
		purchase of new equipment.		effort to secure low emission equipment.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Transportation and	Disrupt Access To The Site.	6-1 Construction Scheduling.	Insignificant	Contractor/LAHD
Circulation	Disrupt access to the site during	Contractor shall construct the railroad		Once, at begining of construction.
	Neu-Proler.	track across New Dock Street during the	4)	The contractor shall submit the Mitigation
		weekend.		Monitoring Report with a copy of the
				spur.

Environmental Management Division Port of Los Angeles 425 South Palos Verdes Street San Pedro, California 90733-0151

Mitigation Measures and Reporting Requirements Hugo Neu-Proler Company — Lease Renewal Summary of Significant Adverse Impacts,

	Detentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Transportation and	Disrupt Access To The Site. Disrupt access to the sile during	6-2 Maintain Traffic Lanes.	Insignificant	Contractor/LAHD Once, at the begining of construction.
	contruction of the railroad spur to Hugo Neu-Proler.	Contractor shall maintain open one eastbound and one westbound lane of traffic along New Dock Street and the	-	The contractor shall submit the Mitigation Monitoring Report certifying that traffic
·		Higo Neu-Troiet access road during construction.		decess will be interested.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Transportation and	Disrupt Access To The Site. Disrupt access to the site during	6-3 No Parking.	Insignificant	Contractor/LAHD Once, at the begining of construction.
	contruction of the railroad spur to Hugo Neu-Proler.	Contractor shall post No Parking signs along the access road during construction to prevent truck queuing from blocking access to the project site or adjacent facilities.		The contractor shall submit the Mitigation Monitoring Report certifying that No Parking signs have been posted.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Public Health and	Emergency Response.	8-1 Construction Scheduling.	Insignificant	Contractor/LAHD
Safety/Risk	Disruption of emergency response during			Once, at begining of construction.
	construction of the railroad spur to Hugo Neu-Proler.	Contractor shall construct the railroad track across New Dock Street during the		The contractor shall submit the Mitigation
		weekend.		Monitoring Report with a copy of the schedule for the construction of the rail
				spur.
Environmental Category	Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Monitoring Program Responsibility
Public Health and	Emergency Response. Discussion of emergency response during	8-2 Maintain Traffic Lanes.	Insignificant	Contractor/LAHD Once, at the begining of construction.
Saletyrask	construction of the railroad spur to Hugo Neu-Proler.	Contractor shall maintain open one eastbound and one westbound lane of		The contractor shall submit the Mitigation
		traffic along New Dock Street and the Hugo Neu-Proler access road during		Monitoring Report certarying that trainic access will be maintained.
		Consu action.		

Environmental Management Division 425 South Palos Verdes Street San Pedro, California 90733-0151 Port of Los Angeles

Mitigation Measures and Reporting Requirements Hugo Neu-Prolet Company — Lease Renewal Summary of Significant Adverse Impacts,

Environmental Category	Environmental Category Potentially Significant Adverse Impacts	Mitigation Measures	Sig. After Mitigation	Sig. After Mitigation Monitoring Program Responsibility
Public Health and Safety/Risk	Emergency Response. Disruption of emergency response during		Insignificant	Contractor/LAHD Once, at the begining of construction.
	construction of the railroad spur to Hugo Neu-Proler.	Contractor shall post No Parking signs along the access road during		The contractor shall submit the Mitigation
		construction to prevent truck queuing from blocking access to the project site		Monitoring Report certifying that No Parking signs have been posted.
		or adjacent facilities.		

SECTION 1 DESCRIPTION OF THE PROJECT

1.1 Project Location

The Hugo Neu-Proler Company (HNPC) facility is located at 901 New Dock Street, on Terminal Island in Master Plan Area 7 of the Port of Los Angeles (Figure 1.1-1 and 1.1-2). The facility encompasses Berths 210-211 and associated backlands. The East Basin of Los Angeles Harbor is immediately to the north of the facility at the confluence of the Consolidated Slip and the Cerritos Channel. The Matson Container Terminal is immediately east of the facility, the Yusen Container Terminal is immediately to the west, and New Dock Street is immediately south, with the Union Pacific railroad yard south of New Dock Street. A marina is located north of the site, across Cerritos Channel. Layout of existing and proposed facilities are illustrated in Figures 1.1-3 and 1.1-4, respectively.

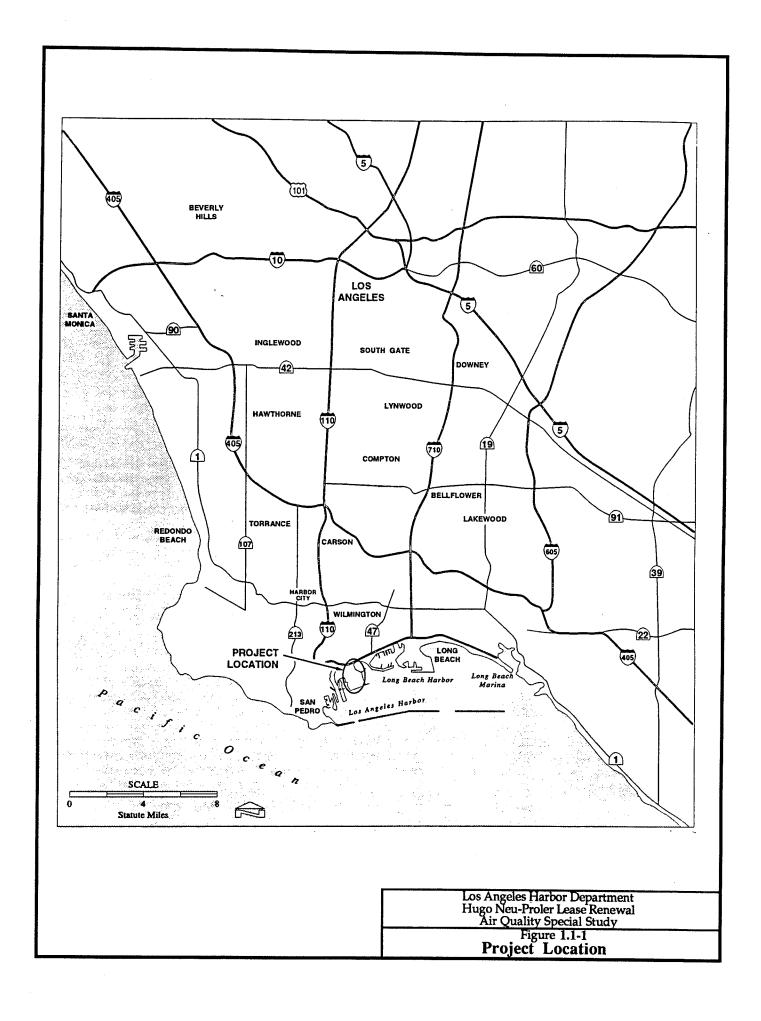
1.2 General Setting

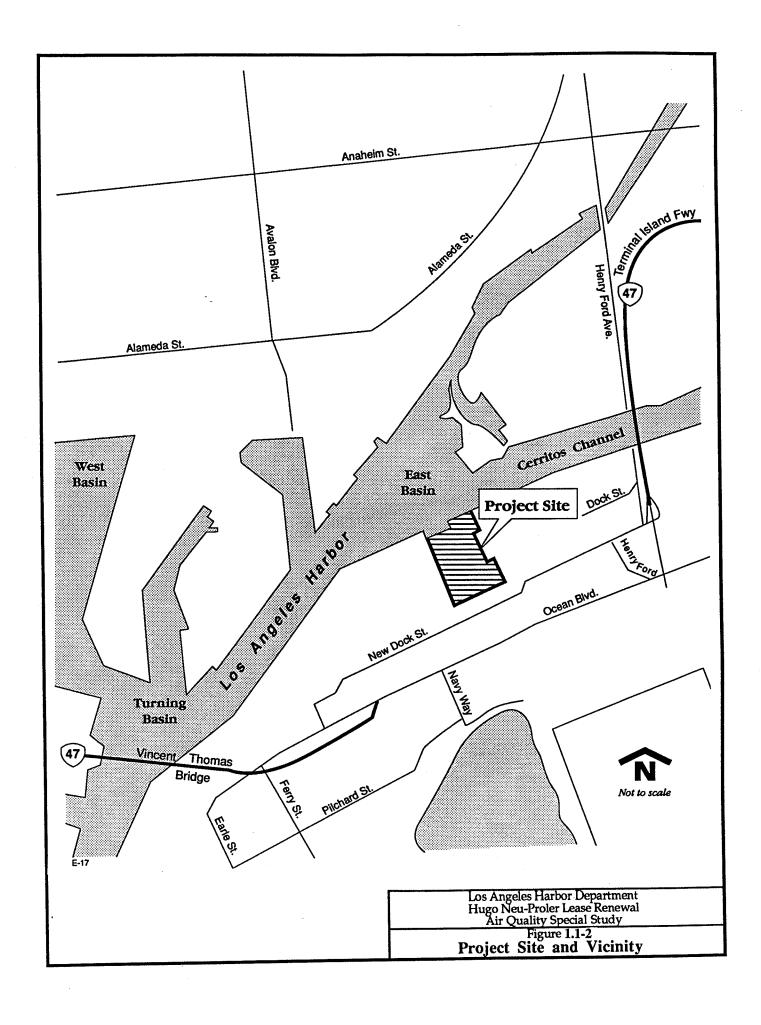
The Port of Los Angeles (Port) is primarily industrial in land use, and contains approximately 300 berths for shipping cargo to and from the region. Activities at the Port range from transfer of containerized goods and tankage to bulk items shipped in open containers, such as foodstuffs and coal. The Port is equipped to handle almost any type of cargo. Leading cargo types in terms of tonnage include crude petroleum, refined petroleum products, iron and steel, cement, and lumber. Other major cargoes include motor vehicles, foodstuffs, chemicals, fibers, and machinery. In addition to shipping activities, the harbor complex supports a number of other uses including a marina and harbor space for small private yachts, shipbuilding facilities, passenger terminals, fishing boat facilities, a restaurant and entertainment complex, and governmental uses.

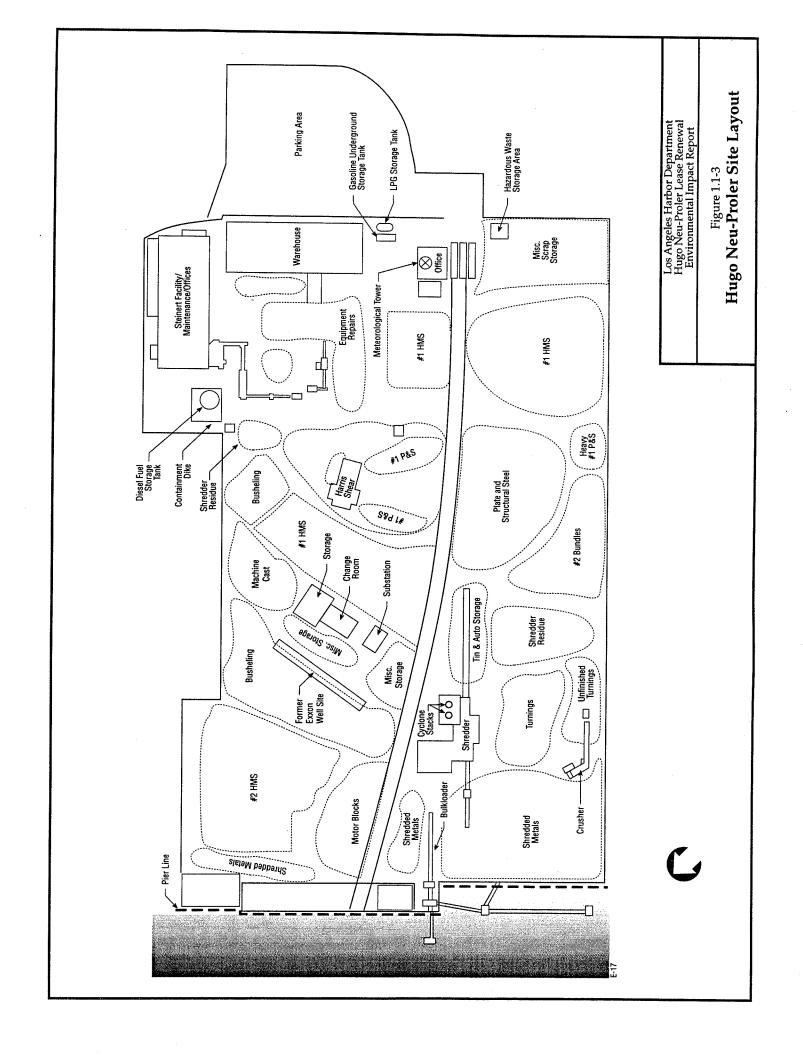
Hugo Neu-Proler Company (HNPC) leases a 26.7-acre (25.5 acres of land and 1.2 acres of wharf) site from the Port for the purpose of receiving, processing, storing and loading various types of ferrous metals, non-ferrous metals (such as aluminum, brass, and copper) for recycling or use in the manufacturing of steel, electrical components, wiring, and other raw materials used by a variety of industries. The project site is in a highly industrial area.

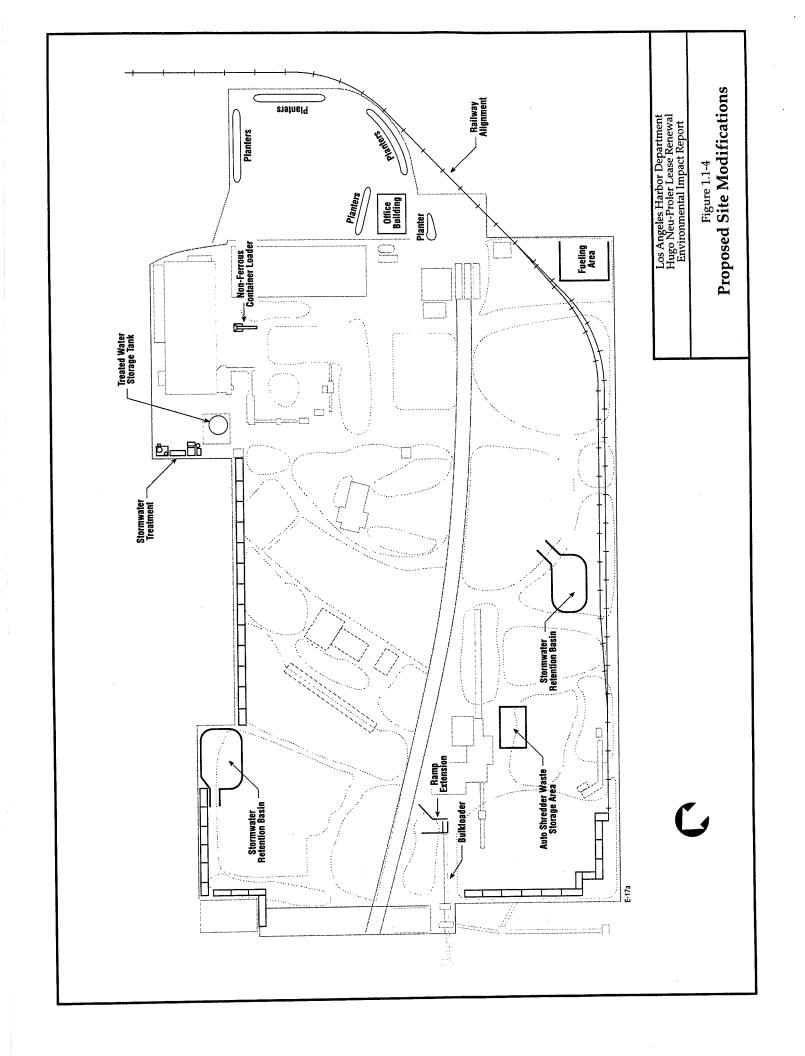
1.3 Project Objectives

HNPC's primary objective is a 30 year lease renewal. In addition to the renewal of the lease and continuation of current operations, project objectives include HNPC's remediation of the soil and groundwater contamination at the site, upgrade or replacement of current facilities and equipment, and addition of new facilities and equipment to the operation. HNPC will remediate soil and groundwater contamination pursuant to a Remedial Action Plan which will be approved by the Regional Water Quality Control Board - Los Angeles Region, the California Department of Toxic Substances Control, and the Los Angeles City Harbor Department.









Proposed new facilities and equipment include:

- 1. Rail tracks and associated structures to allow reintroduction of rail service to the facility.
- 2. Landscaped 4,000-square-foot single story office building and parking area at the south end of the facility.
- 3. Fully pave the scrap processing, handling, and storage area with asphalt or concrete.

4. Additional lighting in storage, loading, and parking areas.

5. Storm water runoff control and treatment system.

6. Noise barriers at strategic locations, as required.

- 7. Perimeter wall around the facility to improve aesthetics of facility.
- 8. Bin walls located around scrap handling area to help control scrap piles.

9. Auto shredder residue storage facility

The upgrades or replacements being proposed include:

- 1. Upgrade the bulk shiploading structure, used to load scrap into ships, to increase its loading rate.
- 2. Water re-circulation system and feed system changes to the non-ferrous metal recovery equipment.
- 3. Improvement to the ferrous and non-ferrous metals storage and handling equipment
- 4. Replace the existing diesel fuel storage tank and provide new dispensing equipment.
- 5. Replace the existing underground gasoline storage tanks with new aboveground gasoline storage tank and provide new dispensing equipment.
- 6. Addition of a new scale to the existing scale system to accommodate rail service.
- 7. Conversion of existing office building into a changing room, shower room, and conference rooms.
- 8. Replacement of a dockside gantry crane, used to load ships, with a larger duty cycle dockside crane.

The purpose of these changes to the facility are to: remediate existing soil and groundwater contamination at the site, reduce the opportunity for future occurrences of soil and groundwater contamination, improve the aesthetics of the facility by landscaping and/or other measures, control noise, reduce dust emissions, manage storm water runoff at the facility, and improve the efficiency, capacity, reliability, and general environmental compatibility of the operation. With the planned new facilities and equipment modifications, the maximum capacity of the facility would be increased from approximately 950,000 to 1,300,000 gross tons of scrap per year.

1.4 Historical Perspective-Project Site

The current Port configuration was developed from shallow tidelands and coastal islands by a succession of channel dredging and landfilling operations which began in the early 1900's. What is now referred to as Terminal Island was referred to by mapmakers in 1915 as "Rattlesnake Island". Development and expansion of Terminal Island continued throughout the 1920's and 1930's.

During World War II, at least Berths 209 through 214 were used by the California Shipbuilding Corporation to construct ships necessary for the war effort. As a result, Berths 210 and 211 (currently occupied by HNPC) were occupied by shipbuilding dry docks from the early to mid 1940's. By 1946, however, the shipbuilding dry docks were in the process of being removed.

After the war, National Metals and Steel Corporation began ship dismantling and scrap metal processing operations at Berths 208 through 212, an area covering the present site and areas

immediately east and west. Between 1954 and 1957, several oil wells were drilled an area of approximately 31,000 square feet in the backlands of Berths 210-211. In 1993, the oil wells, now owned by Exxon, were plugged and abandoned. Contaminated soil was removed from the former Exxon leasehold and the approximately 31,000 square feet of property making up the former Exxon leasehold was incorporated into the HNPC facility.

The HNPC scrap metal terminal at Berths 210-211 was completed and put into operation in 1962. The current configuration of the site resulted from various improvements made subsequent to the commencement of operations at the site. A concrete wharf at Berth 210 was constructed in October 1966 and a portion of the backland area at the rear of Berth 210 was covered with pavement during December 1966. The general character of the site has remained essentially unchanged for the last 28 years.

1.5 Description of Proposed Facility

1.5.1 Existing Facilities and Operations

Operations

HNPC, through a purchasing network and deliveries from five feeder operations in Los Angeles and San Bernardino Counties, receives various types of recyclable ferrous and non-ferrous metals for processing and shipping. The primary sources of scrap are recycling dealers, automobile wrecking yards, manufacturers, and building demolition purveyors. Some of the metals are processed (shredded or sheared) prior to receipt. Some metals are processed at the site, i.e., shredded, torched, crushed, or sheared and then stockpiled for export, while other metals are stockpiled for export without processing (e.g. motor blocks).

The trucks with materials enter the facility via an access road from New Dock Street, are inspected at the gate, weighed and taken to the appropriate storage areas (see Figure 1.1-3). The materials are dumped from the truck or removed using a magnet. Trucks leaving the facility are then reweighed and pass through tire washing equipment before exiting the facility.

The piles are maintained by the use of bulldozers, conveyors, cranes and front-end loaders. The processed materials are moved from the shear, or shredder to adjacent storage areas primarily using conveyors and cranes. The materials are loaded on vessels using either the bulkloader or a dockside crane.

Hazardous materials may be present in some loads delivered to the site; however, all loads are inspected both at the Terminal Island facility and the feeder operations. Also, all trucks are passed through radiation detectors to screen for radioactive material. It is the policy of HNPC not to accept loads which contain any of the following:

In or attached to automobiles

- No catalytic converters
- No mufflers or tail pipes
- No tires
- No gas tanks
- No batteries or pieces of batteries (including battery terminal connectors)
- No air bag canisters
- No brake fluids, anti-freeze, transmission fluid, or other fluids
- · No engine block with motor oil in it
- No miscellaneous items in the car or in the trunk

Other items not accepted

- Fluorescent light fixtures with ballast
- Chlorofluorocarbons (CFCs)
- Radioactive materials or containers
- Drums, barrels, containers or lids that are not certified clean
- Material with asbestos insulation or gaskets
- Compressed gas cylinders (closed containers)
- Mercury control switches
- Electrical control panels with PCB ballast or capacitors
- Residential appliances with PCB ballast or capacitors, CFC, and fluids
- Industrial appliances with PCB ballast or capacitors, CFC, and fluids
- Electronic units with PCB ballasts or capacitors
- Whole transformers or transformer sheet, that are not certified clean (free of PCB and non-PCB oil and residue)
- Tanks, vessels, and condensers that are not certified clean
- Hazardous material or hazardous waste
- Ammunition shells
- Lead wheel weights
- Garbage, rags, paper or other debris
- Engine blocks containing motor oil
- PCB articles
- Commercial appliances containing PCB ballasts or capacitors, CFC, or fluids.

The facility processed approximately 787,500 gross tons of metals during 1992, which is typical of current operations. About 22 percent of that total is shredded prior to receipt at the facility and about 32 percent is shredded at the site. The metals are separated for storage, processing and shipment according to grade (defined by appearance and type of scrap) and need for further processing. The general grades used for managing ferrous materials on the site are as follows:

Busheling Material = pieces about 1/4 inches thick, 2 feet wide and 5 feet long Shredded Material = shredded metal pieces averaging the size of a human fist

Turnings Material . = pieces of metals resulting from the machining of metals, such as during the operation of a lathe

Motor Blocks = vehicle engine units without driveshafts, carburetors, etc.

Bales = metal pieces which are pressed into bales

#2 Bundles = compressed metal materials, e.g., chain links, cans, and wire

P & S = plate and structural steel #1 HMS = heavy melting steel #2 HMS = heavy melting steel Rail = railroad metal materials

Prepared = materials suitable for export without further processing

Unprepared = materials that must be processed prior to export

Machine Cast = cast iron pieces

The ferrous and non-ferrous metals are stored in piles while awaiting shipment. Figure 1.1-3 indicates the general areas where such materials are stored, processed and prepared prior to export.

Maintenance of facility equipment, structures, and vehicles takes place at the site. These activities may include painting, welding, and torching of structures or equipment, and repair and servicing of process equipment and vehicles.

Truck Receiving and Shipping

Scrap metals are delivered by trucks to the site throughout the day and evening hours. Non-ferrous metals produced at the non-ferrous metal recovery plant are loaded into containers and transported by trucks to a rail transfer facility for shipment to domestic markets. In addition to the metals delivered to the site, trucks also take auto shredder residue, and metals recycling residue (from both ferrous and non-ferrous operation) from the site. The existing (1992) average daily one-way truck trips and yearly one-way truck trips are provided in Table 1.5-1.

Table 1.5-1. Existing (1992) one-way truck trips.

Existing Truck Traffic	Daily	Yearly
Scrap Metal Delivery	180	53,900
Non-ferrous Metal (from site)	1	242
Auto Shredder Residue (from site)	9	2,588
Residue from Non-ferrous recovery operation (from site)	0.4	116
Metal Recycling Residue (from site)*	3	884
Total	193	57,730

^{*} This includes 517 truck loads of material generated by concrete pavement, maintenance and cleaning activities which were not part of waste streams normally generated by facility operation.

On-Site Mobile Equipment

There are a number of vehicles and mobile equipment which may be used for dust suppression, and on-site movement of personnel and metals as follows:

- 10 yard and maintenance vehicles
- 12 cranes, some with magnets
- 5 bulldozers
- 11 front-end loaders/ bobcat loaders
- 9 forklifts (6 using liquefied petroleum gas)
- 1 fuel truck
- 3 sweepers and
- 2 water trucks

There are 13 large dump trucks ("Euclids") used to move scrap metal throughout the yard and to the bulkloader and dockside crane. Also, HNPC employs water trucks and sweepers in dust suppression on the access road to the facility and within the facility itself.

Vessel Movements

The actual number of vessel movements per year varies with the market and vessel schedules. During 1992, 27 vessels were loaded. Loading of the shredded materials typically takes 2 to 2.5 days, and loading of vessels carrying other grades of scrap metal typically takes 4 to 5 days. Vessels servicing the site average about 620 feet in length and have an average draft of about 35 feet.

Operating Hours

The operating hours are:

Normal operations

Metal receiving:

6:00 a.m. to 9:00 p.m., Monday through Friday

6:00 a.m. to 3:00 p.m. on Saturdays

Metal Processing:

4:00 a.m. to 12:00 a.m., Monday through Friday

4:00 a.m. to 3:00 p.m. on Saturdays

When loading a ship:

Shredded materials:

24-hours per day, seven days a week

Cut grade materials: 8:00 a.m. to 3:00 a.m., seven days a week

Administrative staff typically work an 8-hour shift from 8:00 a.m. to 5:00 p.m., Monday through Friday.

Number of Employees

There are 135 employees, with 115 working staggered shifts during the hours from 4:00 a.m. to 9:00 p.m., and 20 working from early afternoon to midnight. During shiploading, an additional 15 workers (6 maritime workers and 9 HNPC employees) will be present. The facility generates a daily total of 150 one-way employee vehicle trips for the worst case day.

Buildings and Structures

HNPC has several on-site buildings as illustrated in Figure 1.1-3. The buildings and their uses are as follows:

Office - The office building is a 12,000 square-foot single story permanent building with attached portable units of approximately 2,000 square-feet. The office building is used for administrative purposes such as accounting, sales and marketing, receiving, shipping, and offices for technical and management staff.

Warehouse - The 25,000 square-foot warehouse building is used for storage of parts and supplies, and for maintenance of light equipment and machinery.

Steinert/Maintenance - This 38,000 square-foot building houses the Steinert System (described below), a large shop area, and offices.

Change Room - The 2,400 square-foot single story change room is used by HNPC employees to change clothes and shower.

Wharf

Berths 210-211 have 800 feet of frontage on the East Basin, with a 370 foot wharf and two fender pilings. Maintenance dredging is occasionally required to maintain a design depth of 37 feet needed to accommodate the bulk carriers HNPC uses for metal shipment.

Auto Shredder

This electrically powered unit shreds large light gauge metal pieces, primarily autos and home appliances, into smaller sized pieces about the size of a fist, i.e., about 4 inch wide and long and between 2 and 4 inches thick. This unit is used to achieve efficient stowage, and so that a sufficient stockpile of shredded material is available for export. The unit uses a covered conveyor system and water spray equipment for dust suppression. This unit is usually operated before 10 a.m., to take advantage of lower electric rates offered by the Department of Water and Power for electric use in off-peak hours. In the process of operating this unit, a residue is produced which consists of small metallic particulates, and other non-metallic constituents (e.g. plastic, rubber, and dirt). The auto shredder contains an in-line treatment unit used to immobilize the soluble metal fraction of the auto shredder residue. Residue treated by this unit is tested and, if it meets state criteria, is considered a non-hazardous waste. If the auto shredder residue is untreated it is considered a California-only hazardous waste.

Turnings Crusher

Turnings often are thin, long and of varying shapes such as an irregular coil. Therefore, for better stowage and ease of loading, the turnings are flattened and broken into smaller pieces by this electrically powered unit.

Harris Shear

The Harris shear is a large hydraulic shear used to cut unprepared materials, up to about 2 inches in thickness, into lengths suitable for stowage and loading. This unit is electrically powered.

Non-Ferrous Separator/Steinert System

Materials are processed in order to separate ferrous, non-ferrous, and non-metallic materials by size. Metallic materials and non-metallic materials are separated from non-ferrous metals by magnets and screens before entering the Steinert Building where a Steinert System is used for further separation of non-ferrous metals from non-metallic material. The Steinert System is a dry system using a conveyor system, an eddy current separation system, and area for hand sorting of material. The building housing the Steinert System also has storage and maintenance areas and offices. This equipment is electrically powered.

Bulkloader

This electrically powered unit is used to load metal pieces directly onto vessels. Material is pushed into a conveyor system after being dumped by Euclids onto a loading ramp or pushed by bulldozers from a storage pile. The conveyor transports the scrap up through the bulkloader's structure. At the end of the conveyor the scrap drops onto an inclined steel plate which swivels to direct the scrap into different areas of the ship's hold. The bulkloader is fitted with pans and covers to minimize the generation of dust. The conveyor is fitted with curtains and spill plate to contain most of the dust and the release of materials being carried back by the conveyor. Operation of the bulkloader includes use of a "mist-type" water spray system at the transfer point to suppress and collect dust as the shredded materials and cut grade are placed on and move along the bulkloader conveyor. Use of this water spray system minimizes the potential for runoff water on the ground at the base of the bulkloader. A spill plate system has been designed and installed along the berth area at and near the bulkloader to catch any metal pieces which might fall from the conveyor during the loading of vessels.

Utilities

Utility services include water, electricity, natural gas, sewer, solid waste disposal, and telephone. During 1992 the average monthly usage for these utilities was as follows: approximately 1,300,000 gallons of potable water; about 570,000 kilowatt-hours; 21 therms of natural gas; and a sanitary sewer discharge of about 180,000 gallons (6,000 gallons per day). Where possible, water used for dust suppression is collected and reused for dust suppression.

Cardboard, paper, packaging and other similar wastes are deposited in on-site containers and removed by a contract hauler to an approved disposal site. Paper is recycled where possible. Hazardous waste generated by maintenance and repair activities is disposed of at licensed off-site facilities.

In 1992, approximately 45,700 gross tons of auto shredder residue, 6,400 gross tons of metal recycling residue and 2,000 gross tons of non-ferrous metal residue were produced. The auto shredder residue and the metal recycling residue were treated on-site by an in-line fixation treatment unit and considered a non-hazardous waste. The waste was removed by truck to local landfills licensed to receive such materials. Starting in 1993, the auto shredder residue and metal recycling residue are not treated and are therefore considered a California-only hazardous waste. These wastes are removed in containers from the HNPC facility under hazardous waste manifest by hazardous waste haulers, and placed on rail cars for transport to a landfill, licensed to receive this material, in Utah. The non-ferrous metal residue, a non-hazardous solid waste, is shipped by trucks to a local landfill. These three wastes streams are by-products of the processing of the scrap metal and their tonnage will vary with the annual production of the facility. In addition, 8,900 gross tons of metal recycling residue, from a soil/scrap mixture removed prior to paving and treated by a portable treatment unit, were disposed of in a landfill. This waste was the result of paving activity and will be replaced by site remediation pursuant to a RAP to be approved by the RWQCB, DTSC, and LAHD.

Storm water runoff is allowed to collect in several depressions along the central corridor between scrap storage piles. The water in these depressions is pumped into water trucks and/or "Baker" tanks and used for dust control. When the storm water is in excess of the storage capacity it is pumped into the "Baker" tanks for additional retention and settling of solids. Excess storm water is allowed to overflow from the tank into a sump near the parking area where it is discharged into the Inner Harbor via a storm drain.

Fuel Use and Storage

Three types of fuel are stored on the site: gasoline, diesel, and liquefied petroleum gas (LPG). During 1992, the average yearly use of fuel was approximately 10,000 gallons for gasoline, 395,000 gallons for diesel, and 7,600 gallons for liquefied petroleum gas.

There are two underground storage tanks (1,000-gallon each) used to store regular and unleaded gasoline. There is an associated fuel dispensing island. There also is an above-ground 173,000-gallon diesel storage tank with a filling island. On-site vehicles are fueled at this facility.

Emergency Power

There are two 15 KW diesel-powered generators on the site which are used to provide emergency power in the event of a loss of service from the Los Angeles Department of Water and Power, or in the event that there is need for emergency electrical power to manage the processing, storing or loading of metal materials.

Contamination

In 1988, diesel fuel was discovered on top of the groundwater table at the facility south of the existing office building. The fuel has apparently leaked from an underground pipeline leading to the diesel storage tank. Operations to recover the diesel free-product are underway. No other areas at the facility have been found to contain free-product hydrocarbons. Investigation of the groundwater found trace amounts of dissolved heavy metals and organics at various locations at the site. The concentration of the dissolved metals and organics were each below 1 mg/l.

Investigation of soil at the facility identified metals, PCBs, and petroleum hydrocarbons as the contaminants of concern at the site.

1.5.2 Proposed Changes to Processing Units and Facilities

The proposed changes to processing units and facilities (upgrading bulkloader structure, replacement of gantry crane, restoring rail service, and other facility improvements) will increase the facility's capacity to 1,300,000 gross tons per year.

1.5.2.1 New Facilities and Equipment

Reintroduction of Rail Service

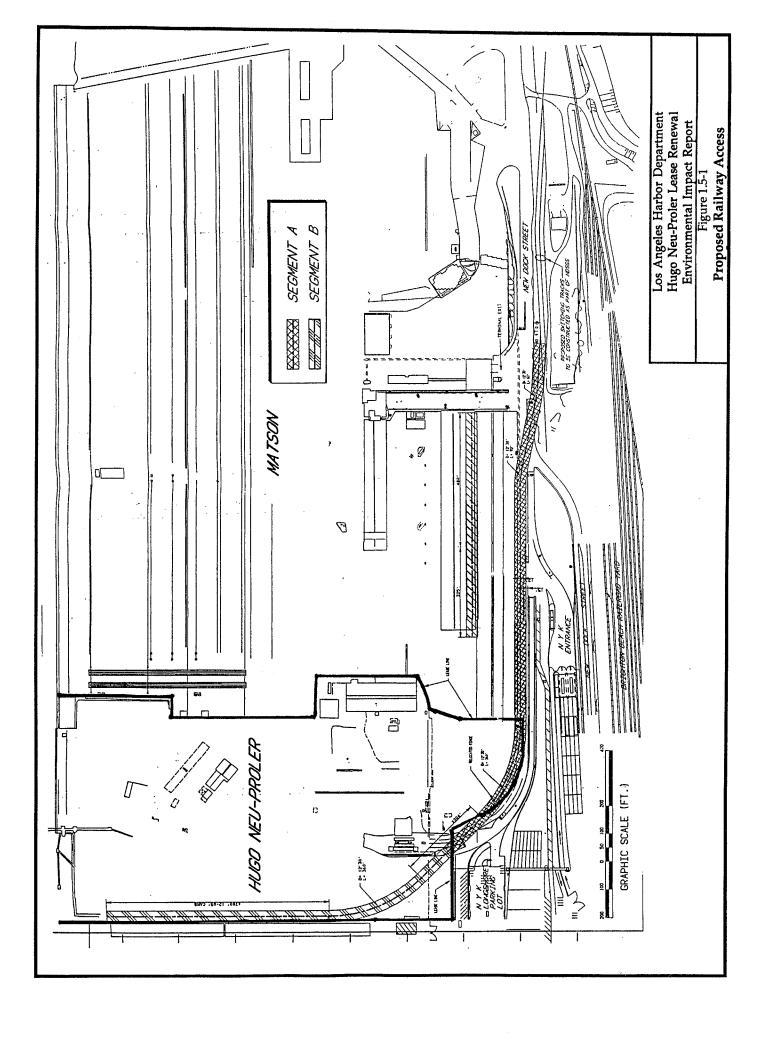
Before rail service was discontinued in 1990, HNPC purchased scrap by rail from Arizona, Nevada and Northern California and shipped non-ferrous metals to domestic markets. Reintroduction of rail service would permit HNPC to receive up to 140,000 gross tons of scrap per year by rail.

Rail access to Terminal Island is provided by a single track Port of Los Angeles line, which is operated by the Harbor Belt Line Railroad (HBL), a joint operation of the three railroad companies and the LAHD, which has operating rights over the Port of Los Angeles tracks onto Terminal Island. The railroad line approaches Terminal Island from the north via the Badger Avenue Bridge, a double-leaf bascule bridge which crosses the Cerritos Channel adjacent to the Commodore Heim Bridge. On Terminal Island, the tracks run generally east-west and are located between New Dock Street and Ocean Boulevard/Seaside Avenue.

Approximately 2,100 feet of new track (Segment A) would be constructed to connect the site to proposed switching tracks on the south side of New Dock Street as shown in Figure 1.5-1. An additional 2,130 feet of track (Segment B) would be constructed on-site. Location of the proposed rail tracks within the facility is shown in Figure 1.5-1.

Thirteen rail cars per weekday are expected to be delivered and removed from the HNPC facility. These additional rail cars will be joined to existing trains and will not increase the number of train trips into the Los Angeles region or the Port area. The only new activity will be the switching required to deliver the rail cars to the HNPC facility. Switching of the rail cars and delivery to the site is planned for the hours between 5:00 p.m. and 12:00 a.m. The scrap will be off-loaded from the rail cars using one of the existing HNPC cranes.

In addition to the new on-site tracks, a new scale will be constructed to weigh rail cars when they enter the facility.



Office Building, Landscaping, Parking, and Lighting

HNPC proposes construction of a 4,000 square-foot, single story office building in a portion of the existing parking lot area as shown in Figure 1.1-4. The building would be flat roofed, approximately 11-13 feet in height, using prop-up type construction with metal siding.

Currently, parking at HNPC is divided between two parking areas with a portion of the eastern parking lot is used to store large metal girders, metal plates, and other large pieces of scrap. Construction of the office building would remove parking spaces from the western parking lot. HNPC would replace these parking spaces by converting the entire eastern lot into a parking area and moving the scrap storage function into the facility.

Landscaping to improve aesthetics would include the construction of planters along the inbound lane and proposed new office area where shrubs can be planted, as shown in Figure 1.1-4.

Outside lighting would be provided in the storage and handling areas and in the parking area.

Perimeter Wall

HNPC proposes to utilize empty sea containers, and stack four containers high to build a wall 32 foot high along portions of the perimeter of the facility to control noise and improve aesthetics as shown in Figure 1.1-4.

HNPC expects to purchase sea containers and complete their placement within twelve to eighteen months after a lease extension is granted. Portions of the facility perimeter have to be paved with concrete before sea containers can be positioned.

Bin Walls

HNPC proposes to utilize concrete blocks (2 feet x 4 feet x 2 feet) to construct bin walls to aid in controlling scrap piles. To accommodate storage and shiploading activities, scrap piles are frequently moved around. Therefore, HNPC will utilize concrete block as bin walls to ensure continued operational flexibility. The height of the stacked concrete blocks will vary from 8 to 12 feet.

Auto Shredder Residue Storage Facility

A storage area for auto shredder residue will be constructed in the area between the auto shredder process line and the railroad tracks as shown in Figure 1.1-4. The storage facility (100 feet x 100 feet x 20 feet high) will consist of a floor with bermed concrete containment area enclosed on three sides and covered by a roof in which the shredder residue will be placed while awaiting loading for shipment. The storage facility will be equipped with a portable loading hopper powered by a diesel generator (<50 hp) which will be used to load the residue into containers or trucks. It will be constructed in conjunction with the paving which will be completed after remediation of the area.

1.5.2.2 Facility Upgrades and Equipment Replacement

Bulkloader Structure

HNPC proposes to extend the existing bulkloader ramp and conveyor system by 35 feet and 25 feet respectively. HNPC proposes to upgrade the existing bulkloader conveyor drive system to increase loading rate by 20% to 40%. The current loading rate ranges from 300 to 750 gross tons per hour depending upon the type of scrap that is being loaded. The existing water suppression

system for dust control will be expanded to cover the proposed ramp and conveyor extensions.

Replacement of Gantry Crane

Increased shiploading activities at the adjacent container terminal berths has limited HNPC's ability to position ships for scrap loading and HNPC has used a 450-hp gantry crane to augment shiploading by the bulkloader. The proposed increased shipping volume may require replacement of the existing gantry crane. HNPC plans to replace the existing gantry crane with a larger diesel gantry crane (685-hp with a 350-ton capacity).

Replacement of Diesel Fuel Storage and Dispensing Facilities

HNPC proposes to replace the existing aboveground diesel storage tank with two 20,000 to 25,000 gallon vaulted tanks. The existing storage tank would then be incorporated into the storm water system. The proposed location for the vaulted tanks is shown in Figure 1.1-4.

Portable ABC dry chemical fire extinguishers will be located near the proposed vaulted tanks for fire suppression.

Replacement of Underground Gasoline Storage and Dispensing Facilities

HNPC proposes to replace the existing underground gasoline storage tanks and dispensing units with one 1,000 gallon vaulted tank. The proposed location for the gasoline vaulted tank is shown in Figure 1.1-4.

Portable ABC dry chemical fire extinguishers will be located near the proposed vaulted tank for fire suppression.

Turnings Crusher

HNPC is not planning any upgrades to the existing turnings crusher. HNPC discontinued use of turnings crusher in August 1994.

Remodeling of Existing Office Building

With the construction of a new office building, the existing office building would be remodeled to contain conference rooms, a changing room and shower facility. The existing building containing the changing room and shower facility would be demolished.

Storm Water Runoff Control and Treatment System

Collection basins will be incorporated into the construction of the concrete cover at the facility. The concrete cover will be engineered to drain storm water and water used in dust suppression into the collection basins, from which the water will be pumped into a 173,000 gallon storage tank. This water will be drawn from the tank for use in dust suppression. If the capacity of the tank is exceeded, the excess water will be pumped into an oil-water separator, filtered or treated, and then discharged into a storm drain.

Remediation

The diesel free-product on the groundwater east of the office building is being recovered using groundwater wells as part of an on-going remediation effort. This effort will continue until the free product is removed and the dissolved contamination reduced to levels acceptable to the Regional Water Quality Control Board, Department of Toxic Substance Control, and the Los Angeles

Harbor Department. If required, contaminated groundwater will be removed, treated to appropriate cleanup levels, and discharged or reused on the site.

Soil contamination will also be remediated to levels acceptable to the Regional Water Quality Control Board, Department of Toxic Substance Control, and the Los Angeles Harbor Department. Depending on the cleanup levels set by the agencies, HNPC may merely cover the site with asphalt-concrete, remove contaminated soil for disposal in an approved landfill, utilize soil treatment processes to fixate the contaminants to reduce their mobility and toxicity. The amount of soil to be treated and/or removed is estimated to be approximately 65,000 tons. Remediation will be completed within five years of entering into the proposed lease.

Installation of Asphalt-Concrete Pad

Approximately 300,000 square feet of the site is unpaved. HNPC proposes to pave this area with 10 inches of reinforced asphalt-concrete over a 6 to 12 inch base. Contaminated soils would be removed and/or treated prior to capping with asphalt-concrete if required by the Regional Water Quality Control Board, Department of Toxic Substance Control, or the Los Angeles Harbor Department.

1.5.3 Changes in Future Operations

Truck Receiving and Shipping

Scrap metals will continue to be delivered by truck to the site throughout the day and evening hours. With the re-establishment of rail access to the site, auto shredder residue and metals recycling residue would be shipped out by rail, and truck use would be substantially reduced. The projected average daily and yearly vehicle one-way will increase as follows:

Table 1.5-2. Existing (1992 data), proposed, and expected change in vehicle one-way trips.

Vehicle Traffic	Exis Daily	ting Yearly		oosed Yearly	Cha Daily	ange Yearly
Scrap Metal Delivery	180	53,900	301	90,400	121	36,500
Non-ferrous Metal (from site)	1	242	1.4	400	0.4	158
Auto Shredder Residue (from site)	9	2588	0	0	-9	-2588
Residue from Non-ferrous recovery operation (from site)	0.4	116	0.6	191	0.2	75
Metal Recycling Residue (from site	3_	884	0	0	-3	-884
Total	193	57,730	303	90,991	110	33,261

On-Site Mobile Equipment

The proposed increase in the facility capacity to 1,300,000 gross tons per year will not substantially alter the numbers of mobile equipment used on-site. The equipment will be more efficiently used by increasing the size of the bulk loader ramp and conveyor, and a replacement of a

gantry crane with a duty cycle crane to improve the loading rate.

Vessel Movements

HNPC proposes to increase the facility capacity to 1,300,000 gross tons per year, of which 1,200,000 gross tons per year would be loaded into ships for export. Since the size of the vessels calling at HNPC will not change, the increase of shiploading to 1,200,000 gross tons per year would result in a proportionate increase in the number of vessels by 14, to about 41 per year. In the worst case scenario of shiploading, the number of days vessels are being loaded will increase from the current 154 days to 234 days per year.

Site Processing Procedures

The site processing procedures will remain substantially the same with the proposed increase in capacity.

Operating Hours

HNPC has not proposed any changes in operating hours of the facility.

Number of Employees

The number of persons employed at HNPC will increase to about 164 to accommodate the proposed increase in facility capacity to 1,300,000 gross tons per year. With the increase in employees there will be a daily total of 164 vehicle round-trips on the worst case day. This represents an increase, over the existing conditions, of 14 vehicle round-trips for the worst case day.

Utilities

Utility services include water, electricity, natural gas, sewer and telephone. During construction and subsequent operation of the upgraded facility the average monthly usage for these utilities will be as follows:

Utility	Current Use	Proposed Use	Expected Change
Potable Water (cubic feet)	179,100	215,000	35,900
Electricity (kilowatt-hours)	569,000	625,000	56,000
Sanitary sewer discharge (gallons)	180,000	198,000	18,000
Natural gas (cubic feet)	2,000	2,000	0

During construction, additional solid waste is expected to be generated by the project. This waste, such as cardboard, concrete, wood, and other building or packaging material, will be deposited in on-site containers and removed by a contract hauler to an approved disposal site. Cardboard, paper, packaging and other similar wastes generated by normal operation of the facility will be deposited in on-site containers and removed by a contract hauler to an approved disposal site. Paper will be recycled where possible. After the installation of new equipment and facility upgrades are completed, the amount of these solid wastes generated by the operation of the facility will not be significantly changed from the existing operation. Hazardous waste generated by maintenance and repair activities is not expected to change and will continue to be disposed of at licensed off-site facilities.

With full operation, approximately 75,400 gross tons of auto shredder residue, 10,500 gross tons of metal recycling residue, and 3,300 gross tons of non-ferrous metal residue will be produced. Plans are to continue the shipment of untreated auto shredder residue and the metal recycling residue to a landfill licensed to receive such material in Utah. The non-ferrous metal residue, a non-hazardous solid waste, will continue to be shipped by truck to a local landfill.

Storm water and water used in dust suppression will drain into the collection basins, from which the water will be pumped into the aboveground storage tank. This water will be drawn from the tank for use in dust suppression. If the capacity of the tank is exceeded, the excess water will be pumped into an oil-water separator, filtered or treated, and then discharged into a storm drain.

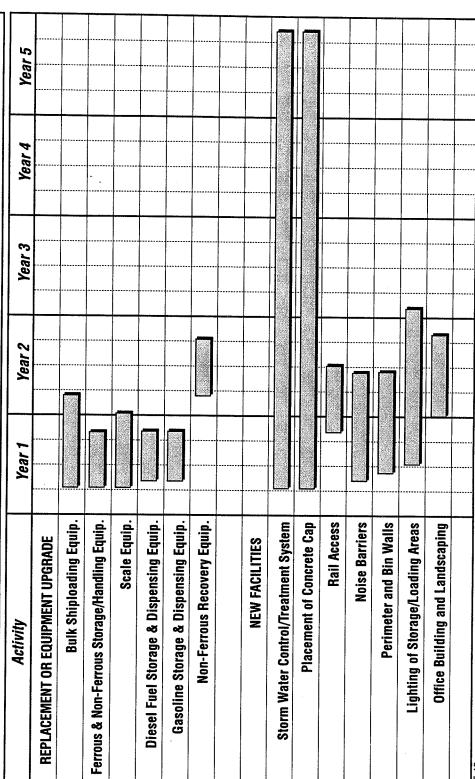
Fuel Use

Monthly fuel use is expected to increase from 10,000 to 15,600 gallons of gasoline per year, from 395,000 to 600,000 gallons of diesel per year, and from 7,600 gallons to 12,000 gallons of liquefied petroleum gas per year.

1.5.4 Project Schedule

Figure 1.5-2 illustrates the schedule for implementation of proposed changes to the existing HNPC equipment and facilities at Berths 210-211.

Year 4 Year 3 Hugo Neu-Proler Company Project Schedule Lease Renewal Year 2 Year 1 Activity



Los Angeles Harbor Department Hugo Neu-Proler Lease Renewal Environmental Impact Report

Figure 1.5-2
Hugo Neu-Proler Site Modification

Construction Schedule

SECTION 2 EIR USE, RELATED PROJECTS, AND RELATIONSHIP TO PLANS

2.1 Intended Use of EIR

This environmental impact report (EIR) evaluates the environmental effects of a lease renewal and planned changes to the existing scrap metal handling and shipping operations proposed by HNPC for Berths 210-211 in the Port of Los Angeles. In addition to the renewal of the lease and continuation of current operations, HNPC will be remediating the soil and groundwater contamination at the site, upgrading or replacing current facilities and equipment, and proposes to add new facilities and equipment to the operation. This document is intended to fulfill the requirements of the California Environmental Quality Act (CEQA).

This EIR has been prepared in accordance with the CEQA (Public Resources Code (PRC), Sections 21000-21177) and its Guidelines (California Code of Regulations (CCR), Sections 15000 et seq.) and the City of Los Angeles CEQA Guidelines. The City of Los Angeles Harbor Department (LAHD) is the local lead agency for the project, and has prepared this EIR. The LAHD will have approval authority for this project.

This EIR is also intended to support the permitting processes of all agencies whose discretionary approvals must be obtained for particular elements of this project. Responsible agencies that are expected to use this EIR are listed in Table 2.1-1.

2.2 Related Projects

Figure 2.2-1 locates and Table 2.2.-2 describes the projects considered for potential cumulative analysis in this EIR. These projects were analyzed together with the proposed project for potential cumulative impacts to each of the environmental resources. These projects were identified through discussions with permitting and planning agencies and reflect staff estimates. Emphasis was given to identifying those projects most likely to result in incremental increases in impacts because of type, size, or location in relation to the Berths 210-211 Lease Renewal project and its alternatives.

2.3 Relationship to State, Regional, and Local Plans and Statutes

A primary objective of the planning process for the proposed project is to ensure that the criteria and guidelines of applicable plans and policies are met. The following discussion addresses how the proposed project will comply with these plans.

California Environmental Quality Act (CEQA)

CEQA provides for a public review process to evaluate the environmental impacts of activities that require governmental approval, financing, or participation. If an activity could have a significant impact on the environment, these governmental agencies must prepare an EIR that considers the possible adverse impacts to the environment and identifies ways to minimize those impacts through mitigation measures.

Table 2.1-1 Responsibilities of Agencies Expected to Use This EIR (page 1 of 3)

Agency

Responsibilities

FEDERAL

U.S. Army Corps of Engineers

Issues permit(s) (Section 10) for structures or work in or affecting navigable waters of the United States. Issues 404 permits for placement of dredge or fill material in waters of the United States.

STATE

California Department of Fish and Game

Review and submit recommendations in accordance with CEQA. Consultation role in accordance with the Fish and Wildlife Coordination Act.

California State Lands Commission

The State Lands Commission has an oversight responsibility for tide and submerged land legislatively granted in trust to local jurisdictions (Public Resources Code Section 6301). All tide and submerged lands, granted or ungranted, as well as navigable rivers, sloughs, etc., are impressed with the Common Law Public Trust. Additionally, the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (chaptered as Division 7.8 of the Public Resources Code) directs the State Lands Commission to inspect certain maritime facilities, along with associated equipment and to monitor their operations and effects on public health, safety and the environment.

California Department of Health Services

Primarily responsible for controlling and investigating the quality of public drinking water in the State. Ensures that public water supplies produced from wells meet drinking water standards by requiring local water supply agencies to monitor wells.

California Department of Toxic Substance Control

By State statute, the Department of Toxic Substances Control (DTSC), formerly part of the Department of Health Services, implements the State Toxic Injection Well Control Act of 1985. Additionally, it regulates disposal of hazardous waste into underground injection wells, issues permits for hazardous waste generators and disposal facilities, and takes enforcement actions and remediation activities in accordance with provisions of RCRA and California's Hazardous Waste Control Act.

Table 2.1-1 Responsibilities of Agencies Expected to Use This EIR (page 2 of 3)

Agency

Responsibilities

California Integrated Waste Management Board (formerly the California Waste Management Board)

Review and submit recommendations in accordance with CEQA. Statutory and regulatory authority to control the handling and disposal of solid, non-hazardous waste in a manner that protects public safety, health and the environment. State law assigns responsibility for solid waste management to local governments.

To ensure compliance with State policy, the Waste Management Board reviews and concurs on local permit decisions. The Waste Management Board has water quality protection regulations that require monitoring of groundwater quality and of the collection, treatment, and disposal of leachate.

REGIONAL South Coast Air Quality Management District

Review and submit recommendations in accordance with CEQA. Permitting authority for construction and operation of facilities with stationary sources, for activities involving remediation of soils (Rules 1156 and 1166), and for new or modified sources of air emissions (New Source Review).

California Regional Water Quality Control Board, Los Angeles Region

Permit authority for Waste Discharge Orders and National Pollutant Discharge Elimination System (NPDES) permit for discharge of waste water into surface waters.

Permit authority for surface impoundment of extracted groundwater, groundwater disposal, and dredged material disposal.

LOCAL City of Los Angeles Building and Safety Department

Permit authority for building permits.

City of Los Angeles Bureau of Engineering

Permit authority for Storm Drain Connection Permits for discharges of storm water and/or connection of a storm drain into the City's storm drain system.

Table 2.1-1 Responsibilities of Agencies Expected to Use This EIR (page 3 of 3)

Agency

Responsibilities

City of Los Angeles Bureau of Sanitation

Permit authority for Industrial Waste Permits for discharges of industrial wastewater to city sewer system.

City of Los Angeles Fire Department

Approval of Business Plan, and Risk Management and Prevention Program. Review and submit recommendations regarding design for building permits.

City of Los Angeles Department of Transportation

Reviews and approves changes in city street design, construction, signalization, and traffic controls.

City of Los Angeles Harbor Department

Leasing authority for Port of Los Angeles land. Permit authority for coastal development and engineering construction. Lead Agency for EIR and review for adherence of project with regulatory requirements.

Los Angeles County Fire Department

Licenses and inspects all hazardous waste generators in the City of Los Angeles. Provides regulation and oversight of site cleanup projects involving hazardous waste generators where surface and subsurface soils are contaminated with hazardous substances.

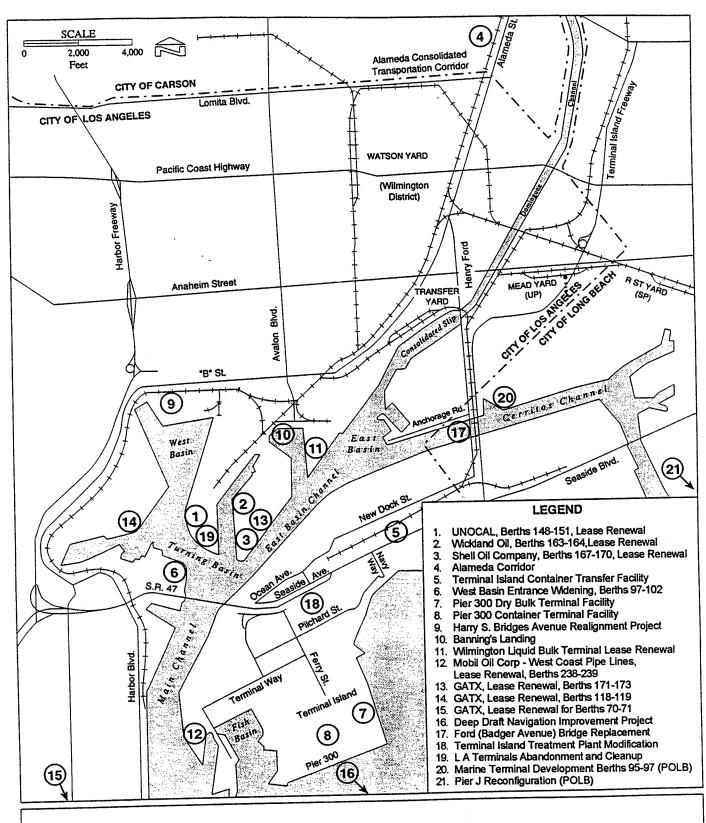


Figure 2.2-1
Related Projects in the Vicinity of the Project

PROJECTS IN THE PROPOSED PROJECT VICINITY (page 1 of 6)

Status	Unapproved project. EIR in progress. Currently under LAHD review.	Approved project. Currently under construction.	Approved project. Under construction.
Description	This proposed project is a 25-year lease renewal for the Unocal Liquid Bulk Facility located at Berths 148-151 in the Wilmington District of the Port of Los Angeles. There are no major facility modifications or changes in operations. The project involves the remediation of soil and groundwater at the site. There are no major facility modifications or changes in the proposed operations.	This proposed project is a 20-year lease renewal for the Wickland Oil liquid bulk facility located at Berths 163-164 on Mormon Island in the Wilmington District of the Port of Los Angeles. The project includes change in ownership, implementation of a soil and groundwater cleanup program, minor facility modifications, installation of a cargo pipeline to Berths 171-173, and a potential change in product types.	The project is a 35-year lease renewal for Shell's Mormon Island Facility at Berths 167-170 in the Wilmington District of the Port of Los Angeles and includes site modifications to upgrade existing facilities. Site modifications include replacement of mechanical equipment (pumps and an air compressor), installation of a new electrical substation, possible replacement of the office center, inspection of all storage tanks and repair as necessary to eliminate leaks, implementation of leak testing for all underground piping, relocation of all underground piping above-ground for piping which cannot be leak tested, implementation of a groundwater cleanup program, and possible reconstruction of structural supports underlying dock facilities (including some pile driving and dredging with ocean disposal).
Project/Location	 Unocal Marine Terminal- Lease Renewal Berths 148-151 	2. Wickland Oil - Env. Imps., Facil Mods, Own Transfer, Lease Renewal Berths 163-164	3. Shell Oil Company Morman Island Env. Improvements and Facility Modifications; Berths 167-170

PROJECTS IN THE PROPOSED PROJECT VICINITY

(page 2 of 6)

Construction pending. Approved project. highway/rail transportation corridor serving the Los Angeles and Long Beach Harbors. Project will include widening Alameda Street to six lanes, doubleimprovements along the corridor. The project is being developed under the Alameda Corridor Transportation Authority ACTA (formerly Joint Powers Authority) involving the Los Angeles and Long Beach Harbor Departments, the This proposed project involves construction of a 20-mile \$1.8 billion tracking the rail line, and construction of 16 grade separations and other cities of Los Angeles and Long Beach, the six affected cities along the corridor, the Los Angeles County Transportation Commission, the Los Angeles County Board of Supervisors, and Caltrans. The project is currently in the conceptual Description design/capacity studies stage. Alameda Corridor Project/Location **Transportation** Consolidated (formerly Corridor)

l Approved project. Construction pending.

> 5. Terminal Island Container Transfer Facility Project

Dock Street, closure of Ocean Avenue and New Dock Street, expansion of the The proposed project involves the redevelopment of the Brighton Beach Rail Yard, in the Terminal Island District of the Port of Los Angeles. Redevelopment Container Transfer Facility, replacement tracks for automobile loading, realignment of track west of Brighton Beach Yard, grade separation for New of the Brighton Beach Rail Yard is expected to consist of adding two track connections north of the Badger Avenue Bridge, development of an Intermodal Badger Avenue berths 218-233, and Rehabilitation/Modification. at container terminal

> 6. West Basin Entrance Widening Project-Berths 97-102

of the site, demolition of the timber wharfs, and excavation and dredging activities. The overall project goal is a widening of the entrance channel into the West Basin to a minimum 800' wide navigable channel with a bottom depth of The proposed project involves three major elements: restoration and remediation 45' MLLW

Approved project. Under construction.

PROJECTS IN THE PROPOSED PROJECT VICINITY

(page 3 of 6)

Approved project. Final Construction pending. design in progress. The Pier 300 Dry Bulk Facility is one of the first elements of Phase I of the Port of Los Angeles 2020 Plan; the 2020 Plan responds to cargo forecasts and facility requirements of the Ports of Los Angeles and Long Beach through the year acre remote storage area connected by an enclosed conveyor system. The project includes wharf construction, access road improvements and at-grade rail 2020. The project includes a single-berth, a 19 acre ship loading area and a 105 improvements on Terminal Island, storage tracks and fugitive dust control system. The dry bulk facility would handle coal, petroleum coke, and other dry Description bulk commodities. Project/Location Facility Project **Bulk Terminal** Pier 300 Dry

Approved project. Currently under construction. The Pier 300 container terminal is part of the Port of Los Angeles 2020 Plan. The 2020 Plan responds to cargo forecasts and facility requirements of the Ports of Los Angeles and Long Beach through the year 2020. The container terminal grade road and rail crossings, a wharf, and a grade separation (overpass) at Container Transfer Facility (ICTF), an adjacent four-lane roadway, several at-Seaside Avenue and Navy Way. Approximately 40 additional acres of the project site is dedicated for future expansion of the container terminal storage area The proposed project also includes construction of a near-dock Intermodal would have four ship berths and approximately 200 acres of container storage. will be used for relocated petroleum coke storage on an interim basis. Terminal Facility

Container 8. Pier 300

PROJECTS IN THE PROPOSED PROJECT VICINITY (page 4 of 6)

Chafus	Original Control of the Control of t	in Unapproved project. EIR ct. Certified. Project currently cue under LAHD review. J); on jes ue jor S.	ths Unapproved project. EIR gs, completed. Currently under ect LAHD review.	alk Approved project. 22- Construction pending. to ity of
	Description	This proposed project involves realignment of Harry S. Bridges Avenue in Wilmington and development of adjacent existing backland areas. The project includes: acquisition of properties between Harry S. Bridges Avenue and "C" Streets (from Figueroa to Broad Avenue), and south of Harry S. Bridges Avenue between Broad Avenue and Alameda Street (DWP property excluded); construction of a realigned Harry S. Bridges Avenue between John S. Gibson Boulevard and Avalon Boulevard; widening the existing Harry S. Bridges Avenue centerline on both sides between Avalon Boulevard and Broad Avenue and on the south side between Broad Avenue and Alameda Street to major highway standards; and realigning of railroad track to parallel realigned Harry S. Bridges Avenue.	The project is the development, on Port property south of Water Street at berths 184-185, of a 10,000 square foot building suitable for community meetings, functions and displays showcasing port and community activities. The project includes parking, a waterfront promenade, monument signage, and Avalon Blvd. streetscape from the site to Harry Bridges Street.	
	Project/Location	9. Harry S. Bridges Avenue Realignment Project	10. Banning's Landing Waterfront Access	11. Wilmington Liquid Bulk Terminal's Lease Renewal and Facility Development Berths 187-193 and the 32-acre Facility at 2400 East Pacific Coast Highway

PROJECTS IN THE PROPOSED PROJECT VICINITY (page 5 of 6)

Status	Approved project.	Unapproved project. EIR in progress. Currently under LAHD review.	Unapproved project. EIR in progress. Currently under LAHD review.	Unapproved project. EIR in progress. Currently under LAHD review.	Approved project. Currently under construction.	Unapproved project. SEIR/EIS in progress. Currently under LAHD review.	Unapproved Project.
Description	The proposed project is a 15-year lease renewal for the Mobil Oil liquid bulk facility at Berths 238-239 in the Wilmington District of the Port of Los Angeles. The project involves the remediation of soil and groundwater at the site. There are no major facility modifications or changes in the proposed operations.	The proposed project is a 30-year lease renewal for the GATX liquid bulk facility at Berths 171-173 in the Wilmington District of the Port of Los Angeles. The project involves the remediation of soil and groundwater at the site.	The proposed project is a 25-year lease renewal for the GATX liquid bulk facility at Berths 118-119 in the San Pedro District of the Port of Los Angeles. The project involves the remediation of soil and groundwater at the site. There are no major facility modifications or changes in the proposed operations.	The proposed project is a 20-year lease renewal for the GATX liquid bulk facility at Berths 70-71 in the San Pedro District of the Port of Los Angeles. The project involves remediation of soil and groundwater at the site.	The proposed project involves construction of federal channels and eventual construction of approximately 582 acres of additional landfill for Pier 400 in the Port of Los Angeles. Separate environmental documents will be prepared for individual terminals expected to be developed on the landfill in the future.	The proposed project involves the replacement of the existing Ford (Badger Avenue) double-leaf bascule bridge crossing the Cerritos Channel with a lift bridge.	The City is pursuing modifications to the Terminal Island Treatment Plant to produce reclaimed water for industrial and landscape irrigation use.
Project/Location	12. Mobil Oil Corp -West Coast Pipe Lines- Lease Renewal- Berths 238-239	13. GATX - Lease Renewal for Berths 171-173	14. GATX- Lease Renewal for Berths 118-119	15. GATX- Lease Renewal for Berths 70-71	16. Deep DraftNavigationImprovements -Pier 400	17. Ford (Badger Avenue) Bridge Replacement Project	18. Terminal Island Treatment Plant Modification (TTTP)

PROJECTS IN THE PROPOSED PROJECT VICINITY (page 6 of 6)

Status	Unapproved project. Currently under LAHD review.	Unapproved project	Approved project. Currently under construction.
Description	The proposed project is an abandonment and cleanup of the L A Terminals liquid bulk terminal at Berths 149-150, in the Wilmington District of the Port of Los Angeles. The terminal received caustics, phosphoric acid and chlorinated solvents by barge, tanker, and rail car for distribution by truck and rail car into the Southern California region.	This project would include redevelopment of the former Ford/Melamed site located at 700 Henry Ford Avenue, for use as a marine terminal suitable for handling breakbulk, neobulk, and/or container cargo. The site contains approximately 72 acres of land and water. The proposed project will be developed in two phases over a period of several years. The project will include 7 acres of landfill, removal of existing bulkhead, and excavation of 13,500 cubic yards, and dredging approximately 30,000 cubic years. The project will also include construction of one 1,100 foot-long wharf, replacement of underground utilities, and construction of terminal support buildings, installation of cranes, parking, fencing, and roadways.	The Port of Long Beach is modifying the existing Pier J area. The project includes the following components: expansion and redevelopment of an existing terminal and rail system for International Transportation Service and pacific Container Terminal, as well as construction of grade separations and relocation of public access.
Designal I contion	19. L A Terminals Abandonment and Cleanup Berths 149-150	20. Marine Terminal Development Berths 95-97 (POLB)	21. Pier J (POLB)

This EIR has been prepared in accordance with the EIR preparation requirements and guidelines established under CEQA and additional guidelines provided by the California Office of Planning and Research, and the City of Los Angeles. The EIR is an informational document which identifies environmental impacts associated with implementation of the proposed project and mitigation measures to reduce those significant impacts identified.

Tidelands Trust Act of 1911

Submerged lands and tidelands within the Port of Los Angeles, which are under the Common Law Public Trust, were legislatively granted to the City of Los Angeles pursuant to Chapter 656, Statues of 1911 and as amended. The Port of Los Angeles jurisdictional properties are held in trust by the City for the people of California and administered by the City's Harbor Department to promote and develop maritime-related commerce, navigation, and fisheries.

The project would result in continuation of a facility that depends on maritime vessels to transport product to and from the facility. Therefore, the project is consistent with the requirement that maritime commerce be promoted and developed.

California Coastal Plan

The Port Master Plan has been approved by the Los Angeles Board of Harbor Commissioners and certified by the California Coastal Commission. Under provisions of the California Coastal Act, the Port Master Plan is incorporated into the local coastal program of the City of Los Angeles. The LAHD has coastal development permit authority for activities under its jurisdiction.

The proposed project is consistent with the California Coastal Act, particularly with goals identified in Chapter 3, Article 7 - Industrial Development and Chapter 8, Article 2 - Policies. Proposed use of the site is coastal-dependent (must be on or adjacent to the sea in order to function) and proposed improvements will be located either on-site or in areas off-site that are within the jurisdiction of the California Coastal Commission and LAHD. The proposed project would use land for port purposes by encouraging shipping, and improving support and access facilities.

Port of Los Angeles Port Master Plan

The Port of Los Angeles Master Plan provides for the development, expansion, and alteration of the Port, in both short-term and long-term periods, for commerce, navigation, fisheries, port-dependent activities, and general public recreation. Those objectives are consistent with the provisions of the California Coastal Act of 1976, the Charter of the City of Los Angeles, and applicable federal, state, and municipal laws and regulations.

Situated in Port Planning Area 7 (Terminal Island/Main Channel), the project is in an area with a large concentration of container and bulk handling terminal facilities. No changes in the use of this area are planned for either the short-term or the long-term periods. The proposed project is consistent with the Port Master Plan.

City of Los Angeles General Plan - Port of Los Angeles Plan

The Port of Los Angeles Plan is part of the General Plan of the City of Los Angeles and provides a 20 year official guide to the continued development and operation of the Port. It is designed to be consistent with the Port Master Plan discussed in Section 2.3.4. Long range preferred water and land use for the Terminal Island Main Channel Planning Area 7 includes commercial shipping, liquid bulk handling, and heavy industrial and commercial activities. The proposed project is consistent with the Port of Los Angeles Plan and Planning Area 7 preferred uses.

City of Los Angeles General Plan - Wilmington-Harbor City District Plan (1990)

The Wilmington-Harbor City District Plan is a part of the General Plan of the City of Los Angeles, and provides an official guide to future development of the district. The proposed project is located in an area south of the Wilmington-Harbor City District. Although the District Plan does not include the Terminal Island area, the plan recommends integrating future development of the Port with the Wilmington community, including changes to transportation and circulation systems, and Port land acquisitions. The plan also recommends interagency coordination in the planning and implementation of Port projects to facilitate efficiency in Port operations, and to serve the interests of adjacent communities. The proposed project is consistent with these recommendations.

City of Los Angeles General Plan - San Pedro Community Plan

As part of the General Plan of the City of Los Angeles, the San Pedro Community Plan serves as the basis for future development of the community. It also constitutes the land use plan portion of the City's Local Coastal Program (LCP) for San Pedro. The Port of Los Angeles, although it is contiguous with San Pedro, is not part of the San Pedro Community Plan area. However, the San Pedro Community Plan does include recommendations regarding the Port, particularly for areas adjacent to commercial and residential areas of San Pedro. These areas include Cabrillo Beach, East and West Channels, and the West Bank of the Main Channel southerly of the Vincent Thomas Bridge. The proposed project is consistent with the recommendations of this plan.

City of Los Angeles General Plan - Air Quality Element

At the local level, the City of Los Angeles has both an Air Quality Element of the City's General Plan (Element) and an accompanying Clean Air Program (CAP), which outlines a program to achieve the goals and mandates of both the current South Coast Air Quality Management Plan (SCAQMD 1991) and the Element. Both documents are in the process of revision at this time. The Element contains general goals, objectives, and policies related to improving air quality in the region; one of these (policy 5.1.1) relates directly to the Port and states: "Make improvements in Harbor and Airport operations and facilities in order to reduce emissions."

Air Quality Management Plan (AQMP)

Designated air resources agencies in the South Coast Air Basin are the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG). The two agencies adopted a revised Air Quality Management Plan (AQMP) in 1994.

The 1994 AQMP emission forecasts for future years were developed by utilizing a specific set of growth rates for population, industry, and motor vehicle traffic, developed by SCAG (1994 AQMP, Appendix III-B). Emissions associated with Port related activities, as well as oil production, transportation, refining, and marketing activities in the South Coast Air Basin were included in the emissions inventory baseline and forecast data. Therefore, the proposed project is consistent with the 1994 AQMP.

The proposed project would be subject to the rules and regulations of the SCAQMD. The project would be operated in compliance with all applicable SCAQMD rules and regulations. The relationship between the proposed development project and the SCAQMD rules and regulations are discussed in greater detail in Section 3.3, Meteorology and Air Quality.

SCAG Regional Plans

The Southern California Association of Governments (SCAG) is responsible for developing regional plans for transportation management, growth, and land use, as well as developing the growth factors used in forecasting air emissions within the SCAB. They have developed the Growth Management Plan (GMP), the Regional Housing Needs Assessment, the Regional Mobility Element (RME), and in cooperation with the SCAQMD, the Air Quality Management Plan (AQMP).

Since the proposed project would not generate population migration into the area or create the demand for new housing units, it is consistent with the GMP and the Regional Housing Needs Assessment.

The proposed project is consistent with the RMP. The RMP acknowledges that cargo handled through the Port is expected to increase significantly through the year 2020, and recognizes that the LAHD is actively engaged in planning for the Port's expansion and efficient operation. The RMP defines an action plan to implement SCAG's Maritime, Railroads, and Goods Movement Program, which includes local transportation infrastructure improvements and the construction of on-dock and near-dock rail facilities. The LAHD is actively pursuing such improvements in its efforts to provide for the efficient handling of cargo. In addition, further development and modernization of the Hugo Neu-Proler facility would have an insignificant effect on transportation infrastructure of the region (see Section 3.6, Transportation and Circulation).

Congestion Management Plan

The Congestion Management Plan (CMP) is a program enacted by the State of California in 1990 to respond to concerns that urban congestion was impacting the economic vitality of the state and diminishing the quality of life in many communities. The primary objectives of the CMP are (1) to make the most effective use of all transportation modes in managing congestion, (2) to require local jurisdictions to examine the impact of land use decisions on the regional transportation system and be responsible for mitigating these impacts, and (3) to develop transportation solutions that also work toward improving air quality.

One of the requirements of the CMP is to identify the impacts of proposed development projects on roadways and intersections that have been designated as part of the CMP network. In the Port area (including Wilmington, San Pedro, and western Long Beach), the freeways, Gaffey Street, Western Avenue, and Pacific Coast Highway are included as part of the CMP roadway system. The intersections of Gaffey Street at Ninth Street, Western Avenue at Ninth Street, Alameda Street at Pacific Coast Highway, Figueroa Street at Pacific Coast Highway, Western Avenue at Pacific Coast Highway, and Santa Fe Avenue at Pacific Coast Highway are designated as CMP monitoring locations.

The CMP guidelines require that a detailed traffic analysis shall be conducted and that a significant impact may occur on the roadway network if a proposed project would add 50 or more vehicle trips during either the AM or PM weekday peak hours to a designated CMP arterial monitoring intersection or if it would add 150 or more peak hour directional trips to a freeway link. Since the traffic analysis for this EIR indicates that a maximum of 34 additional peak hour trips would be generated by the project, the lease renewal would not have a significant impact on the CMP roadway system and a detailed analysis of the CMP intersections is not required.

Water Quality Control Plan - Los Angeles River Basin

The Water Quality Control Plan for the Los Angeles River Basin (Region 4B), adopted by the Regional Water Quality Control Board, Los Angeles Region, designates beneficial uses of the basin's water resources. The plan describes water quality objectives, implementation plans, and surveillance programs to protect or restore designated beneficial uses. The proposed project would be operated in conformance with objectives of the Water Quality Control Plan.

Water Quality Control Policy for the Enclosed Bays and Estuaries of California

The State Water Resources Control Board has adopted a water quality control policy that provides principles and guidelines to prevent degradation, and to protect the beneficial uses of waters of enclosed bay and estuaries (SWRCB, 1991). Los Angeles Harbor is considered an enclosed bay under this policy. Activities such as the discharge of effluent, thermal wastes, radiological waste, dredge materials, and other materials that adversely affect beneficial uses of the bay and estuarine waters are addressed. Waste discharge requirements developed by the Regional Water Quality Control Board, Los Angeles Region, must be consistent with this policy. HNPC will work closely with the Los Angeles Region of the California Regional Water Quality Control Board to obtain approvals and permits necessary for implementation of the proposed project.

			÷	
·				

SECTION 3 ENVIRONMENTAL SETTING, IMPACTS, MITIGATION, AND MITIGATION MONITORING

3.1 GEOLOGY

3.1.1 Setting

3.1.1.1 Topography

The Los Angeles Harbor is located in the southwestern portion of the Los Angeles Basin, a northwest-trending alluvial plain about 50 miles long and 20 miles wide. The lowland surface of this basin, of which the harbor is a part, is a broad, aggraded coastal plain of low relief that slopes gradually seaward (southwest) to the Pacific Ocean. This plain extends inland approximately 7 miles to the topographic uplifts that define the Newport-Inglewood Fault Zone, and offshore about 12 miles to the edge of the submerged San Pedro continental shelf. The harbor is located along the northern portion of San Pedro Bay, a natural embayment formed by repeated movement across the Palos Verdes Fault Zone. This movement created a westerly protrusion of the coastline and a major, terraced topographic uplift, the Palos Verdes Hills, located approximately 2 miles west and northwest of the Los Angeles Harbor. These hills are approximately 1400 feet in height and are encircled by at least 13 marine terraces (Fischer et al., 1987; Ward and Valensise, 1994). The HNPC facility is situated between 7 to 13 feet above mean sea level.

3.1.1.2 Geology

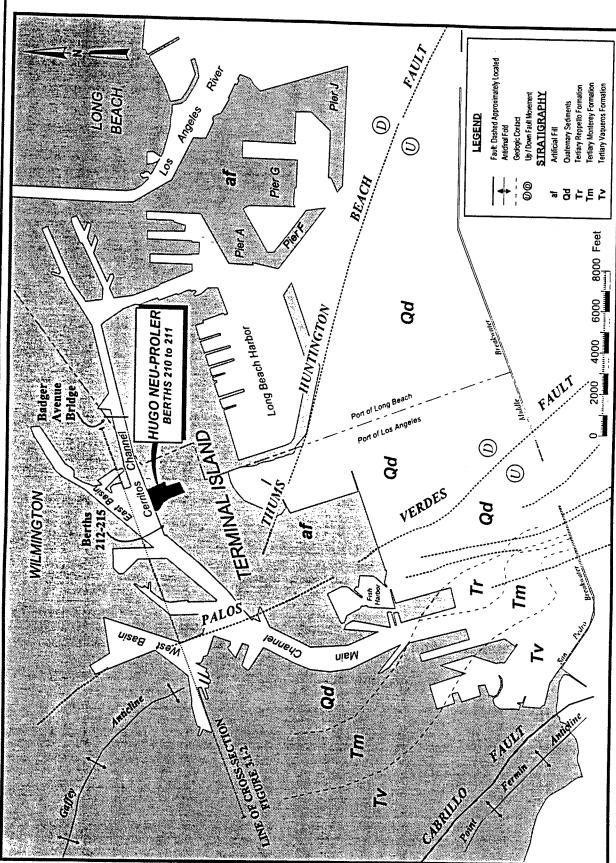
Vertical movement along the Palos Verdes Fault Zone has uplifted a block of bedrock in Los Angeles Outer Harbor, exposing upper Miocene to lower Pleistocene age bedrock to the west of the fault and leaving a thick Quaternary age alluvial sequence on the east side of the fault. Exposed bedrock on the west side of the Palos Verdes Fault consists of mudstone and siltstone, and crops out southeastward from Reservation Point, southeast for a distance of 1 mile. Dead Man Island, originally adjacent to Reservation Point but removed in 1928, and Weldt Rock, 2500 feet southeast of Reservation Point, are examples of these bedrock highs (USACOE, 1985).

The site that the HNPC facility currently occupies on the north-central margin of Terminal Island was formerly part of Rattlesnake Island that consisted of shallow tidelands and coastal islands. The southern margin of Rattlesnake Island was approximately coincident with the current location of Seaside Avenue.

A geologic map and a generalized geologic cross-section showing unconsolidated sediments (Qd), associated aquifers and bedrock (Ta, Tv, Tm, and Tr) in Los Angeles Harbor are shown in Figures 3.1-1 and 3.1-2, respectively.

3.1.1.3 Landfilled Materials

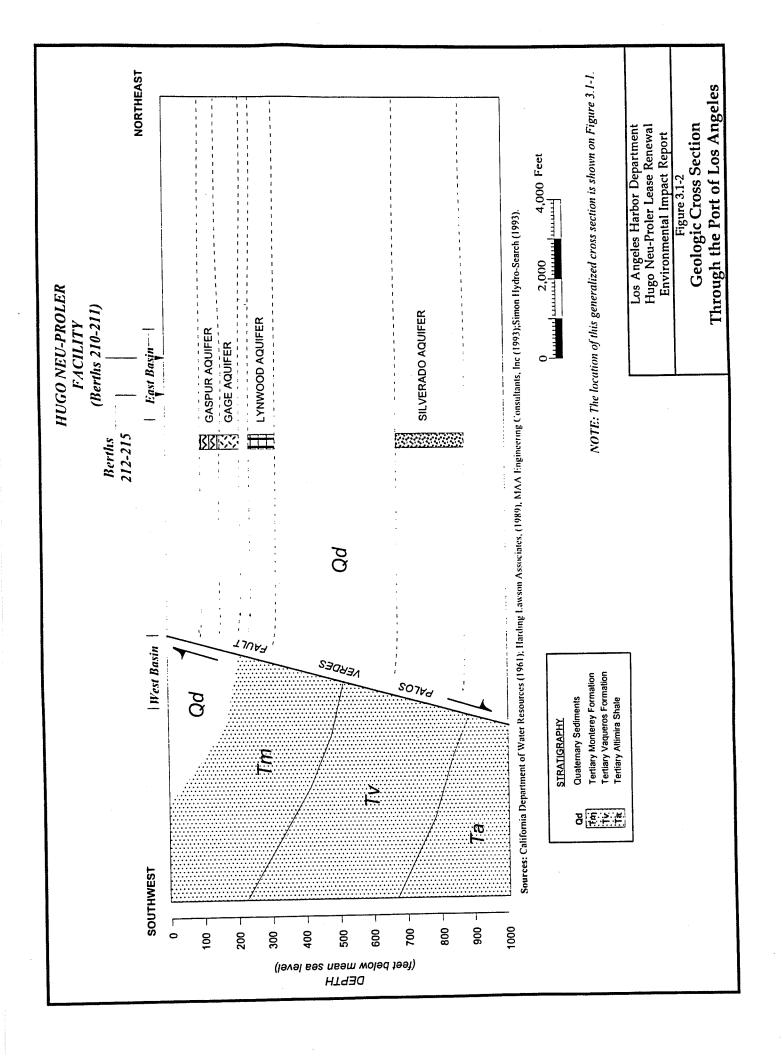
Landfilling activities began in the early 1900's constructing Terminal Island from dredged sediments from Dominguez Channel that were hydraulically placed as dikes (Harding Lawson Associates, 1989). Cerritos Channel was created between Terminal Island and the mainland. The



Sources: United States Army Corps of Engineers (1987); Clarke and Henderson (1987); Fischer et al., (1987); Wright (1991).

Los Angeles Harbor Department Hugo Neu-Proler Lease Renewal Environmental Impact Report

Figure 3.1-1 Geologic Setting



portion of the landfill on which the HNPC facility is located was made in the 1940's. Typically, these fill materials consist of gray to brown, fine to medium grained sand and silty sand with varying percentages of shell fragments and mica that range between 5 to 10 feet (1.5 to 3 meters) in thickness (Envirosphere, Inc., 1989).

Recent environmental soil studies of the HNPC facility have been performed (Environmental Audit, Inc., 1991) based upon soil sampling in five trenches. The trenches varied in depth from 3.7 to 5.8 feet. In each trench, between 4 and 12 inches of dark brown soil overlies up to 46 inches of beach sand which in turn overlies a "marine layer". As stated by Environmental Audit, Inc. (1991) the, "marine layer indicates dredge spoil used to construct the backland area of the site". In some of the trenches, thin layers of red rust soil (up to 5 inches thick) cement wash (5 inches thick) and soil/rock (6 to 10 inches thick) were encountered. It is evident that materials above the marine layer reflect activities at the site since the dredge material was placed.

Geotechnical studies performed as a part of the Berths 212-215 Backland Improvements, immediately west of the HNPC facility (Harding Lawson Associates, 1989), characterized subsurface conditions as 3 to 5 feet of fill with debris that overlies between 7 to 14 feet of heterogeneous hydraulic fill (the "marine layer" of Environmental Audit Inc., 1991) that, in turn, overlies between 5 to 20 feet of natural interbedded sands and sandy silts (Figure 3.1-2).

3.1.1.4 Harbor Sediments

Sediments in the Cerritos Channel were sampled to a maximum depth of 120 feet (36 meters) by Dames and Moore (1975) and by MAA Engineering Consultants, Inc. (1993) in close proximity to the Badger Avenue Bridge (also known as the Henry Ford Avenue Bridge) approximately 4,000 feet to the east. These borings showed a surficial layer of very loose harbor bottom sediments composed primarily of low plasticity silts and silty sands varying in thickness from near zero in the center of the channel to over 20 feet beneath the channel banks. The loose sediments overlay medium dense deposits of recent alluvium, composed primarily of low plasticity silts, clays and silty sands, to an approximate depth of 75 feet. Beneath these recent alluvial deposits are very dense deposits of sand and gravel that form a marine terrace (Figure 3.1-2).

Metals, PCBs and other contaminants found in sediments in the vicinity of HNPC and other inner harbor areas were examined in a study conducted by the Port of Los Angeles (LAHD 1993). At most of the sampling stations, the sediment samples were collected from three strata: shallow (0-4 feet), medium depth (4 to 8 feet), and deep (8-12 feet). Results of the sampling program and a comparison of the area near HNPC with other areas sampled in the inner harbor are provided in Tables 3.1-1 and 3.1-2. The LAHD (1993) report examined the potential for adverse effects of the contaminated sediments using a method developed by Long and Morgan (1990). Long and Morgan identified contaminant levels at which adverse effects are seldom expected (termed ER-L) and the level at which adverse effects are likely (termed ER-M). As shown in Tables 3.1-1 and 3.1-2, several metals and organic contaminants exceed the ER-L levels, but none exceed the ER-M levels.

In the past, scrap which was mishandled during shiploading activities at the HNPC facility occasionally fell into the water where it may have an impact on water or sediment quality. Systems designed to catch falling scrap have been implemented by HNPC which have eliminated this problem.

Table 3.1-1

Mean sediment concentrations of metal consituents (µg/g, dry weight).

Cadmium Chromium	Arsenic Cadı	
***************************************	0.7	15 0.7
	1.2	19 1.2
	9.0	9:0 8
	Q.	3 ND
	9:0	10 0.6
	0.3	4 0.3
	0.2	4 0.2
	0.2	6 0.2
l	9.0	11 0.6
l	9.0	9:0
l .	0.3	8 0.3
	1.0	11 1.0
	4.8	13 4.8
	2.9	13 2.9
	2.1	13 2.1
	6.0	11 0.9
	0.3	16 0.3
	0.2	5 0.2

= Value is greater than the ER-L

= Value is greater than the ER-M. Bold

Table 3.1-2

Mean sediment concentrations of organic constituents (dry weight basis).

Station	Strata	Total Organic Carbon (%)	Oil and Grease (µg/g)	Total Petroleum Hydrocarbons (µg/g)	Total Organotins (µg/kg)	Total PAH (µg/kg)	Total Phthalates (µg/kg)	Total DDT (µg/kg)	Total PCB (µg/kg)
Southwest Marine Dry Dock Area (DDA)	-	1.37	200	146	1054	ND	833	200	583
Southwest Marine		1.26	1527	922	112	8457	3667	160	44
Slip 240 (SMS)	2	0.76	1220	716	80	13167	117	4	QN
	3	0.11	19	13	ND	117	6023	QN	ND
Former Todd Shipyard	1	1.02	362	215	132	8067	216	77	415
(FIS)	2	0.62	32	18	5	QN	337.5	9	∞
•	3	0.63	15	4	1	1275	5840	ON	QN
	4	0.63	ND	ND	ND	009	ND	ON	ND
Former Chevron		1.13	803	467	219	433	197	138	343
M.O.I. (FCM)	2	0.89	717	487	46	297	193	- 99	190
	3	0.83	253	170	7	QN	753	23	153
Northwest Corner West Basin (NWB)	1	1.33	733	367	370	12617	12667	102	197
Consolidated Slip	-	1.97	8677	4642	322	517	2418	310	664
(CSL)	2	1.27	9696	5825	91	2333	233	102	338
	3	1.21	7939	1231	53	4667	195	101	240
Hugo Neu-Proler	-	0.84	153	405	253	440	1500	62	335
(HNP)	2	0.62	135	93	4	4950	21500	20	65
	3	0.34	ND	ND	ND	ND	770	ND	ND

ND = Not Detected

= Greater than ER-L Values

Bold = Greater than ER-M Values

3.1.1.5 Subsidence

Subsidence in the Los Angeles-Long Beach area was first observed in the 1920's. It is believed that this early regional subsidence was related to groundwater withdrawal, and possibly natural basin sediment compaction. Subsidence accelerated during the 1938-39 period, coincident with early development of the Wilmington oil field (Allen, 1973). Between 1926 and 1967, approximately 29 feet of total subsidence was recorded approximately 1.5 miles to the northeast of the HNPC facility, near the eastern end of Terminal Island, in Long Beach. A maximum annual rate of subsidence of 2.4 feet was recorded between 1951 and 1952 and coincided with a period of very high oil production (Randell et al., 1983). Extraction of hydrocarbon fluids within the Wilmington Oil Field during this period caused reduced subsurface fluid pressure, resulting in compaction of oil-producing sediments and surface land subsidence. In 1958, secondary injection of water into oil-depleted zones was initiated which resulted in an eventual reduction of subsidence and a partial rebound of much of the subsided area. If the present balance between fluid injection and hydrocarbon withdrawal is maintained, future subsidence of this type should not be a concern (USACOE, 1992).

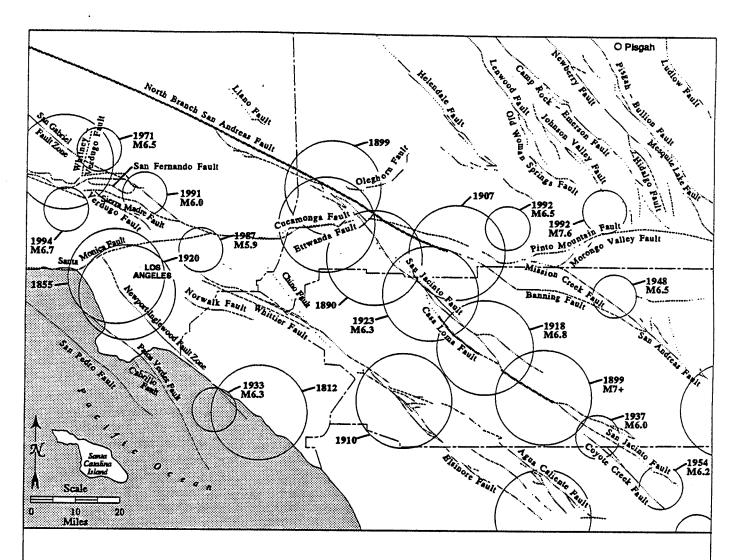
3.1.1.6 Faults and Earthquakes

Faults

Faults are fractures that represent lines of weakness in the earth's crust along which topographic or sub-surface structures on one side of the fault are offset, vertically or horizontally, relative to the same structures on the other side of the fault. Slow pressure build-up and sudden stress-release along one of these faults results in an earthquake and further displacement of both the topographic and sub-surface structures. Southern California has been historically known as a seismically active region and is crossed by numerous faults. These faults comprise a broad belt, known as the San Andreas Transform, that marks the diffuse boundary between the Pacific Plate to the west and the North American Plate to the east. Within this belt, the San Andreas Fault has, over geologic time, produced the most cumulative geologic offset.

Figure 3.1-3 is a regional fault map showing the location of regional faults in southern California. Table 3.1-3 presents the salient characteristics for all active and potentially active faults within 62 miles of the HNPC facility deemed capable of generating large-magnitude earthquakes. As defined by Hart (1992), active faults are those faults that have produced ground rupture within the last 10,000 years (Holocene age), and potentially active faults are those that have produced ground rupture within the last 1.6 million years (Quaternary age).

Active and potentially active faults considered most important to the Los Angeles Harbor, in terms of the potential for seismic hazard, include the southeast-trending Palos Verdes, THUMS-Huntington Beach, Newport-Inglewood, San Andreas, San Jacinto, Elsinore, San Pedro Basin, and Santa Cruz-Santa Catalina Ridge faults. Each of these faults lies within the Peninsular Ranges Structural Province. In addition, the west-trending faults that together comprise the Southern Frontal Fault System of the Transverse Ranges Structural Province, also present seismic hazard to the Los Angeles Harbor. Finally, the Torrance-Wilmington Fold & Thrust Belt, thought to exist beneath the western margin of the Los Angeles basin, may also represent a potential seismic hazard. A brief description of these faults, and fold & thrust belts, is presented in the following sections.



MAJOR EARTHQUAKES AND RECENTLY ACTIVE FAULTS IN THE SOUTHERN CALIFORNIA REGION

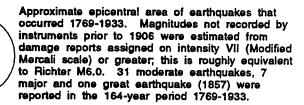
ACTIVE FAULTS

Total length of fault zone that breaks Holocene deposits or that has had seismic activity

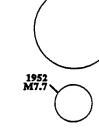
Fault segment with surface rupture during an historic earthquake, or with a seismic fault creep.

Holocene volcanic activity
O (Amboy, Pisgah, Cerro Prieto and
Salton Buttes)

EARTHQUAKE LOCATIONS



Earthquake epicenters since 1933, plotted from improved instruments. 29 moderate and three major earthquakes were recorded in the 40-year period 1933-1973.



1899 M7+

Source: SAIC, from Moran et. al. 1973.

Figure 3.1-3
Seismicity of Southern California

Table 3.1-3 Characteristics of Major Regional Faults

FAULT	CLOSEST DISTANCE TO SITE (mile/km)	LENGTH OF FAULT OR SEGMENT (mile/km)	MCE (M¹)	RECURRENCE INTERVAL (yrs)
	SA	AN ANDREAS FAULT		
San Andreas (southern section-includes the Mojave, San Bernardino and Coachella Valley segments)	56/89	188/300	8.3 ²	132 ¹⁵
	Di	ENINSULAR RANGES		
San Jacinto	54/86	139/222	6.5-7.118	107-46818
Chino	36/57	18/28	6.8	3000
Whittier-Elsinore	23/36	156/250	7.318	73018
Newport-Inglewood Onshore segment	7/11	39/62	7.0 ¹⁰	1500 ¹⁰ (average of values for segments A and B of Wesnowsky, 1986)
Offshore segment (Newport Beach to La Jolla)	25/40	76/122	7.0-7.256	.n/a
THUMS-Huntington ²² Beach (between Palos Verdes and Newport- Inglewood faults)	0.9/1.4	>20/>32 22	n/a	n/a
Palos Verdes				_
Santa Monica Bay Segment	9.7/15.5	19/31	6.5-7.0 ⁵	2000-80005
Onshore Palos Verdes Hills segment	1.2/2	9/14	6.7516	200016
San Pedro Basin segment	1.2/1.9	34/55	6.7516	200016
Coronado Banks	26/42	76/12220	6.25-7.25 ²⁰	3000
San Pedro Basin	16/25	53/85	n/a	n/a

Table 3.1-3 (Cont.) Characteristics of Major Regional Faults

FAULT	CLOSEST DISTANCE TO SITE (mile/km)	LENGTH OF FAULT OR SEGMENT (mile/km)	MCE (M*)	RECURRENCE INTERVAL (yrs)			
Santa Cruz-Santa Catalina Ridge	33/53	53/85	7.010	n/a			
San Diego Trough	52/83	66/106 ²⁰	6.25-6.75 ²⁰	2000-8000			
San Clemente	44/70	222/356 ²⁰	7.5	400			
	TF	RANSVERSE RANGE	<u> </u>				
Anacapa (syn. Point Dume)	31/50	50/80	7.0	2000			
Malibu Coast	31/50	21/34	7.5 ¹⁰	n/a			
Santa Monica	25/40	15/24	7.510	n/a			
Hollywood	26/41	21/34	6.4	1600			
Raymond	27/43	14/22	6.7	3000			
Sierra Madre	33/52	46/74	7.0	5000³			
San Fernando	38/60	11/17	6.5	200			
Cucamonga	40/64	13/20	6.5-7.29	6259			
San Gabriel	39/62	44/71	6.7-7.0	500			
Santa Susana	42/67	24/38	6.9	630			
Oak Ridge (onshore and offshore)	54/86	69/110	7.5	250-500 ²³			
Arroyo Parida	76/122	28/44	7.018	5350 ¹⁸			
San Cayetano	63/101	31/49	7.1	450			
	FO	LD & THRUST BELT	'S				
Elysian Park Fold & Thrust Belt	14/22	63 miles/100 km along east and north flank of LA basin	7.0-7.5 ⁸	1000 ⁸			
Torrance-Wilmington Fold & Thrust Belt	9/15	38 miles/60 km along SW margin of LA basin	7.0-7.5 ⁸	1000 ⁸			

REFERENCES

- 1. CDMG (1988)
- 2. Davis et al., (1982)
- 3. Crook et al., (1987)
- 4. Davis and Namson (1989)
- 5. Fischer et al., (1987)
- 6. Fischer and Mills (1991)
- 7. Hauksson (1987)
- 8. Hauksson (1992)
- 9. Morton and Yerkes (1987)
- 10. Mualchin and Jones (1992)
- 11. Pinault and Rockwell (1984)
 - 12. Rockwell et al., (1985)
 - 13. Rzonca et al., (1989)
 - 14. Sharp (1981)
 - 15. Sieh et al., (1989)
 - 16. Ward and Valensise (1994)
 - 17. Wesnousky et al., (1991)
 - 18. Wesnousky (1986)

- 19. WGCEP (1988)
- 20. Woodward-Clyde Consultants (1986)
- 21. Woodward-Clyde Consultants (1979)
- 22. Wright (1991)
- 23. Yeats (1988)
- 24. Ziony and Jones (1989)
- 25. Ziony and Yerkes (1985)

NOTES

For recurrence intervals, where a range is shown, a preferred estimate may be shown in parentheses.

n/a = data are not available

A maximum credible earthquake is regarded as the largest earthquake that a fault could be resonably expected to produce regardless of the time with which it takes to occur (California Division of Mines and Geology, 1975). Maximum credible earthquakes are usually quoted in terms of M, moment magnitude, that relate specific fault characteristics, such as fault length and slip rate, directly to earthquake size.

Richter local magnitude applies only to earthquakes in southern California and relates the amplitude of the recorded earthquake signal to earthquake size.

There is little existing information concerning offshore faulting. Unless otherwise noted, recurrence intervals, and MCE's were estimated by comparison with onshore faults. MCE's and recurrence intervals for the Coronado Banks, San Pedro Basin, San Diego Trough and San Clemente faults based upon discussions with Mark Legg, ACTA Inc, Torrance, California (1992).

Site-to-fault distances made using location of late Quaternary fault rupture at a scale of 1:250,000, as documented by Ziony and Jones, 1989.

Offshore, the determination of youngest strata displaced by faulting was made using the maps of Greene and Kennedy (1986) and Clarke et al., (1987).

A maximum credible earthquake is regarded as the largest earthquake that a fault could be reasonably expected to produce regardless of the time with which it takes for that earthquake to occur (California Division of Mines and Geology, 1975). Maximum credible earthquakes are usually quoted in terms of M, moment magnitude, that relate specific fault characteristics, such as fault length and slip rate, directly to earthquake size.

PALOS VERDES FAULT ZONE. The Palos Verdes Fault Zone extends from the east-trending Santa Monica Fault zone in northern Santa Monica Bay southeastward towards the Palos Verdes Peninsula, where it marks the northeastern boundary of the Palos Verdes Hills, through the Port of Los Angeles, and over the offshore San Pedro basin margin. The Palos Verdes Fault Zone is generally considered to consist of three separate segments, each with differing levels of activity: the Santa Monica Bay segment, the Palos Verdes Hills Segment and the San Pedro Shelf Segment (Greene et al., 1975; Junger and Wagner, 1977; Nardin and Henyey, 1978). The San Pedro Shelf Segment extends through the Los Angeles Harbor and is considered active within Holocene time seaward of the Middle Breakwater (Greene, et al., 1975; Dames and Moore, 1977; Fischer et al., 1987) and potentially active within the harbor (Jennings, 1992). The Palos Verdes Fault Zone has not been accurately mapped across Terminal Island nor the recency of activity determined. However, based upon mapping performed by Fischer et al., (1987), the Palos Verdes Fault Zone may reach approximately 1,000 feet (305 meters) in width at the southern margin of Terminal Island and pass approximately 1.2 miles to the west of the HNPC facility.

The Palos Verdes Fault has not produced any large earthquakes during historic time although the presence of at least 13 uplifted marine terraces on the Palos Verdes peninsula suggest that it has done so in the geologic past (Ward and Valensise, 1994). Several estimates of the maximum credible earthquake for the Palos Verdes Fault Zone have been made. Fischer et al., (1987) assigned a maximum credible earthquake of M=6.5 to M=7.0, with recurrence intervals of 2,000 years and 8,000 years respectively, to the Palos Verdes Fault Zone. This work was based upon studies of the Palos Verdes Fault in the offshore region. Recently, based upon studies of the marine terraces present on the Palos Verdes peninsula, Ward and Valensise (1994) have calculated a maximum credible earthquake of M=6.75 with a recurrence interval of 2,000 years.

THUMS-HUNTINGTON BEACH FAULT. This fault has not been extensively investigated and has only been mapped in Pliocene age bedrock, from the Port of Los Angeles to Huntington Beach, using proprietary oil company data (Bauer et al., 1966; Clarke and Henderson, 1987). Wright (1991) suggests that the THUMS-Huntington Beach Fault intersects the Newport-Inglewood Fault zone offshore of Dana Point and intersects the Palos Verdes Fault Zone just north of the Port of Los Angeles Inner Harbor. Ziony and Jones (1989) document a possible Late Quaternary age for a portion of this fault between Sunset Beach and Newport Beach. Between these locations, Henry (1987) shows the fault to disrupt Pleistocene age sediments which infers that the fault is at least potentially active. Further north, Jennings (1992) denotes a portion of the THUMS-Huntington Beach Fault as active offshore of Newport Beach. However, there is no information available to document the recency of activity, or the location of the fault within Quaternary age sediments, within the Port of Long Beach or the Port of Los Angeles. As portrayed by Clarke and Henderson (1987), at its closest approach, the THUMS-Huntington Beach Fault passes within approximately 4,500 feet to the south of the HNPC facility.

A small seismic cluster is associated with the THUMS-Huntington Beach Fault 4 miles west of Newport Beach, the largest earthquake of which was a Richter Local Magnitude, M_L=3.7 event that occurred in October 1984. The Richter Local Magnitude scale was developed for use only with earthquakes in southern California, and relates the amplitude of recorded earthquake signals to earthquake size. A maximum credible earthquake has not been documented for the THUMS-Huntington Beach Fault.

NEWPORT-INGLEWOOD FAULT. Located approximately 7 miles northeast of the Los Angeles Harbor, the Newport-Inglewood Fault Zone marks the western boundary of the Los Angeles Basin extending from Beverly Hills southeast to Newport Bay. The Newport-Inglewood Fault Zone has a history of moderate to high seismic activity. The largest instrumentally recorded event was the $M_L = 6.3\,1933\,$ Long Beach earthquake that occurred on the offshore portion of the fault. A maximum credible earthquake of M=7 has been assigned to the Newport Inglewood Fault (Mualchin and Jones, 1992).

TORRANCE-WILMINGTON FOLD & THRUST BELT. Hauksson (1990) analyzed the style of movement that had occurred during many earthquakes across the Los Angeles basin. For those earthquakes that showed thrusting, Hauksson noticed a distinct correlation with previously mapped folds in the sedimentary subsurface. Hauksson suggested that these subsurface folds formed as a result of slip along previously unrecognized faults at depth - "blind" thrusts - that trend subparallel to, but do not intersect, the ground surface. It is for this reason that fold & thrust belts are not shown on Figure 3.1-3. Part of the Torrance-Wilmington Fold & Thrust Belt is thought to underlie the Los Angeles Harbor at approximately 9 miles depth (Davis and Namson, 1989). Hauksson (1992) cites a maximum credible earthquake of M=7.0 to 7.5 for this fold and thrust belt with a possible recurrence interval of 1,000 years.

WHITTIER-ELSINORE FAULT. This fault zone is 46 miles (74 km) long, reaches 0.7 miles in width, and extends from the northern edge of the Santa Ana Mountains southeastward towards the Mexican border. It is located 22 miles northeast of the Los Angeles Harbor. Five earthquakes greater than M=5.0 have occurred along the Elsinore fault this century, three of which were located near Lake Elsinore in 1910 (the largest of these was M_L=6.0). Numerous small earthquakes continue to be associated with this fault.

The Los Angeles Harbor is closest to the northern segment of the Elsinore fault (Wesnousky, 1986), commonly known as the Whittier fault. Many studies have regarded the Whittier Fault and its southeasterly continuation, the Elsinore Fault, as a single tectonic feature. A maximum credible earthquake of M=7.3 was determined by Wesnousky (1986) with a return period of 730 years.

Evidence suggests that the October, 1987, Whittier Narrows earthquake occurred on the northernmost portion of the Whittier Fault.

SAN ANDREAS FAULT. At its closest approach, the San Andreas fault is located approximately 55 miles northeast of the Los Angeles Harbor. The San Andreas fault zone typically ranges between 0.2 miles to 0.9 miles in width (although it is over 2.5 miles wide near Palmdale) and marks the major surface boundary between the Pacific and North American tectonic plates. It extends from Cape Mendocino in the northwest to the Salton Trough in the southwest (Wallace, 1990).

The segment closest to the Los Angeles Harbor extends from Cholame to San Bernardino and last ruptured during the 1857 M=8.0 Fort Tejon earthquake. Based upon trenching studies of interbedded stream and marsh deposits, Sieh et al., (1989) have documented nine other previous earthquakes and estimated a recurrence interval of 132 years. These ten major earthquakes occurred in clusters of two or three events that were separated by dormant periods of 200 to 300 years. If this pattern continues, the "Big Bend" section of the San Andreas Fault may currently be in a dormant period that could continue for another 100 years. However, this implies that the rupture on the southern San Andreas fault (south of San Bernardino) is more likely to produce the next great earthquake. For hazard analyses, a maximum credible earthquake of 8.3 is often used for the southern section, as assigned by Davis et al., (1982).

SAN JACINTO FAULT. This fault system extends from Wrightwood in the north, where it may merge with the San Andreas fault, southeastward toward the international border with Mexico. It is located approximately 53 miles from the Los Angeles Harbor. For the last 100 years it has been the most active fault in southern California, producing at least seven earthquakes of $M_L = 6.0$ since 1890 (Yerkes, 1985; Wesnousky, 1991). The largest of these earthquakes was an $M_L = 6.8$ event near the town of San Jacinto in 1918. Maximum credible earthquakes of M=6.5 to M=7.1 have been assigned to individual segments of this fault by Wesnousky (1986) with recurrence intervals ranging from 107 to 468 years respectively.

SAN PEDRO BASIN FAULT. The San Pedro Basin fault is located approximately 15 miles west, and offshore of the Los Angeles Harbor. The fault extends southeast from near Point Dume as a series of discontinuous faults to a point near the east end of Santa Catalina Island. It has not been extensively studied but seismic reflection profiles show possible late Pleistocene age sediment displacement. A maximum credible earthquake has not been documented for this fault.

SANTA CRUZ-SANTA CATALINA RIDGE FAULT. The offshore Santa Cruz-Santa Catalina Ridge fault extends southeastward from the eastern end of Santa Cruz Island to the southwest of Santa Catalina Island and is associated with a prominent seafloor escarpment. The largest events known to have occurred along this fault were an $M_L = 5.3$ event in 1981 and an $M_L = 4.1$ event in 1987. Holocene activity is documented from seismic reflection profiles. At its closest approach the fault is located 32 miles from the Los Angeles Harbor. A maximum credible earthquake of M=7.0 was determined for this fault by Mualchin and Jones (1992).

SOUTHERN FRONTAL FAULT SYSTEM OF THE TRANSVERSE RANGES. The faults that mark the southern frontal fault system of the Transverse Ranges trend west from San Miguel Island in the offshore region towards the San Andreas fault onshore. They include the Santa Cruz Island, Anacapa, Santa Monica, Hollywood, Raymond, Sierra Madre, and Cucamonga faults. The faults effectively mark the northern margin of the Peninsular Ranges geomorphic province. Maximum credible earthquakes for each of these faults are shown on Table 3.1-1 in this report.

SAN FERNANDO VALLEY BLIND THRUST FAULT. Major folding of the Transverse Ranges, due to north-south compression, initiated during the last two to three million years. This compression may have been responsible for the creation of a south-dipping blind thrust fault beneath the San Fernando Valley. Rupture of this fault at 19 km depth produced the Northridge earthquake, a Richter local magnitude 6.7 earthquake, on January 17, 1994. The epicenter was located approximately 60 km to the north of the HNPC site. Data suggest that a blind thrust fault plane, dipping 10 degrees to the south from Santa Clarita to Northridge, was responsible for the main shock and that a similar fault plane, dipping 40 degrees to the south, was responsible for the majority of the aftershocks. Movement across this blind thrust fault was such that the Santa Susana Mountains that bound the northern San Fernando Valley rose by approximately 40 cm.

Effects of Earthquakes

The principal damaging effects of earthquakes consist of surface rupture, ground shaking, and liquefaction. Each of these are discussed in the following sections.

FAULT DISPLACEMENT. As mapped by Fischer et al., (1987), the HNPC facility is located approximately 1.2 miles east of the Palos Verdes Fault. Based upon the mapping of Bauer et al., (1966) that was subsequently revised by Clarke and Henderson (1987), the HNPC facility is located approximately 0.9 miles north of the THUMS-Huntington Beach Fault. It is considered unlikely that the HNPC facility would be subject to ground rupture during an earthquake that is located on either of these faults.

EFFECTS OF STRONG GROUND MOTION. The intensity of ground shaking at a specific location depends on several factors, including earthquake magnitude, distance from the earthquake source, and site response characteristics, particularly near-surface geologic materials. Ground shaking generally causes the most widespread effects, not only because it can propagate considerable distances from an earthquake source, but also because it can trigger secondary effects. These secondary effects include liquefaction and slope failure, with resultant structural damage to buildings and foundations. Liquefaction is discussed in the following section.

LIQUEFACTION. Soil liquefaction is a phenomenon in which the ground loses its strength or stiffness when ground shaking associated with an earthquake induces large excess pore water pressures, causing the soil to liquefy. While almost any saturated granular soil can develop increased pore water pressures when shaken, these excess pore water pressures can lead to liquefaction if the intensity and duration of earthquake shaking are great enough. The effects of ground shaking are often greatest on young, water-saturated sediments.

Among the recent earthquakes that were great enough to cause liquefaction were the Northridge earthquake in 1994, the Landers-Big Bear earthquakes in 1992, the Loma Prieta earthquake in 1989, the Mexico City earthquake in 1985, the Central Japan Sea earthquake in 1983, the San Fernando earthquake in 1971, the 1964 Alaska earthquake, and the Nigata (Japan) earthquake in 1964. Structures particularly vulnerable to liquefaction during these earthquakes were buildings with shallow foundations, railways, highways, bridges, buried structures, dams, canals, retaining walls, port structures, utility poles, and towers.

Within the Los Angeles Harbor, the existing hydraulically placed landfills consist predominantly of loose to medium-dense, water-saturated sands and silts. These soils in the harbor area are susceptible to liquefaction during strong ground motions from earthquakes. No improvement techniques have been implemented to date at the proposed project area. However, the liquefaction potential at the HNPC facility area is less than other, newer landfill areas within the Port due to the following reasons:

- The portion of the landfill underlying the HNPC facilities is one of the oldest on Terminal Island, allowing for more settlement time under its own weight (i.e., the area was filled in the mid to late 1940's).
- The HNPC facility is underlain by a relatively thin package of fill materials (i.e. 5 to 10 feet in thickness), that are underlain by natural sediments less prone to liquefaction.
- The area has been used as a scrap metal processing facility for nearly 30 years. The associated activities, such as scrap metal storage and heavy vehicle movement, in addition to site improvements such as office and industrial buildings, have been assisting in the consolidation of fill during this period of time.

3.1.1.7 Tsunamis and Seiches

Tsunamis (seismic sea waves) are extremely long-period waves often associated with vertical tectonic displacement of the seafloor due to earthquakes. However, they can also be generated by other mechanisms, including submarine landslides, volcanic eruptions, and even underwater nuclear explosions. Seiches are oscillations generated in an enclosed water body such as a harbor or lake.

Historical data indicate that the California coast has experienced many tsunamis. The most damaging tsunami occurred after the 1964 Alaska earthquake. Crescent City sustained considerable damage, while Los Angeles and Long Beach harbors received minor damage (Long Beach City Planning Department, 1975). In Southern California, the most damaging tsunami occurred after the 1960 Chilean earthquake. In the Los Angeles-Long Beach Harbor, 5-foot waves surged back and forth in Cerritos Channel and currents tore some 300 small boats and yachts from their slips; as many as 30 were sunk. The Palos Verdes Peninsula, harbor breakwaters, and various nearshore islands offer some protection to the harbors from tsunami waves.

Estimates of runup (the highest elevation above tide level that the water reaches as it runs up on land) due to tsunamis of distant origin indicate that a runup of approximately 6.5 feet would be equaled or exceeded on the average of once every 100 years at Long Beach Harbor, and that a runup of 10 feet would be equaled or exceeded once every 500 years (Houston and Garcia 1974).

3.1.2 Impacts

3.1.2.1 Significance Criteria

The impact of the proposed project on the geologic environment would be considered significant if:

- Geologic processes such as landslides or erosion would be triggered or accelerated.
- Substantial alteration of topography beyond that resulting from natural erosion and depositional processes would occur.
- Unique geologic features (such as paleontological resources) or geologic features of unusual scientific value for study or interpretation would be disturbed or otherwise adversely affected.
- Known mineral (gas or petroleum) resources would be rendered inaccessible.
- Substantial disruption, displacement, compaction, or over-covering of the soil occurred. Also if substantial irreversible disturbance of the soil materials at the site or adjacent sites such that their use for normal purposes in the Port area would be compromised.

Impacts of the following geohazards on the proposed project would be considered significant if:

- Earthquake-induced ground shaking occurred that was capable of causing liquefaction, settlement, or surface cracks at the site and attendant damage to proposed structures causing a substantial loss of use, or exposing the public to substantial risk of injury.
- Seiches or tsunamis of 7 feet or more occurred that were caused by nearby or distant earthquakes, capable of causing damage to structures or exposing the public to substantial risk of injury.

3.1.2.2 Impact Analysis

Project Construction

In addition to a 27-year lease renewal and continuation of current operations, HNPC will be upgrading or replacing certain facilities and equipment. The most notable of these upgrades/replacements will be those that involve the excavation of portions of the site. HNPC intend to install rail tracks from Berths 210-211 to the southern margin of the Matson Terminal, construct a 4,000 square foot single story office building, install noise barriers, perimeter and bin walls, storm water runoff control and treatment systems, replace or upgrade gasoline storage and dispensing facilities, pave unpaved areas of the facility, construct an auto shredder residue storage facility, improve the bulk handling facilities by extending the ramp, landscape the area and add a parking area at the south-east end of the facility. These construction activities will include excavation, grading, filling, compaction of soils, and trenching. If the soil at the site is found to be unsuitable for use as fill for the proposed construction, suitable fill material may have to be imported from an outside source. Such activities may result in the soil being displaced, compacted, and covered over by pavement, building, and other improvements. However, the facility is in an area of industrial use and the soil has previously been displace and otherwise disturbed. In addition the overcoveing of soil by pavement will allow for control of storm water runoff from the site and help prevent contamination of the soil by heavy metals and organic compounds during the operation of the facility. The project will not have a significant adverse impact.

Project Operation

Based on the historic seismic record, it is highly probable that the Los Angeles Harbor area will be affected by future earthquakes. Present evidence indicates that damaging earthquakes will likely occur on or near recognized Quaternary faults that have shown evidence of geologically recent activity (Yerkes, 1985). Seismic shaking that could result in liquefaction, settlement, slope failure, or surface cracks in Berths 210-211 has a relatively high probability of occurrence, while potential ground rupture effects are limited to the area immediately surrounding the Palos Verdes Fault and possibly around the THUMS-Huntington Beach Fault.

Facilities on Berths 210-211 would be susceptible to damage from a local or regional earthquake if liquefaction of the fill were to occur. Three conditions must exist before liquefaction can occur: (1) the presence of unconsolidated fill material, prone to liquefaction; (2) saturated conditions; and (3) cyclic shaking associated with moderate to large earthquakes (magnitude 5 or greater). The potential for liquefaction of hydraulic fills in the project area under earthquake shaking has been studied by Pyke, Knupple, and Lee (1978), who concluded that the probability of major liquefaction of the fills within the useful life of most Port facilities is somewhat less than 50 percent. Studies by Harding Lawson Associates (1989) have also suggested the likelihood of liquefaction due to certain seismic events at specific Port locations. In view of the potential for seismic activity along the Newport-Inglewood Fault Zone, the San Andreas Fault, and the Palos Verdes Fault, cyclic shaking is likely to occur during a moderate (nearby) or large (distant) earthquake. Any resulting liquefaction and ensuing ground failure could cause injuries at and major damage to the HNPC facility. Therefore, the potential impacts from liquefaction and ensuing ground failure within the Port should therefore be considered significant.

Although new facilities will incorporate earthquake resistant designs as required by existing Federal, State and Local codes, the seismic hazards related to future earthquake activity in the region represent an unavoidable significant adverse impacts for the project.

Since the HNPC facility is located on the northern margin of Terminal Island at an elevation of between 7 to 13 feet above mean sea level, and given the great distance between the site and the

tectonic environment required to produce tsunamigenic earthquakes, these types of seismic hazards are insignificant at the HNPC facility.

Groundwater cleanup operations at the facility could withdraw moderate to substantial volumes of water from the site during the remediation activities. Although this dewatering could cause subsidence, it is believed that the volume of water withdrawn will be too small to impact fill material. Thus, the project impact is insignificant in this respect.

Accumulation of scrap which is mishandled during shiploading activities has the potential for local impacts to channel bottom topography. HNPC has recently improved the systems designed to catch falling scrap, and has largely eliminated the problem.

Maintenance dredging of marine sediment adjacent to Berths 210-211 would result in minor alterations which would bring the sea floor topography back to the original design for the wharf. The volume of materials removed would be insignificant when compared to the volume of materials removed due to ongoing dredging of the entire Cerritos Channel for berth-access purposes.

3.1.3 Cumulative Impacts

Lease renewal and continued use of Berths 210-211 and the near-berth area, and other projects in the region to be developed during the lease period, would not have any cumulative impact on the probability of occurrence for geologic hazards such as earthquakes or flooding in the region. The presence of these facilities would only serve to increase the number of structures in the harbor that could be affected by such geologic hazards; however, this increase would be very small relative to the total number of new structures proposed for the area in the 2020 Plan and other potential local developments.

3.1.4 Mitigation Measures

There are no mitigation measures available beyond those required by federal, state, and local building codes.

3.1.4.1 Recommended Mitigation Measures

None required.

3.1.4.2 Impacts Mitigated to Insignificance

By incorporating earthquake resistant design into newly engineered facilities, adverse impacts from future seismic activity can be reduced; but for infrequent major or great earthquakes, impacts would remain significant.

3.1.4.3 Unavoidable Significant Adverse Impacts

The seismic hazards related to future earthquake activity, particularly strong ground shaking in the region, represent an unavoidable significant adverse impact to future development for the Berths 210-211 area.

3.1.4.4 Mitigation Monitoring Program

None required.

3.2 SOIL AND GROUNDWATER

3.2.1 Setting

The HNPC facility dismantles, stockpiles, and recycles a variety of ferrous and non-ferrous materials, such as automobiles, engine blocks, metal turnings, storage tanks, appliances, pipe, fencing, and structural steel. Some materials undergo only sorting and piling, while other materials are crushed, shredded, or sheared into pieces of manageable size for transport. In some instances, the nature of the processing on-site leads to localized areas of contamination associated with specific materials (such as heavy metals and PCBs). For example, metal turnings that might contain cutting oil residues are piled near the turnings crusher for processing; engine blocks with crankcase oil residue are piled in a localized area; and oversized material such as pipes, plates and structural steel, that might also contain oily residues are piled for processing near the Harris shear (see Figure 1.1-3). Other than these relatively consistent uses of site surface area, most of the metal piles are frequently relocated and consolidated to allow for maximum use of the site area.

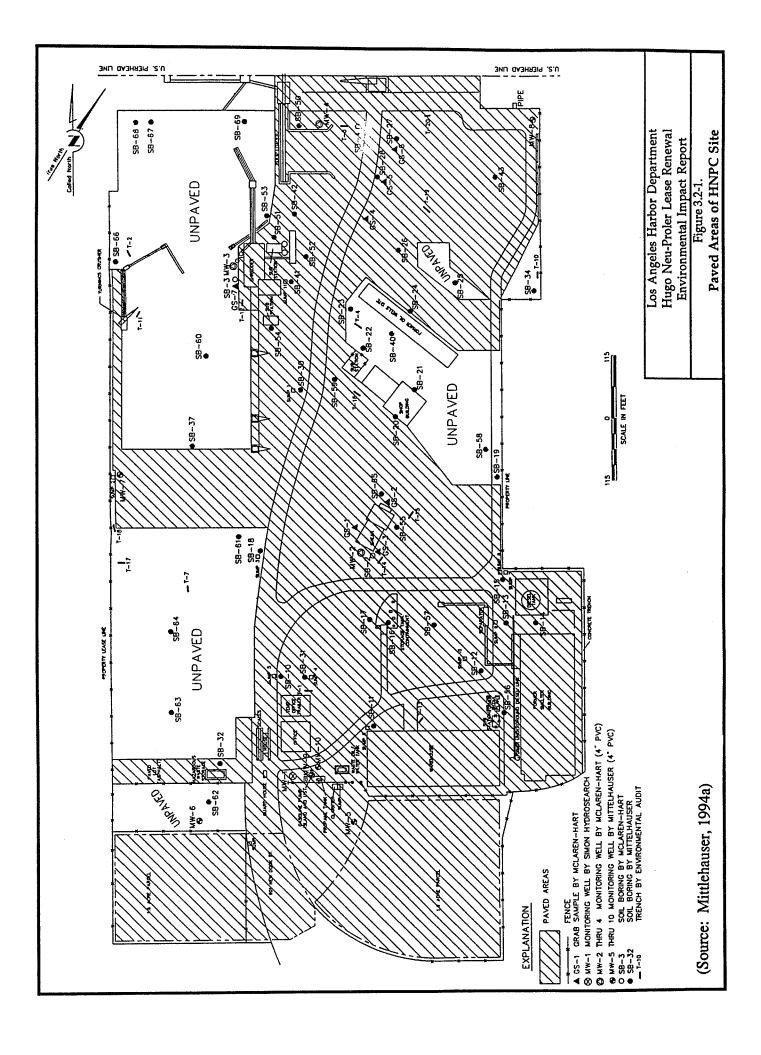
Concrete pavement of portions of the HNPC site has been added over the past thirty years and, at present, the site is approximately 60 percent paved (Figure 3.2-1). The following sections describe the groundwater and soil setting.

3.2.1.1 Groundwater Setting

A series of groundwater aquifers exist within the geologic section that underlies the Hugo Neu-Proler facility. The Gaspur aquifer is the closest aquifer to the ground surface at approximately 90 feet below mean sea level. The Gaspur aquifer is underlain by the Gage aquifer, 150 feet below mean sea level, which in turn is underlain by the Lynwood aquifer at 225 feet and the Silverado aquifer at 685 feet, (California Department of Water Resources, 1961). The nearest active water wells that make use of these aquifers are operated by Texaco Oil Company 2.2 miles to the north and by Southern California Edison 2.8 miles to the northeast. Both draw water for industrial purposes from the Silverado aquifer. The nearest water wells for human consumption draw water from the Lynwood and Silverado aquifers in Lomita 3 miles to the north and were last pumped for drinking water in September, 1980. They are no longer active. Groundwater within the aquifers lying beneath the site is non-potable and considered unusable as a fresh water source. No known operational groundwater supply wells are present south of the Dominguez Gap Barrier, which is a line of freshwater injection wells located approximately 4 miles north of the site. These wells were emplaced in an effort to control the sea water intrusion that has occurred along much of this coastal area. It is unlikely that the deeper aquifers could be contaminated through migration of on-site contaminated soil because of the presence of largely impermeable strata separating each aquifer.

Site specific hydrogeological conditions were reviewed by Simon Hydro-Search (1993). Information from that report is summarized in the following section.

The depth to groundwater is seven to ten feet below ground surface (bgs) at the HNPC facility. The groundwater gradient and flow direction were documented during a 71-hour tidal study performed at the site (Simon Hydro-Search 1993). The results of the investigation revealed relatively low mean hydraulic gradients ranging from 0.00012 to 0.00068 ft./ft. across the site. Based on the 71-Hour Mean Water Elevation, the mean groundwater flow direction is northwest, toward the Los Angeles Harbor.



Based upon a review of the borehole logs of four pump test wells (MW-1 through MW-4; Figure 3.2-2) the soils beneath the site consist predominantly of sand to clayey silts, silts, and sands to a depth of approximately 31 feet bgs (Simon Hydro-Search 1993). A clay unit was inferred to occur at a depth 29 to 31 feet bgs at the MW-1 location based on the observation of clay cuttings which were wrapped on the lowermost auger flight from the soil boring for this monitoring well.

The HNPC facility is situated along the northern perimeter of Terminal Island in an active oil producing area. The site is located on a man-made fill area consisting of dredge sediments from the Los Angeles Harbor. The project site and adjacent properties have been used for industrial scrap metal operations for approximately thirty years.

Site Groundwater Contamination

A free phase product lens, characterized as a weathered diesel fuel, has been identified beneath a gasoline storage and dispensing area (Figure 3.2-3) and an adjacent warehouse building at the facility.

Free phase product has been observed in piezometers WP3 and WP5 and wells B1, B2, and B13 (Figure 3.2-3). Free product is present as a sheen in piezometers WP2 and WP4, as noted by slight discoloration's in the product paste used to gauge these wells. Product has not been encountered in piezometers WP1, WP6, and WP7. Based upon this information, free phase product is present in the subsurface at least 30 feet west and 110 feet east of the dispenser island. The extent of the free phase product plume has not been fully defined to the plant east, south, and north (Simon Hydro-Search 1993).

Analytical results of a product sample were indicative of a medium boiling point petroleum product, such as diesel fuel. The specific gravity for the free product sample collected was reported to be 52.44 pounds per cubic foot, which corresponds to the specific gravity of diesel fuel. The free product in the fuel dispenser area apparently resulted from a leak in an underground diesel pipeline which connected the aboveground diesel storage tank to the former remote diesel fuel dispenser near the present gasoline island (Mittelhauser 1993). The leak has since been repaired (A. Chater, personal communication, 1994).

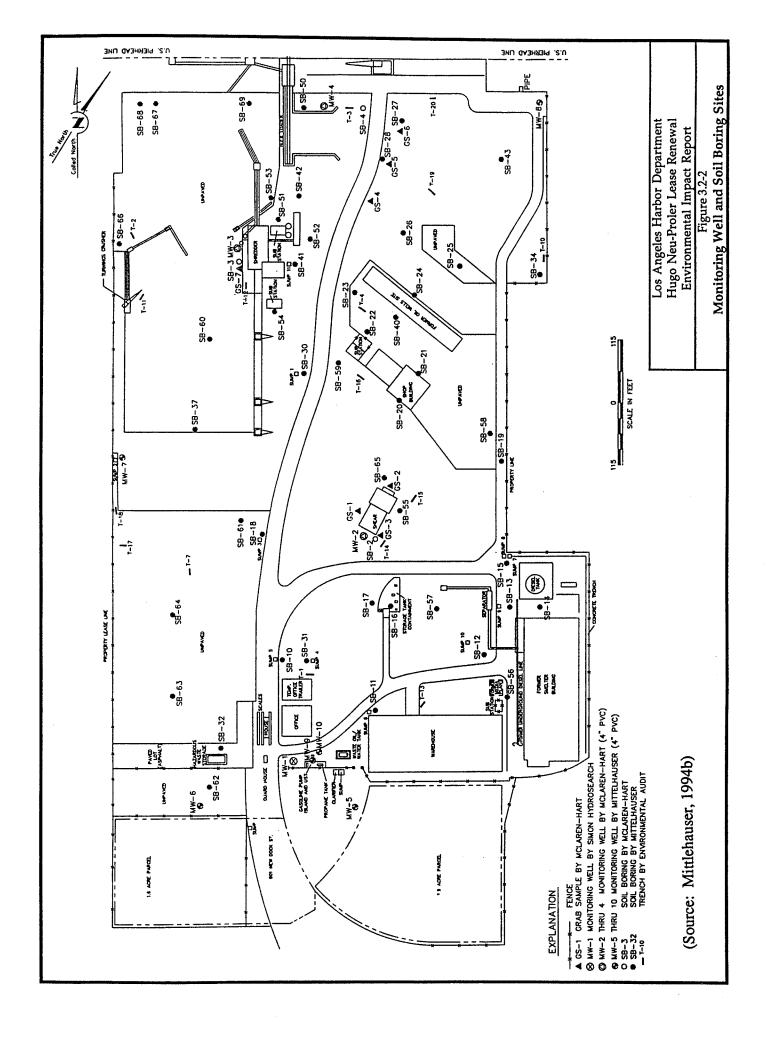
A free phase product recovery system was installed in March 1991 at the site to initiate recovery of the free phase product under the supervision of the RWQCB. In August 1992, HNPC personnel improved the system to enhance free phase product recovery. Approximately 2,800 gallons of diesel fuel product have been recovered by the system to date (A. Chater, personal communication, 1994).

Based on the hydraulic conductivity and the range of hydraulic gradients, the estimated range of groundwater velocity is 0.15 to 0.84 ft./year. Thus, the potential for significant migration of the free product and any dissolved constituents by advection appears to be very small (Simon Hydro-Search 1993).

The RWQCB has approved the "Free Phase Hydrocarbons Investigation Workplan" submitted by HNPC in October, 1994. This plan is intended to assess the extent of the free phase prior to submission and approval of a Remedial Action Plan (RAP) for groundwater cleanup.

Site Groundwater Quality

A groundwater sample collected from MW-1 provides site groundwater quality for comparison with drinking water standards (Simon Hydro-Search 1993). The general minerals analysis (Table 3.2-1) indicates that the water has a total dissolved solids (TDS) content of 3,100 milligrams per



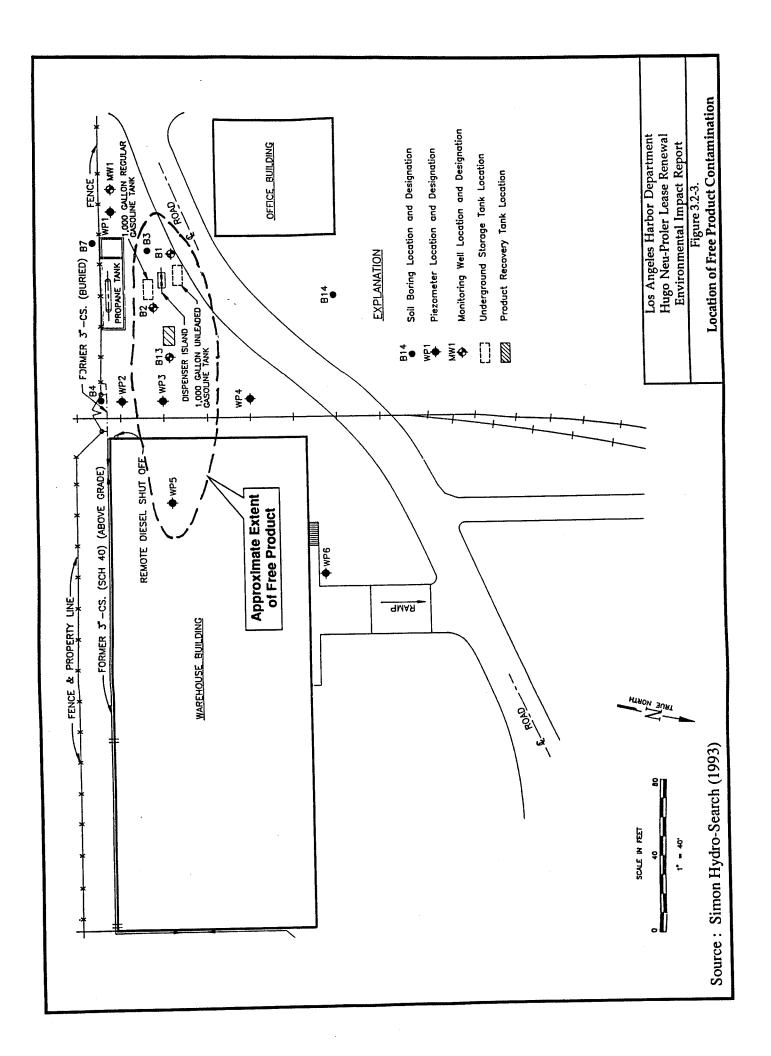


Table 3.2-1. Site groundwater quality at monitoring well MW-1, drinking water standards, and typical sea water composition (Source: Simon Hydro-Search 1993)

Groundwater Constituent	MW-1 Groundwater Concentration (mg/l)	State of EPA Drinking Water MCLs (mg/l)*	Typical Sea Water Concentration (mg/l)
Bicarbonate, as CaCO ₃	800	NA	140
Bromide Chloride Sulfate Calcium Magnesium Sodium Potassium Silica Total Dissolved Solids	NA 1,000 480 130 110 840 62 13 3,100	NA 250 250 NA NA NA NA NA NA S00	65 19,000 2,690 400 1,300 10,500 380 6 35,000

MCL = Maximum Contaminant Level

NA = Not Available

mg/l = milligrams per liter

^{*} Source: State of California, Regional Water Quality Control Board, 1989, The Designated Level Methodology For Waste Classification and Cleanup Level Determination.

liter (mg/l). In general, water containing a TDS concentration in excess of 500 mg/l is considered non-potable (California Regional Water Quality Control Board, RWQCB, 1989). In addition, the chloride and sulfate concentrations exceed the recommended guidelines established by EPA and State of California for consumptive use.

Mittelhauser (1994a) summarized the previous findings of the major investigations of chemical contamination of site groundwater, and conducted additional water sample analysis from eight monitoring wells. Tables 3.2-2 and 3.2-3 provide results of analysis for organic compounds and metals, respectively. Mittelhauser concluded groundwater has not been impacted by operations on the site other than the diesel leak described above. No non-aqueous phase liquid was observed in groundwater monitoring wells except in the areas of the gasoline underground storage tanks and dispensing island. Minor organics were found in the groundwater, but the concentrations were not considered a threat to the environment. No evidence of petroleum hydrocarbons found in the subsurface soil samples were found in the groundwater. Metals were found only in minor concentrations, well below the maximum concentration limits for drinking water.

3.2.1.2 Soil Setting

The general soil conditions of the site and regional area have been described in Section 3.1 Geology. The following section focuses on soil contamination which is present on the HNPC site.

Contamination of soils at HNPC has been the subject of several site investigations. Site investigations are summarized in Table 3.2-4. Mittelhauser (1994b) reviewed results of site investigations and identified areas of potential contamination.

Mittelhauser (1994a) summarized the previous findings of the major investigations of chemical contamination of site soils, conducted additional site sampling investigations, and completed a feasibility study for remediation of the site. Vertical extent of petroleum hydrocarbons and metals present in soil at HNPC are provided in Tables 3.2-5 and 3.2-6, respectively. Mittelhauser (1994b) concluded these data indicate a pattern of relatively homogeneous metals contamination in the top 2 feet of soil, which might be considered a "mixing zone" due to the type of work activities conducted on site. Petroleum hydrocarbons are present only in localized areas which are consistent with reported storage areas for processing of metal turnings, oversized materials, and engine blocks. Distinctive zones of contamination with most metals are not apparent, probably due to the constant relocation of the scrap piles throughout the site.

Data presented by Mittelhauser (1994b) also indicates metal and petroleum hydrocarbon contaminants are found under the paved areas of the site as well as the unpaved areas, and that elevated concentrations of contamination are present in some areas to a depth of 4-6 feet.

3.2.2 Impacts

3.2.2.1 Significance Criteria

Impacts resulting from project construction or operation would be considered significant if one or more of the following situations occur:

 Alteration in the rate or direction of groundwater flow that results in off-site migration of contaminated groundwater to harbor waters.

Table 3.2-2. Summary of Organic Compounds in Groundwater Samples at Hugo Neu-Proler (Source: Mittlehauser, 1994b)

Detection	Ě			8	200	200	2000		900	9000	0.00	0.005	0,00	2000	97.0				0.00005	0.00005				9000	900	3				
	MW-10			•																										1
	MM-9			•																										
	MW-8	•		Q	Q	Q	2		2	Ş	2	2	2	2	2				2	9				Ş	2 5	2			,	,,,
	MW-7			2	2	2	QV		2	2	Q	2	9	2	0.005		Q3		FT	2			ED	9	2 5	2			•	9,
	MW-6			2	2	2	Q		2	2	S	Q		0.250	2		OT DETECT		2	2			OT DETECT	200	80.0	2		OT DETECT		9.7
	MW-5			2	S	2	Q		9	QN	Q	Q		0.085	2		ALL OTHER ANALYTES NOT DETECTED		2	Ş			ALL OTHER ANALYTES NOT DETECTED	3	90.0	2		ALL OTHER ANALYTES NOT DETECTED	-	7.7
	MW-4			2	2	2	2		QN	2	S	QN		2	Q		ALL OTHER		2	TR			ALL OTHER	1	2	2		ALL OTHER		7.2
	MW-3			Q	2	Q	8		Q	2	8	Q		2	Q				2	2				!	2	0.005				4.4
	MW-2			Q	Q	Ş	2		2	2	2	QV		Ş	2				2	2				ļ	2	Ş				7:2
	MW-1			S	Ş	Ş	2		2	2	2	Q		2	ON				0.00008	Q					2	2				7.3
	Concentration			low	l'om	l'ou	mo/l		ma/l	ma/l	1/00	l/gm		_∏gш	l/gm				l/om	l/ou					l/ge	ľ/gm				
Analytical Method	and i aboratory Analyte		EPA Method R015-III	edices	S TOOLS	Piesei C	MotorOil	EPA Method 8240	Benzene	Ethylhenzene	Toliana	Total Xvienes		Acetone	cis 1.2-Dichloroethene			EPA Wathout found	Aldrin	Calle BEC	Sella			EPA Method 6270	bis - (2 - Ethylhexyl) phthalate	Phenol				7

TR = Trace = slightly below or at detection limit EPA Method 8015 - modified tested for total petroleum hydrocarbons (TPH) using the standard indicated • MW = 9 and MW = 10 contain free = phase product and were not sampled.

Summary of Metals in Groundwater Samples at Hugo Neu-Proler, concentrations in ug/l. (Source: Mittlehauser, 1994b) Table 3.2-3.

되 999 2 2 9999 일 웊 9999 22222 2 9 9 99999 FR 999999 皇 S = **S** S S S S S S S 999999 2 999999 2 S S S S S S S S S S S S S S 999999 2 99 99999 999999 999999 32222222 222222 8222222 222222 02222222 99999 222222222 99999 99999 28222222 99 4 270 27 79 8 8 2 6010 5010 8 2222 5.2 86 5 5 999 2 2 皇 9999999 8 8 8 8 8 8 8 8 8 8 8 8 222222 QA/QC Sample Location Detection Limit MW-104 MW-101 MW-3 MW-5 MW-2 9-WW MW-7 MW-8 E0-1

MW-101 is a duplicate from MW-1 MW-104 is a duplicate from MW-4 EQ-1 through EQ-5 are equipment blanks and trip blank

Table 3.2-4. Summary of Soil and Groundwater Investigations at Hugo Neu-Proler

Date	Environmental Consultant	Nature of Investigation
July, 1990	Environmental Audit, Inc.	Determine Aroclor concentrations on surface materials located on the cement cap of the berth area.
March, 1991	Environmental Audit, Inc.	Five trenches were excavated on-site to determine soil contaminant concentrations in areas representative of the processes at Hugo Neu-Proler.
November, 1991	Environmental Audit, Inc.	Additional trench testing to further describe soil contamination concentrations.
April 1992	McLaren/Hart	Collection and analysis of soil and groundwater samples in support of development of the Remedial Action Plan
September, 1992	HNPC	Chemical analysis of sludge samples from seven sumps.
September, 1992	McLaren/Hart	Addendum to Remedial Action Workplan
November, 1992	McLaren/Hart	Amendment to Remedial Action Workplan
March, 1993	Mittelhauser Corp.	Supplemental site assessment. Summary of site information and identification of areas of potential contamination.
September, 1993	Simon Hydro-Search	Progress report on free phase hydrocarbon assessment and groundwater remediation.
October 1993	Mittelhauser Corp.	Collection and analysis of additional soil and groundwater samples in support of development of the Remedial Action Plan Feasibility Study
March, 1994	Mittelhauser Corp.	Site Characterization Report and Remedial
October, 1994	Mittelhauser Corp.	Action Plan Free phase hydrocarbon investigation workplan

Table 3.2-5. Vertical Extent of Petroleum Hydrocarbon Contamination in Site Soils (Source: Mittlehauser, 1994b)

DEPTH INTERVAL	
0 TO 2 FEET	
No. of Non Detects	15
No. of Detects	67
TPH Range, mg/kg	15 to 40,000
2 TO 4 FEET	
No. of Non Detects	42
No. of Detects	28
TPH Range, mg/kg	19 to 16,500
4 TO 6 FEET	
No. of Non Detects	. 8
No. of Detects	11
TPH Range, mg/kg	13 to 16,100
Over 6 Feet	
No. of Non Detects	48
No. of Detects	10
TPH Range, mg/kg	11 to 5,000

Table 3.2-6. Vertical Extent of Metal Contamination in Site Soils (Source: Mittlehauser, 1994b)

		1	т	Т-	т-	т—	т-	_	Υ-	Υ-		т-	_	_	1	_	т—	,	_
ZINC		c	88	15 - 26,600			0	7	14 - 17,600			0	24	13 - 7,450			0	25	15 - 792
NICKEL		0	88	5 - 4,020			0	77	4 - 510			0	24	3 - 181			0	57	4 49
MERCURY		28	88	.12-11			04	37	0.12-24.6			6	15	0.1-8.95			4	13	0.2-4.6
LEAD		6	77	009'6 - 2			23	R	1 - 4,300			9	18	2 - 8,440			21	82	1 - 66
COPPER		0	88	4 - 61,500*			4	73	4 - 8,190			2	. 22	5 - 9,140			9	51	2 - 130
CHROMIUM		0	98	4 - 2700			0	4	6 - 540			0	24	5 - 167			0	57	6 – 29
CADIUM		17	69	.29-97.1			\$	37	11-77			9	14	.3~58			49	8	.27 – 2.55
DEPTH INTERVAL	O TO 2 EEET	No. of Non Detects	No. of Detects	Contaminant Range, mg/kg		2 TO 4 FEET	No. of Non Detects	No. of Detects	Contaminant Range, mg/kg		4 TO 6 FEET	No. of Non Detects	No. of Detects	Contaminant Range, mg/kg		OVER 6 FEET	No. of Non Detects	No. of Detects	Contaminant Range, mg/kg

- Substantial changes in groundwater quantity and/or quality, either by direct additions or withdrawals or by puncture of an aquifer.
- Substantial changes in groundwater quantity that would affect public water supplies.
- There is a discharge that creates pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code.

3.2.2.2 Impact Analysis

Future activities at the property that have the potential for impacting site soils or groundwater are construction, operations, and remediation. Each of these activities are discussed below:

3.2.2.2.1 Project Construction

The proposed project includes site improvements such as storm water collection and treatment facilities, pavement of the entire surface, and remediation activities. Construction activities would occur during the first few years of the 27 year lease term, and involve individual intermittent activities lasting only a few days to five years, depending upon the specific action undertaken.

Many of the construction activities would require excavation of soils and possibly dewatering activities if construction below groundwater level is required. Excavation, soil disruption, soil compaction, backfilling, and dewatering activities associated with construction would be minor in scope. The amount of dewatering, if any, and associated discharge will be done in accordance with RWQCB direction and will not pollute or contaminate groundwater or surface waters. Soils above the threshold levels established by the RWQCB excavated during construction will be managed in accordance with the approved RAP. Project construction will not result in any significant impacts to soil or groundwater.

3.2.2.2. Project Operation

HNPC proposes to continue the operation of its scrap metal facility and undertake facility improvements to increase its scrap handling capacity. These ongoing and expanded operations have the potential of impacting the soil and groundwater at the site by the release of heavy metals, petroleum hydrocarbons, and organic chemicals into the environment. The storage of hazardous materials used in the operation of the facility will be in accordance with applicable federal, state, and local regulations. Adherence to these regulations will reduce the probability and severity of any release to soil and groundwater. Also, several facility improvements will lessen the impact of facility operations on the soil and groundwater. The handling and processing of scrap metals may release heavy metals, petroleum hydrocarbons, and organic chemical into the soil and groundwater at the site. Construction of concrete/asphalt pavement over the site, coupled with a storm water collection and treatment system, will prevent contact of these compounds with the soil and groundwater underlying the facility.

Petroleum fuels will continue to be stored at the facility. The current underground fuel storage tanks will be replaced with vaulted storage tanks. Leaks from these tanks could enter the soil and groundwater at the site and migrate into the surface waters of the harbor. This represents a potentially significant impact. HNPC will be required by LAHD to institute a source control program designed to prevent leaks from the vaulted tanks and eliminate any leaks that may occur from entering the soil and groundwater at the site. The source control program will include an mechanism for alerting operators to leakage from storage tanks before petroleum products can enter the soil or groundwater, require HNPC commit to an inspection schedule of the tanks to insure

their integrity, immediate repair of leaks, and other elements designed to reduce or prevent release of petroleum products into the soil or groundwater. Also, since the groundwater is connected to harbor waters, prevention of petroleum product from reaching groundwater will also protect harbor waters. The source control program will mitigate to insignificant the potential release of petroleum produces from the vaulted tanks into the soil and groundwater at the site and also harbor waters.

3.2.2.2.3 Remediation

Free-Product Recovery and Groundwater Remediation.

The ongoing recovery of the free-product is under the supervision of the RWQCB and will have a positive impact on soil and groundwater quality. Dissolved hydrocarbons in groundwater will also be addressed as part of the free-product recovery and soil remediation program (RWQCB, letter of November 18, 1994). The RWQCB will review the data on levels of dissolved contaminants in groundwater and determine the need for remediation of dissolved hydrocarbons. If required by RWQCB, a groundwater extraction system and treatment system will be installed to reduce dissolved contaminants to levels satisfactory to the RWQCB. All water extraction, treatment, and discharge activities will be regulated by the RWQCB. The extraction and treatment systems will be equipped with contaminant, spill prevention, and leak detection systems to prevent unauthorized release of contaminated groundwater. The remediation program will also comply with existing AQMD air quality regulations. Meeting the regulatory requirements of both the RWQCB and the AQMD will reduce any adverse impacts from this operation. There will be no significant adverse impact from the recovery of free product and groundwater remediation.

Soil Contamination

An objective of the proposed project is to remediate soil and groundwater contamination at the facility to acceptable regulatory levels. In a Memorandum of Understanding with the LAHD, HNPC has agreed to proceed with remediation of the site under the direction and oversight of the RWQCB to levels below: "(a) hazardous waste threshold levels as said defined under state and federal regulations, provided contamination levels in excess of said regulatory levels may be left on the premises if certified in writing by the California Department of Toxic Substances Control as being non-hazardous and (b) contamination levels that are demonstrated through a risk assessment process as part of a RAP, to protect human health and the environment consistent with Tidelands Trust purposes." Restoration and remediation of the site will be performed in accordance with a RAP to be approved by the RWQCB and the LAHD, and would be performed whether or not the lease is renewed for continued use of the site by HNPC.

Worst case construction impacts would involve the following:

- Soil contamination occurs at various depths throughout the site, but most of the
 contamination is concentrated in the upper 2 feet of the soil. Excavation and treatment or
 disposal of contaminated soil will take place in unpaved areas of the facility totaling
 approximately 300,000 square feet. This would result in the excavation of 25,000 tons of
 contaminated soil.
- For the approximately 650,000 square feet of the facility presently covered by pavement, the underlying soil will be tested during routine removal and replacement of the concrete pavement. Although some of the contaminated soil had been reportedly removed previous to paving, for evaluation of worst case remediation impact the soils are assumed to be contaminated down to an average depth of approximately 2 feet for the entire paved area. Remediation of the soils in the paved areas of the site would result in excavation and processing of approximately 40,000 tons of contaminated soil.

The excavated soil would be processed on-site through the scrap metal recovery units with in-line treatment capability to recover ferrous and non-ferrous metals. The following three options will be considered by HNPC in remediating the soil contamination:

- 1. Soil will be fixated through the in-line treatment system associated with the scrap metal recovery units using polysilicate treatment technology. The fixated soil will be sampled and stockpiled for on-site use as a base material. Excess fixated soil will be disposed of at a landfill. An application for a Waste Discharge Permit will be submitted to the RWQCB for review and approval.
- 2. Soil will be fixated through the in-line treatment system associated with the scrap metal recovery units using polysilicate treatment technology. The fixated soil will be sampled and stockpiled for disposal at a landfill. An application for Waste Discharge Permit will be submitted to the RWQCB for review and approval. Base material will be imported to offset soil which will be removed from the site and disposed of at a landfill. Base material will be placed in the excavations and compacted to a depth of 6 to 12 inches.
- 3. Soil from the scrap metal recovery units will be stockpiled for transportation and disposal at a landfill permitted to receive such material. Base material will be imported, placed in the excavations and compacted to a depth of 6 to 12 inches.

Field remediation construction will conform to traditional construction and materials handling equipment and procedures. Water sprays will be used for dust suppression.

Soils in the areas to be remediated and capped do not contain VOCs. Consequently, HNPC does not plan to submit an application to the South Coast Air Quality Management District for a Rule 1166 permit. If VOCs should be experienced during excavation of soils, excavation will be shut down and a Rule 1166 permit will be obtained.

Remediation Schedule

If the lease renewal is granted by the LAHD, the remediation will commence with the approval of the RAP. Much of the site is used to store incoming scrap metal and processed metal waiting to be loaded on ships. In order to remediate the soil at the site, HNPC will need to schedule their remediation activities in relation to the facility operations occurring at that time. However, remediation of the site will be completed within five years of the RAP approval and lease renewal. In the event the lease is not renewed, HNPC will begin site remediation after lease denial and RAP approval, with completion of remediation of the site within two years.

3.2.3 Cumulative Impacts

Of the related projects considered for analysis (see Table 2.2-1, Section 2.2), none are expected to have the potential for cumulative impacts to soil or groundwater resources.

3.2.4 Mitigation Measures

3.2.4.1 Recommended Mitigation Measures

Petroleum fuels storage at the site represent potentially significant impact. HNPC will be required by LAHD to institute a source control program designed to prevent leaks from the vaulted tanks and eliminate any leaks that may occur from entering the soil and groundwater at the site. The source control program will include an mechanism for alerting operators to leakage from storage

tanks before petroleum products can enter the soil or groundwater; require HNPC to commit to an inspection schedule of the tanks to insure their integrity, and immediate repair of leaks; and other elements designed to reduce or prevent release of petroleum products into the soil or groundwater. Also, since the groundwater is connected to harbor waters, prevention of petroleum products from reaching groundwater will also protect harbor waters. The source control program will mitigate to insignificant the potential release of petroleum produces from the vaulted tanks into the soil and groundwater at the site and also harbor waters.

3.2.4.2 Impacts Mitigated to Insignificance

Institution of a Source Control Program for the petroleum storage tanks on-site will reduce the potential impact of tank leaks to insignificant.

3.2.4.3 Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts.

3.2.4.4 Mitigation Monitoring Program

Potentially Significant Adverse Impact	Mitigation Measure	Significance After Mitigation	Monitoring Program Responsibility/ Report Recipient	Frequency/ Timing
Petroleum leaks to soil and groundwater.	Institute a Source Control Program requiring immediate leak detection, inspection, and maintenance of tanks to prevent leaks into soil and eventually groundwater.	Insignificant	HNPC/LAHD	Before lease to HNPC is renewed and annually during operation.

3.3 METEOROLOGY AND AIR QUALITY

3.3.1 Setting

The Hugo Neu-Proler Company (HNPC) project site is located in the Harbor District of the City of Los Angeles in the southwestern coastal area of the South Coast Air Basin (SCAB). The SCAB consists of the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The SCAB covers an area of approximately 6,000 square miles and is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego County line. The boundaries of the SCAB are shown in Figure 3.3-1.

Air quality in the immediate project area and surrounding regional environment would be affected by emissions from the construction and operation of the proposed action. General descriptions of the air quality resource and the potentially affected region of influence are provided in this section. Subsequent sections discuss the federal, state, and local regulatory requirements which must be met by the project, the existing climate, meteorology, and baseline air quality and emissions, the predicted impacts of the proposed action and alternatives, cumulative impacts with other projects in the area, and mitigation which may be employed to lessen the impacts.

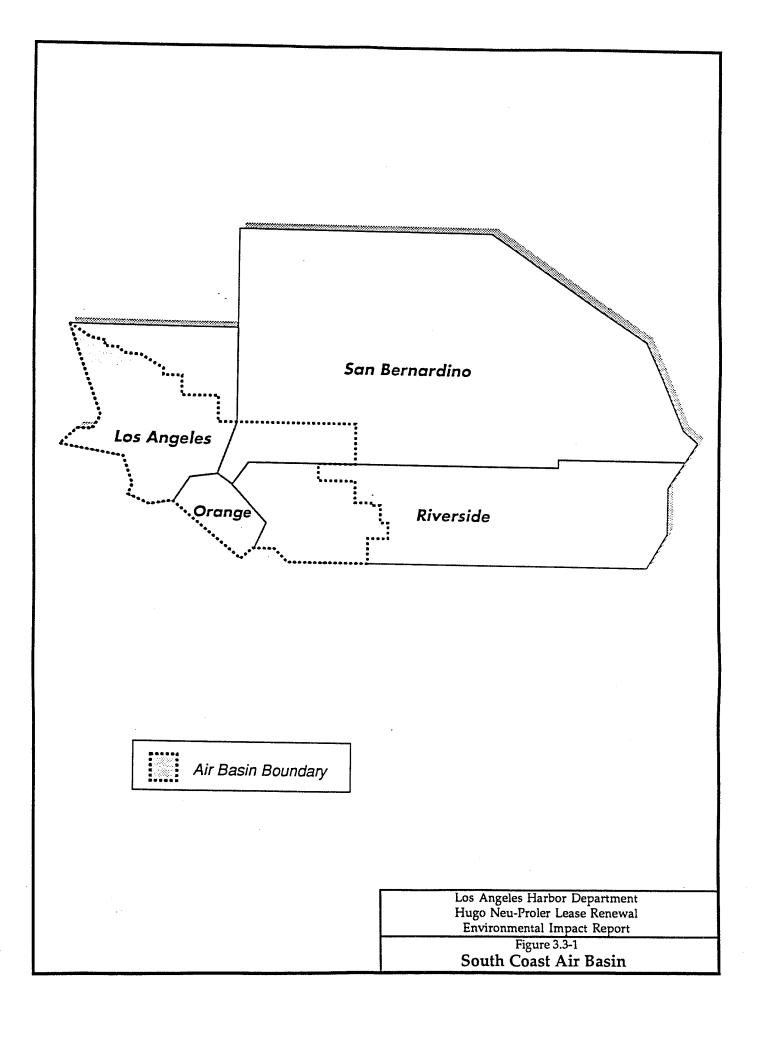
3.3.1.1 Climate and Meteorology

The climate of the region is classified as Mediterranean, characterized by cool, dry summers and mild, wet winters. The major influence on the regional climate is the Eastern Pacific High, a strong persistent anticyclone, and the moderating effects of the cool Pacific Ocean. Seasonal variations in the position and strength of the High are a key factor in the weather changes in the area.

The Eastern Pacific High attains its greatest strength and most northerly position during the summer, when it is centered west of Northern California. In this location, the High effectively shelters Southern California from the effects of North Pacific extra-tropical storm systems. Large scale atmospheric subsidence associated with the High produces an elevated temperature inversion along the West Coast. The base of this subsidence inversion is generally from 1,000 to 3,000 feet above mean sea level during the summer. Vertical mixing is often limited to the base of the inversion, and air pollutants are trapped in the lower atmosphere. The mountain ranges that rim the Los Angeles Basin constrain the horizontal movement of air and also inhibit the dispersion of air pollutants out of the region. These two factors are largely responsible for producing the high pollutant conditions experienced in the SCAB.

Marine air trapped below the base of the inversion is often condensed into fog and stratus clouds by the cool Pacific Ocean. This condition is typical of summertime weather in the San Pedro Bay region. Stratus clouds usually form offshore and move into the coastal plains and valleys during the evening hours. When the land heats up the following morning, the clouds burn off to the immediate coastline, only to reform again the following evening.

As winter approaches, the Eastern Pacific High begins to weaken and shift to the south, allowing migratory extra-tropical storm systems to pass through the region. These storms produce periods of cloudiness, strong shifting winds, and precipitation. The number of days with precipitation can vary substantially from year to year, producing a wide range of annual precipitation totals. Storm conditions are usually followed by periods of clear skies, cool temperatures, and gusty west to north winds as these systems move eastward. The nearest monitoring site for which meteorological and air quality data are available is the SCAQMD monitoring station located in north



Long Beach. Data obtained at the Long Beach monitoring station is considered representative for harbor area. Annual precipitation data from the Long Beach Airport, approximately seven miles northeast of the San Pedro Bay region, has ranged from 5 to 21 inches over the past 40 years of record, with an average of 11.54 inches. Monthly precipitation totals are given in Table 3.3-1, which shows the defined wet-dry seasonal pattern characteristic of coastal California locations. Generally, precipitation is lower along the coastline and increases inland towards higher terrain.

Table 3.3-1 Monthly Average Rainfall at Long Beach Airport; (1951-1986)

Month	Amount (inches)
January	2.98
February	2.50
March	1.69
April	0.83
May	0.16
June	0.04
July	0.00
August	0.09
September	0.16
October	0.15
November	1.36
December	1.58
Annual	11.54

Source: NOAA 1987.

Although most of the precipitation in the region is produced by winter storms from the North Pacific, summer rainfall from tropical sources can also occur. This precipitation is usually adverted into the region from continental Mexico or tropical storms off the west coast of Mexico. However, precipitation from tropical air masses is infrequent and usually negligible.

The average high and low temperatures at the Long Beach Airport in July are 83.0°F and 62.6°F, respectively. January average high and low temperatures are 66.0°F and 44.3°F. Extreme high and low temperatures recorded from 1951 through 1986 were 111.0°F and 25.0°F, respectively (NOAA 1987). Temperatures in the San Pedro Bay region are generally less extreme, due to the moderating effect of the ocean. The proximity of the Eastern Pacific High and a thermal low pressure system in the interior desert region to the east produces a general westerly, onshore air flow in the region for most of the year. The high frequency of southwest to northwest sea breezes usually occurs during the daytime for most of the year and transports air pollutants away from the coast toward the interior regions in the afternoon hours. Easterly winds are attributed to nocturnal and wintertime land breezes. These land breezes may extend many miles offshore during the colder months of the year until daytime heating reverses the flow back onshore. High pollutant impacts can occur during these conditions when land breezes transport onshore emissions over the ocean, then return them with the onset of the sea breeze to recombine with local emissions. This "sloshing" mechanism is known to produce high ozone concentrations in the SCAB during the warmer months of the year.

During the fall and winter months, the Eastern Pacific High can combine with high pressure over the continent to produce light winds and extended inversion conditions in the region. These stagnant atmospheric conditions often result in adverse pollutant concentrations in the SCAB. In the Long Beach area, wind speed averages 6.3 miles per hour, with relatively little seasonal variation. The dominant daily wind pattern is a daytime sea breeze and a nighttime land breeze. A wind rose is shown in Figure 3.3-2. The daily cycle of wind is broken only infrequently by winter storms and strong northeasterly winds originating in the Mojave and Colorado Deserts and the

Great Basin east of the SCAB. These winds, known as the Santa Ana winds, can reach speeds in excess of 50 miles per hour.

3.3.1.2 Ambient Air Quality

Air quality at a given location can be described by the concentration of various pollutants in the atmosphere. Units of concentration are generally expressed in parts per million (ppm) or micrograms per cubic meter (ug/m³). The significance of a pollutant concentration is determined by comparing the concentration to an appropriate federal and/or state ambient air quality standard. The standards represent the allowable atmospheric concentrations at which the public health and welfare are protected and include a reasonable margin of safety to protect the more sensitive individuals in the population. Federal standards, established by the EPA, are termed the National Ambient Air Quality Standards (NAAQS). The NAAQS are defined as the maximum acceptable concentrations that may not be exceeded more than once per year, except the annual standards, which may never be exceeded. The state standards, established by the California Air Resources Board (ARB), are termed the California Ambient Air Quality Standards (CAAQS). The CAAQS are defined as the maximum acceptable pollutant concentrations that are not to be equaled or exceeded. Federal and/or state ambient air quality standards are presented in Table 3.3-2. The criteria pollutants considered in this EIR are ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter smaller than 10 microns in diameter (PM₁₀).

The EPA has designated all areas of the United States as having air quality better than (attainment) or worse than (non-attainment) the NAAQS. A non-attainment designation means that a primary NAAQS has been exceeded more than three discontinuous times in three years in a given area. Pollutants in an area are often designated as unclassified when there is a lack of data for the EPA to form a basis of attainment status. The ARB also designates areas of the state as either in attainment or non-attainment of the CAAQS. An area is in non-attainment if the CAAQS has been exceeded more than once in three years. At the present time, the SCAB in which the proposed project is located, is in "severe" non-attainment for the CAAQS for O₃, NO₂, and CO, and non-attainment for the CAAQS for PM₁₀. It is also in "severe" non-attainment for the NAAQS for NO₂ and PM₁₀. The SCAB is in attainment for both the NAAQS and CAAQS for SO₂ (SCAQMD 1991).

Maximum pollutant concentrations measured at various monitoring stations within the SCAB from 1987 through 1991 are used to characterize the baseline air quality of the San Pedro Bay area. The SCAQMD north Long Beach location is the closest monitoring station to the Port of Los Angeles, located approximately eight miles to the north, and provides data most representative of conditions in the project area. Maximum pollutant concentrations are shown in Table 3.3-3 to show conditions in the nearby area of the basin. Generally, concentrations of photochemical smog, or O₃, are highest during the summer months and coincide with periods of maximum solar insolation. Inert pollutant concentrations (those criteria pollutants other than O₃) tend to be the greatest during the winter months and are a product of light wind conditions and surface-based temperature inversions that are frequent during that time of year.

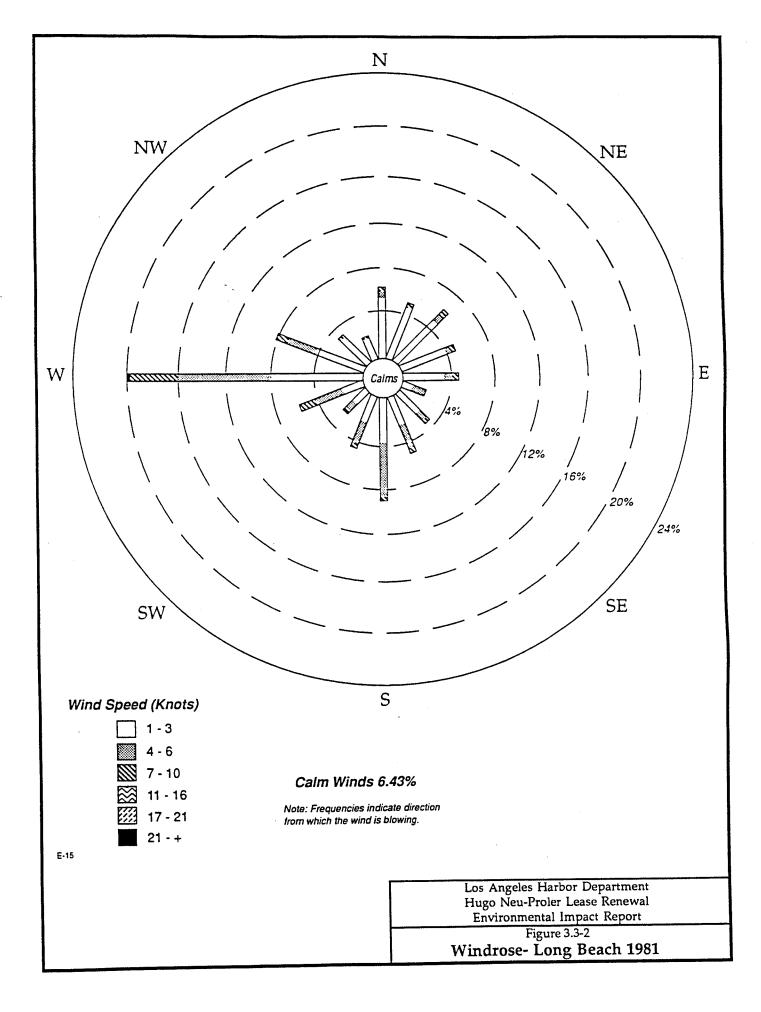


Table 3.3-2 National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National	Standards	Relevant Effects
		Concen- tration	Primary	Secondary	
Ozone	1 hour	0.09 ppm (180 ug/m3)	0.12 ppm (235 ug/m3)	Same as Primary Std.	High concentrations can directly affect lungs, causing irritation. Common effects are damage to vegetation and cracking of untreated rubber.
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	Same as Primary Std.	Interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.
	1 hour	20 ppm (23 mg/m ³)	0.09 ppm (40 mg/m ³)		
Nitrogen Dioxide	Annual Average	***	0.053 ppm (100 ug/m3)	Same as Primary Std.	Irritating to eyes and respiratory tract. Colors atmosphere reddish brown.
	1 hour	0.25 ppm (470 ug/m3)			_
Sulfur Dioxide	Annual Average		80 ug/m3 (0.14 ppm)		Irritates upper respiratory tract; injurious to lung tissue. Can yellow plant leaves, destructive to marble, iron and steel. Limits visibility and reduces sunlight.
	24 hour	0.05 ppm (131 ug/m3)	365 ug/m3 (0.14 ppm)		·
	3 hour			1300 ug/m3) (0.5 ppm)	
	1 hour	0.25 ppm (655 ug/m3)	es su		
Suspended Particulate Matter (PM ₁₀)	Annual Geometric Mean	30 ug/m3			Irritates eyes and respiratory tract. Absorbs sunlight, reducing amount of solar energy reaching the earth. Produces haze and limits visibility.
	24 hour	50 ug/m3	150 ug/m3	Same as Primary Std.	
	Annual Arithmetic Mean		50 ug/m3	Ý	
Sulfates	24 hour	25 ug/m3		44	Decreases ventilatory function; aggravates asthmatic symptoms and cardiopulmonary disease. Damages vegetation. Degrades visibility.
Lead	30 day Average	1.5 ug/m3			Increases body burden. Impairs blood formation and nerve conduction.
	Calendar Quarter		1.5 ug/m3	Same as Primary Std.	
Hydrogen Sulfide	1 hour	0.03 ppm (42 ug/m3)		**	Irritant to eyes, mucous membranes, and respiratory tract. Causes odors.
Vinyl Chloride (chloroethene)	24 hour	0.010 ppm (26 ug/m3)			Known human and animal carcinogen.
Visibility Reducing Particles	8 hour (10am-6pm) Pacific Standard Time	California: In su extinction of 0.2 relative humidity Measurement in a Method V.	3 per kilometer is less than 70	when the	Impairs visibility.

Table 3.3-3 Summary of Air Quality Data - Long Beach

Pollutant	1988	1989	1990	1991
Ozone (03)	2,00	2707		
Highest 1-hour average, ppm	0.16	0.16	0.12	0.11
No. of days exceeding	0.10	0.10	0.12	3 1 -
State standard	18	10	5	4
Federal standard	7	3	0	0
Nitrogen Dioxide (NO ₂)				
Highest 1-hour average, ppm	0.28	0.27	0.27	0.28
Annual average, ppm	0.047	0.0428	0.0393	0.0411
No. of days exceeding			_	
State standard	1	1	1	2 0
Federal standard	0	0	0	0
Carbon Monoxide (CO)	40.0	10.1	0.1	0.2
Highest 8-hour average, ppm	10.3	10.1	9.1 11	9.3 14
Highest 1-hour average, ppm	13	13	11	14
No. of days exceeding	2	2	1	1
State (8-hr) State (1-hr)	0 0	ő	Ô	Ô
Federal (8-hr)	1	2	ŏ	ŏ
Federal (1-hr)	ΙÔ	2 0	ŏ	Ö
Sulfur Dioxide (SO ₂)				
Highest 24-hour average, ppm	0.024	0.022	0.013	0.016
Highest 1-hour average, ppm	0.024	0.11	0.05	0.14
No. of days exceeding	0.05	0	5.55	
State (24-hr)	0	0	0	0
State (1-hr)	0	0	0	0
Federal (24-hr)	0	0	0	0
Sulfates				100
Highest 24-hour average, ug/m3	27.8	20	22.6	19.9
No. of days exceeding				
State standard	1	0	0	0
Fine Particulates (PM ₁₀)			110	004
Highest 24-hour average, ug/m3	120	119	119	92* 37.0*
Annual geometric, ug/m3	44.0*	46.5	40.6	40.0*
Annual arithmetic, ug/m3	48.2*	50.5	44.3	40.0
No. of samples exceeding	16	26	14	11
State standard Federal standard	0	0	0	0
*Less than 12 mo. of data, may not be	"		1	Ŭ
representative.				
Lead				
Highest monthly average, ug/m3	0.21	0.11	0.09	0.08
Highest quarterly average, ug/m3	0.15	0.08	0.07	0.07
No. of samples exceeding				_
State (30-day)	0	0	0	0
Federal (Quarterly)	0	0	0	0

Source: South Coast Air Quality Management District, Annual Air Quality Summary and California Air Resources Board, Annual Summary of California Air Quality Data

3.3.1.3 Applicable Rules and Regulations

Under the federal Clean Air Act, specific geographic areas are classified as either an "attainment" or "non-attainment" area for each pollutant based upon NAAQS criteria thresholds. States which have non-attainment areas are required to draft a State Implementation Plan (SIP) demonstrating how they will attain and maintain the NAAQS, through the imposition of air pollution control measures or emission limits. The SCAB is classified as a non-attainment area for ozone, carbon monoxide, nitrogen oxides, and fine particulate matter, and an attainment area for sulfur oxides and lead.

In California, the California Air Resources Board (CARB) regulates mobile emissions, oversees the activities of county Air Pollution Control Districts and regional Air Quality Management Districts, and is responsible for submitting the SIP for California to the U.S. Environmental Protection Agency (EPA). The South Coast Air Quality Management District (SCAQMD) is the regional regulatory authority over stationary source air pollution control, and jointly with the Southern California Association of Governments (SCAG), over air quality planning in the SCAB.

The SCAQMD prepared the 1994 Air Quality Management Plan (AQMP) for the SCAB. The 1994 AQMP establishes air pollution control strategies in an effort to set forth a comprehensive program to lead the South Coast Air Basin into compliance with all federal and state air quality standards. The 1994 AQMP, hereby incorporated by reference, is available for review at SCAQMD offices located at 21865 Copley Drive, Diamond Bar, California.

Under the federal Clean Air Act, the EPA is required to promulgate a Federal Implementation Plan (FIP) for a non-attainment area which fails to submit an adequate SIP. The EPA is currently in the process of developing a FIP to assist the SCAB in achieving the ozone and carbon monoxide NAAQS. It is anticipated that the proposed FIP will supplement the AQMP with federal measures designed to further reduce emissions in the Basin.

The SCAQMD is responsible for developing and enforcing air quality rules and regulations which implement the AQMP. Construction and/or operation of facilities within the SCAB are subject to a number of specific SCAQMD rules and regulations. These requirements include:

Regulation II: Regulation II contains rules that govern the issuance of permits to construct and operate air pollution sources.

<u>Regulation IV</u>: Regulation IV is a set of rules that control air pollution emission sources in a manner which forbids or limits certain actions and activities.

Regulation XI: Regulation XI contains source-specific control requirements that generally limit either volatile organic compounds or NO_X emissions, both of which react in the presence of sunlight to form ozone.

<u>Regulation XIII</u>: Regulation XIII, New Source Review, set forth pre-construction review requirements for new or modified emission sources to ensure that operation of such facilities does not interfere with progress toward attainment of the ambient air quality standards.

Regulation XIV: Regulation XIV is a set of rules which controls and/or limits emissions of toxic air contaminants.

<u>Regulation XV</u>: Regulation XV contains rules that are designed to reduce mobile emissions associated with indirect sources by reducing vehicle miles traveled and number of trips traveled.

<u>Regulation XVI</u>: Regulation XVI is intended to reduce motor vehicle reactive organic compound and nitrogen oxides exhaust emissions by issuing mobile source emission reduction credits in exchange for the scrapping of old, high emitting vehicles.

<u>Regulation XVII</u>: Regulation XVII, Prevention of Significant Deterioration, sets forth preconstruction review requirements for stationary sources to ensure that air quality in NAAQS attainment does not significantly deteriorate.

Regulation XXX: Regulation XXX, establishes a federally enforceable permit program to implement requirements of Title V of the Clean Air Act Amendments of 1990.

3.3.1.4 Existing Facility Emissions

Emissions associated with current activities at HNPC may be categorized into three types: fugitive, point, and mobile source exhaust emissions. Fugitive emissions result from scrap material storage and handling, on-site mobile equipment movement, truck traffic movements, and fuel storage. Point source emissions are generated by an auto shredder, a turnings crusher, and indirectly, from the electric utility power plant(s) supplying the facility electricity. Mobile source exhaust emissions include on-site mobile equipment, trucks transporting material to and from the site, and ships being loaded. Emissions from all these sources have been estimated for 1992 activity levels. Existing facility emissions estimates for fugitive emissions, point sources, and mobile sources are documented in Appendix B Air Quality Special Study.

Existing Fugitive Emissions

There are two types of fugitive emissions generated by site activities: particulate matter (PM and PM_{10}) and reactive organic gases (ROG). Fugitive emissions of particulate matter are generated by scrap material handling, truck traffic, on-site mobile equipment traffic, and shiploading using a bulkloader. The diesel and gasoline fuel storage tanks generate fugitive ROG emissions.

Material Storage. Fugitive emissions may be generated by scrap material storage piles, two underground gasoline storage tanks, and one aboveground diesel fuel storage tank. Emission estimates for the existing fuel storage tanks are calculated based on U.S. EPA (1985) AP-42 emission estimation methodology. Fugitive emissions from wind entrainment of rust and metallic residue from the scrap piles were approximated using emission factors for aggregate storage operations from SCAQMD (1993) CEOA Air Ouality Handbook.

Scrap Handling, Dumping, and Bulkloading. No specific emission factors are available for the scrap material handling source category. However, SCAQMD CEOA Air Quality Handbook and U.S. EPA AP-42 (EPA, 1985) contain emission estimation techniques for similar material handling operations. Aggregate (limestone) was selected as being most similar to the scrap material for purposes of fugitive emissions calculations. This is because of the size of the shredded material pieces, and because the rust content of scrap is between 1-2%, which is similar to silt content of limestone. Similar operations performed during aggregate handling and scrap material handling include movement with on-site mobile equipment, dumping into piles, and handling and bulkloading.

Scrap Delivery Trucks and On-Site Mobile Equipment. Currently, only trucks deliver materials to the site for processing and sale. The number of trucks (based on 1992 activity) is approximately 180 per day. These trucks are weighed at the entrance, drive to an inspection station, and then are directed to unload the material in an appropriate storage pile. Fugitive dust emissions from truck movements are generated by the tires on the pavement and dumping material into piles. Before the delivery trucks leave the facility they must pass through tire washing equipment designed to reduce or eliminate fugitive dust being deposited on the access road and streets as the trucks leave the area. HNPC also employs street sweepers to sweep the access road in an effort to reduce fugitive dust from delivery trucks. SCAQMD CEOA Air Ouality Handbook calculation methods were used to calculate these fugitive emissions.

On-site mobile equipment, including heavy-duty construction type equipment, is used to move the material. This equipment causes fugitive dust emissions from tires on the pavement. There may be many pieces of equipment operating at any one time, especially during shiploading activity. Existing fugitive emissions are summarized in Table 3.3-4.

Table 3.3-4 Summary of Existing HNPC Fugitive Emissions

	Emissior	ıs (lb/day)
Source	ROG	PM ₁₀
Wind Erosion from Storage Piles		6.0
Material Movement w/Heavy Duty Equipment (Dozers)		43.5
Material Dumping into Piles		3.7
Bulkloader		0.3
Truck and Mobile Equipment Dust		52
Heavy Duty Equipment Exhaust		94
Fuel Storage Tanks	0.4	
TOTAL	0.4	200

Existing Point Source Emissions

There are several point sources operating at the site. Exhaust emission rates from two cyclones on the auto shredder were obtained from HNPC annual emission reports submitted to the SCAQMD. The turnings crusher is also a point source. Emission rates associated with operation of the crusher were also obtained from the SCAQMD annual reports.

Emissions associated with the facility electricity consumption may also be considered point source emissions, even though the emission are generated off-site at a generating stations. Electricity is supplied to HNPC by Los Angeles Department of Water and Power (LADWP). Approximately 76.7% of LADWP's power is generated by facilities located outside the South Coast Air Basin. Therefore, only 23.3% of the emissions associated with electrical energy consumption at HNPC are considered as existing emissions.

Existing point source emission estimates are summarized in Table 3.3-5.

Table 3.3-5 Summary of Existing HNPC Point Source Emissions

Source			Em	issions (lb/c	day)	
	_	ROG	CO	NO_X	so_X	PM ₁₀
Auto Shredder/Cyclones (2) Turnings Crusher		292				2.0 0.6
Electricity		0.4	0.9	5.1	0.5	0.2
,	TOTAL	292	0.9	5.1	0.5	2.8

Existing Mobile Source Exhaust Emissions

Mobile source exhaust emissions are contributed by on-site mobile equipment, ships, delivery trucks, shipping trucks, and employee vehicles. Existing emission levels are based on site activity in 1992. Emissions were calculated using SCAQMD <u>CEOA Air Quality Handbook</u> methods and U.S. EPA <u>AP-42</u> methods. Existing mobile source exhaust emissions are summarized in Table 3.3-6.

Table 3.3-6 Summary of Existing HNPC Mobile Source Exhaust Emissions

Source		y)			
	ROG	co	$NO_{\mathbf{x}}$	$SO_{\mathbf{x}}$	PM ₁₀
On-site Mobile Equipment	156	1358	3151	276	190
Ship Emissions	77	264	703	1058	129
Trucks (Delivery)	36	382	106	9	13
Trucks (Shipping)	6	68	19	2	2
Employee Vehicles	14	151	11	1	1
TOTAL	289	1532	2373	1212	239

Summary of Emissions from Existing Operations

A summary of operational emissions from fugitive, point, and mobile source exhaust emissions based on site activities in 1992 is shown in Table 3.3-7.

Table 3.3-7 Summary of Emissions from Existing Operations

Source	Emissions (lb/day)					
	ROG	∞	NO _X	SO _x	PM ₁₀	
Fugitive Emissions Point Source Emissions Mobile Source Exhaust Emissions TOTAL	0.4				200	
	292	0.9	5.1	0.5	2.8	
	289	1532	2373	1212	239	
	581	1533	2378	1213	442	

Odors

The various emissions from the operation of the facility may have odors associated with them. The largest emission category is that of mobile sources, including on-site mobile equipment, trucks, autos, and ships. Most of these sources burn either diesel or bunker fuel resulting localized exhaust emissions with characteristic odors which is endemic to industrial areas.

In 1987, the AQMD cited HNPC for excessive odors resulting from fires within the auto shredder waste piles. Subsequently HNPC instituted procedures to prevent fires in the auto shredder waste piles and there have been no further citations from the AQMD.

3.3.2 Impacts

3.3.2.1 Significance Criteria

Criteria for determining the significance of air quality impacts are based on federal, state, and local air pollution standards and regulations. Impacts are considered to be significant if project emissions:

- Increase ambient pollutant levels from below the NAAQS and CAAQS to above these standards, or substantially contribute to an existing or projected air quality violation.
- Exceed the following SCAQMD daily CEQA significance thresholds:

Pollutant	Construction lb/day	Operation lb/day	
Carbon monoxide (CO)	550	550	
Sulfur dioxide (SO _X)	150	150	
Nitrogen oxides (NO _X)	100	55	
Particulates (PM ₁₀)	150	150	
Reactive organic gases (ROG)	75	55	

- Creates a CO Hotspot which exceeds the State 1-hour or 8-hour standard for CO. If the state CO standard is already exceeded, a substantial increase in CO would be considered significant.
- Project could create objectionable odors at nearby sensitive receptors, residential or sensitive commercial receptors.

3.3.2.2 Impact Analysis

The impacts of the proposed project on local and regional air quality are dependent upon emission increases or decreases attributable to the proposed project. An emissions analysis for the proposed construction activities, operations, and soil and groundwater remediation is presented in the following section. The emission sources and estimated air emissions from the proposed project's operational phase are then compared to the estimated emissions from HNPC's current operations.

3.3.2.2.1 Project Construction

The construction phase of the proposed action would last approximately five years. Construction activities will vary during that period according to the project element(s) being constructed. In general, construction activities begin during the first year, and new facilities construction will continue through the sixth year, as shown in Table 3.3-8.

Table 3.3-8 Project Schedule for Proposed Activities Involving Construction*

Project Activities	Estimated Starting Date*	Estimated Completion Date*	
Proposed Replacement or Upgrades			
Bulk Shiploading Ramp and Conveyor Extension	1	12	
Non-Ferrous Metal Recovery Equipment	12	18	
Ferrous and Non-Ferrous Metal Storage and Handling	1	9	
Equipment			
Diesel Fuel Storage Demolition and Replacement	2	9	
Gasoline Storage Demolition and Replacement	2	9	
Scales	1	12	
Proposed New Facilities			
Office Building and Landscaping	9	21	
Rail Access	3	15	
Storm Water Runoff Control and Treatment System	1	57	
Paving	1	57	
Noise Barriers	2	15	
Lighting of Storage and Loading Areas	3	24	
Perimeter and Bin Walls	2	15	

^{*} Estimated number of months following lease approval and execution.

Construction activities would involve the use of several pieces of HNPC's on-site mobile equipment, water trucks, haul trucks, backhoes, loaders, forklifts, cranes, and trucks. In addition to emissions from on-site mobile equipment exhaust, fugitive dust may result from construction activities. Construction personnel vehicles traveling to the facility also represent an additional emission source. In calculating worst case potential emissions from these sources, it was assumed that all equipment anticipated for use was actually operating on a single day, for 8 hours running time. Compliance with all existing applicable SCAQMD rules and regulations was assumed in development of the worst-case day construction emissions. Assumptions, emission factors, and references used in developing emission estimates are presented in Appendix B Air Quality Special Study.

Worst-case day construction emissions are summarized in Table 3.3-9. Construction emissions of CO, SO_x and PM_{10} on the worst-case day would not exceed the daily construction emission significance thresholds. NO_x and ROG emissions on the worst-case day during construction would exceed the daily emission significance thresholds and therefore are considered to have a significant impact on air quality. Construction activities are anticipated to occur intermittently over the six-year period. It is therefore unlikely that the worst-case day would actually ever occur. Construction emissions would be temporary and intermittent and would decrease after completion of each construction element, and normal operational emissions from the site would be reduced since the same equipment would be used for the construction activities.

Construction may create objectionable odors during certain activities (e.g. paving with asphalt or applying tar to roof of new buildings). These activities will be temporary in duration and, given the industrial nature of the surrounding areas, will be insignificant.

Table 3.3-9 Summary of Estimated Emissions from Proposed Construction Activity

			(lbs/day)		
Maximum Daily Emissions	ROG	CO	NO _x	$SO_{\mathbf{x}}$	PM ₁₀
On-Site Mobile Equipment Construction Employee Vehicle	359	382	840	71	52
Construction Employee Vehicle Exhaust	1.6	14.0	1.1	0.1	0.2
Fugitive Dust	-	_	-	-	14
Total	361	396	841	71	66
Significance Threshold	75	550	100	150	150

Remediation

An objective of the proposed project is to remediate soil and groundwater contamination at the facility to acceptable regulatory levels. Final remediation plans have not been approved; however worst case construction impacts described in Section 3.2 Soils and Groundwater would involve the following:

- Soil contamination occurs at various depths throughout the site, but most of the
 contamination is concentrated in the upper 2 feet of the soil. Excavation and treatment or
 disposal of contaminated soil will take place in unpaved areas of the facility totaling
 approximately 300,000 square feet. This would result in the excavation of 25,000 tons of
 contaminated soil.
- For the approximately 650,000 square feet of the facility presently covered by pavement, the underlying soil will be tested during routine removal and replacement of the concrete covering. Although some of the contaminated soil had been reportedly removed previous to paving, for evaluation of worst case remediation impact the soils are assumed to be contaminated down to an average depth of approximately 2 feet for the entire paved area. Remediation of the soils in the paved areas of the site would result in excavation and processing of approximately 40,000 tons of contaminated soil.

Remediation options include fixation of soil contaminants followed by (1) use of the fixated soil on-site or (2) disposal at a local landfill. A third option includes off-site disposal of contaminated soils at a permitted landfill.

Remediation of the site will be completed within five years. If 65,000 tons of soil were hauled from the site, approximately 2708 truck loads of 24 ton capacity would be required over the five year period, or approximately 540 truck loads per year (2 trucks per week day). Although these trucks would contribute to site emissions of criteria pollutants, they are insignificant when compared with the existing daily and annual truck deliveries to the site of 180 and 56,000, respectively.

The remediation activities are not anticipated to involve emissions of odorous compounds. Any odorous emissions which may be associated with the disturbance of contaminated soils during construction or soil remediation activities would be temporary and localized. The project is located in a highly industrialized area; therefore, impacts associated with odorous emissions generated during remediation activities would be considered insignificant.

3.3.2.2.2 Project Operation

Emissions associated with proposed project activities at HNPC will be from the same sources and activities as current emissions plus those from the proposed rail delivery of scrap to the site. Since the proposed project will allow HNPC to process and ship more material, the project will result in an increase above the existing emission levels. Future emissions are calculated by scaling up the current emission estimates to reflect increased material handling activity. Emissions from on-site activities which may increase due to handling increased material include: fugitive emissions from on-site truck traffic, material loading, and material moving; point source emissions from the auto shredder, crusher, and off-site electricity generation; mobile source exhaust emissions from the on-site heavy duty equipment (on an annual basis), transport trucks delivering material, employee vehicles, rail delivery of scrap, and ocean vessel operations during loading and transport of material within the South Coast Air Basin. Emissions from future activities were calculated using the same calculation methodology as used to calculate current emissions. Emission estimates for fugitive, point source, and mobile sources are documented in Appendix B Air Quality Special Study.

Fugitive Emissions

Material Storage. Materials stored include scrap material awaiting processing and shipping, and proposed aboveground gasoline and diesel fuel storage tanks. Emission estimates for the proposed fuel storage tanks include an increase in the amount of fuel consumed based on additional material handling activities by heavy duty equipment. Fugitive emissions from wind entrainment of rust and metallic residue from the scrap piles were assumed not to increase because the pile sizes are expected to remain the same. Table 3.3-10 summarizes emissions estimates from these fugitive emission sources.

Scrap Handling, Dumping, and Bulkloading. HNPC proposes to handle an increased quantity of scrap material after the project is implemented. Therefore, there would be an expected increase in the amount of emissions resulting from on-site material handling activities. Emission estimates from future activities were scaled up from the emissions from current activities by a factor corresponding to the increase in quantity of material handled. Table 3.3-10 includes these emissions estimates.

Scrap Delivery Trucks and On-site Mobile Equipment. Currently, only trucks deliver materials to the site for processing and sale. Based on 1992 data, the number of trucks is approximately 180 per day. It is estimated with the proposed increase in scrap handling capacity, approximately 301 trucks per day will deliver material. On-site trucks and mobile construction-type equipment is used to move the scrap material. Both trucks and mobile equipment cause fugitive dust emissions from tires on the pavement. It is anticipated that there will be an increase in fugitive dust emissions from these sources because there will more material delivered and handled. The increase is expected to be proportional to the increase in the number of trucks and the quantity of material handled. Estimated emissions from the scrap delivery trucks and on-site mobile equipment in the future is summarized in Table 3.3-10.

Table 3.3-10 Estimated Fugitive Emissions Based on Proposed Increase in Scrap Handling Capacity

_	Emissio	ns (lb/day)
Source	ROG	PM ₁₀
Wind Erosion from Storage Piles		6.0
Material Movement w/Heavy Duty Equipment (Dozers)		66.1
Material Dumping into Piles		5.6
Bulkloader		0.4
Truck and Mobile Equipment Dust		80
Fuel Storage Tanks	1.6	
TOTA	L 1.6	158.1

Point Source Emissions

The proposed increase in scrap handling capacity of HNPC will cause an increase in the emissions from the point sources at the facility. Electricity consumption is expected to increase as well as the quantity of material processed by the shredder. The turnings crusher will no longer be used and will be dismantled. Emissions were calculated the same as for current operational emissions, except that the quantity of material processed, and the amount of electricity consumed were increased in proportion to the proposed increase in material to be processed. Estimated point source emissions are summarized in Table 3.3-11.

Table 3.3-11 Estimated Point Source Emissions Based on Proposed Increase in Scrap Handling Capacity

Source	Emissions (lb/day)					
	•	ROG	CO	NO _x	$SO_{\mathbf{x}}$	PM ₁₀
Auto Shredder/Cyclones (2)		443				3.0
Electricity	_	0.1	1.0	5.6	0.6	0.2
	TOTAL	443	1.0	5.6	0.6	3.2

Mobile Source Exhaust Emissions

Mobile source exhaust emissions are contributed by on-site mobile equipment, ships, delivery trucks, employee vehicles, and proposed scrap delivery by rail. Maximum hourly and daily emissions from on-site mobile equipment are not expected to increase for the project because no new equipment is being purchased. However, the equipment may run for more days per year and, therefore, emissions total on an annual basis will increase, in proportion to the increase in fuel consumption. Emissions from the ships will increase because the number of shiploading days is expected to increase from 154 to 234 per year. HNPC estimates that the number of employees will increase from the current peak of 150 per day to 164 per day, with the number of vehicle trips per day increasing accordingly. The number of trucks delivering material is expected to increase from the 1992 average of 179 per day to approximately 300 per day.

The project includes the addition of a rail spur onto HNPC property. Emissions from locomotive switching operations were calculated using emission factors provided by the California Air Resources Board. HNPC anticipates that approximately 62 railcars will arrive per week (see Section 3.6 Transportation and Circulation). Since the rail spur can accommodate twelve rail cars, a switcher locomotive may travel to HNPC above five times a week or once per day. Exhaust emission estimates for all of these mobile sources are summarized in Table 3.3-12.

Table 3.3-12 Estimated Mobile Source Exhaust Emissions Based on Proposed Increase in Scrap Handling Capacity

			En	issions (lb/	'day)	
Source	•	ROG	CO	NO _X	SO _x	PM ₁₀
On-Site Mobile Equipment	· · · · · · · · · · · · · · · · · · ·	238	1014	2332	216	142
Ship Emissions		77	264	703	1058	129
Trucks (Delivery)		59	637	177	15	22
Trucks (Shipping)		2	17	5	0.4	1
Employee Vehicles		15	165	12	1	1
Locomotives		2.3	3.3	89	4.1	1.7
13000IIIOH VOS	TOTAL -	393	2100	3318	1295	297

Summary of Emissions from Proposed Project Operations

The calculated emissions for the proposed project on the worst case day, which is a shiploading day, are presented in Table 3.3-13 along with significance criteria for the project emissions. Emissions of ROG, CO, and NO_X, exceed the significance thresholds outlined in Section 3.3.2.1, above.

Table 3.3-13 Summary of Estimated Operational Emissions for Proposed Increase in Scrap Handling Capacity

	Emissions (lb/day)				
Source	ROG	CO	NO _x	SO _x	PM ₁₀
Fugitive Emissions	1.6				158
Point Source Emissions	443	1.0	5.6	0.6	3.2
Mobile Source Emissions	393	2100	3318	1295	297
Project Total Emissions	838	2101	3324	1296	458
Existing Total Emissions	581	1533	2378	1213	347
Increase in Emissions	257	568	946	83	111
Significance Thresholds	55	550	55	150	150

CO Hotspots

High concentrations of CO ("hotspots") can occur at intersections where traffic conditions cause traffic delays. A traffic analysis was completed for the project analyzed the anticipated traffic impacts for the proposed project (see Section 3.5 Transportation and Circulation). Peak hour traffic impacts were determined by comparing the incremental increase in volume to capacity ratios at study area intersections, and then comparing them to Los Angeles Harbor and Los Angeles Department of Transportation significance criteria. The analysis indicated the project would not have a significant impact at any of the study area intersections. In addition, the project's impacts on daily traffic volumes on each roadway link were evaluated, and were determined to increase the traffic volume by less than 3% on all roadways.

The traffic analysis also analyzed the impacts the project would have on rail service. The addition of rail access to the site would increase the number of railcars on the trains traveling between the Port and Downtown Los Angeles. The delay at grade crossings caused by the addition of up to 13 railcars was determined to average 23 seconds. This additional delay would not cause a substantial increase in emissions from the exhaust from vehicles waiting. Because the traffic analysis concluded that there would be no substantial affect on traffic volume, intersections, or delays at rail grade crossings, increases in roadside emissions of CO are not expected to have a significant impact on air quality in the study area.

Air Toxics

There will be an increase in particulate emissions during the operation of the proposed facility. An increase in metals and PCBs, which have been designated as carcinogenic air contaminants by the CARB, would be associated with the increase in particulate emissions. Regulations banning the production PCBs containing equipment will, over time, result in less PCBs entering the HNPC facility, and in turn, less PCBs associated with particulate emissions. An air toxic health risk assessment for the proposed project has been performed and is discussed in Section 3.7 Public Health and Safety.

Odors

The increased activity at the facility will lead to an increase in emission, and possibly odors. Any odors occurring would be intermittent in nature and typical of a highly industrialized area. The odor impacts associated with the operation of the facility are considered insignificant.

AQMP Consistency

The SCAQMD and SCAG included Port expansion plans and current activities in the emission inventory forecasts presented in the AQMP. Since HNPC was included in the current emission inventory and the proposed increase in capacity is anticipated by the Port expansion plans, the proposed project is consistent with the 1991 AQMP and should not interfere with the scheduled attainment of air quality standards in the region.

3.3.3 Cumulative Impacts

Cumulative impacts are produced by the aggregation of individual environmental impacts. They can result from the accumulation of impacts from a single project or from several projects. Projects that are planned or currently under development with the Port of Los Angeles area were considered in order to evaluate cumulative air quality impacts. These projects are briefly described in Table 2.2-1. Cumulative emissions from these projects have been determined to be insignificant.

All proposed projects which involve new or modified stationary sources which result in emission increases are subject to SCAQMD Regulation XIII, New Source Review. Emissions associated with these sources would be off-set by a factor of 20 percent greater than the net increase in emissions, thus having a beneficial impact on air quality in the region.

Future projects in the vicinity of the Port of Los Angeles will improve transportation infrastructure and help the South Coast Air Basin progress toward attainment of the ambient air quality standards. Intermodal container transfer facilities (ICTF), such as the Terminal Island Container Transfer Facility and Pier 300 rail facilities, the Alameda Corridor, grade separations, Port Access Demonstration Projects, and the Deep Draft Navigational Project have all been estimated to reduce air emissions in future years. Many of these projects have been identified in the 1991 AQMP as measures to reduce transportation and cargo handling emissions in the Port of Los Angeles region. Additionally, the Port of Los Angeles growth has been accounted for in the AQMP, which illustrates attainment of the ambient air quality standards. As a result, in future years, regional cumulative emissions are anticipated to decrease.

3.3.4 Mitigation Measures

3.3.4.1 Recommended Mitigation Measures

Project Construction

 ${
m NO_X}$ and ROG emissions on the worst-case day during construction would exceed the daily emission significance thresholds and therefore are considered to have a significant impact on air quality. Since construction activities will occur intermittently over a five-year period, it is unlikely that the worst-case day would actually ever occur. The following measures are recommended to reduce emissions during construction activities:

- · Properly tune and maintain all construction equipment.
- Minimize concurrent use of equipment during the peak construction hour (construction phasing).
- Encourage ridesharing and mass transit use among construction personnel.
- Encourage contractors to use low-NO_X engines, alternative fuels, and electrification, whenever feasible.

Project Operation

During project operation, emissions of ROG, CO, and NO_X exceed the significance thresholds outlined in Section 3.3.2.1. As shown on Table 3.3-13 the main sources of operational emissions occur from emissions from mobile sources, including, ships, trucks, and heavy duty material movement equipment. As diesel fuel is reformulated to decrease emissions from the combustion of fuel, a decrease in the total quantity of emissions from the heavy duty equipment and trucks may be expected. However, because the LAHD does not have the authority to regulate these sources, measures to reduce their emissions would be difficult to implement, enforce, and in some cases, would pose safety concerns within the Port's navigational waters. As a result, measures to reduce operational emissions focus on activities at the facility.

All feasible measures to limit operational emissions at the project site to the greatest possible extent have been incorporated into the proposed project. Best available control technology would be implemented on storage tanks, and remediation activities. Bulkloader modifications would increase vessel loading efficiency, thereby reducing berthing time of vessels and minimizing vessel

hotelling emissions.

When feasible, the following measures could be implemented on project operational sources to further reduce emissions:

- Operate HNPC facilities on a 24-hour schedule, thereby spreading emissions generated by support operations and transport of cargo over a greater time period and avoiding peak traffic hours.
- Encourage scheduling of fuel transport movement by truck for off-peak traffic hours, when feasible.
- Encourage use of low-NO_X engines, innovative technologies, and electrification of equipment when feasible and use these technologies as selection criteria for purchase of new equipment.

3.3.4.2 Impacts Mitigated to Insignificance

The impacts to air quality associated with project construction would be minimized through: maintaining equipment in proper tune, minimizing concurrent use of equipment during the peak construction hours, encouraging ridesharing and mass transit use among construction personnel, and encouraging contractors to use low-NO_X engines, alternative fuels, and electrification, whenever feasible. The impacts to air quality associated with project construction would be minimized through: operating HNPC facilities on a 24-hour schedule, scheduling of fuel transport movement by truck for off-peak traffic hours, and purchase and use of low-NO_X engines, innovative technologies, and electrification of equipment, where feasible. However, no additional feasible measures are available to further reduce emissions, and therefore operational impacts cannot be mitigated to insignificance.

3.3.4.3 Unavoidable Significant Adverse Impacts

ROG, CO, and NOx emissions from operation of the proposed project would result in unavoidable significant air quality impacts.

The creation of emissions during project construction and operation is unavoidable. While the use of control measures such as watering to control dust can greatly reduce the expected emissions, the scrap handling processes at the site will continue to generate emissions.

It is unlikely that the internal combustion engines that propel trucks, on-site mobile equipment, and marine vessels will be replaced with "non-polluting" power sources in the foreseeable future. While some reduction in emissions from these sources will occur as new design and fuel standards are imposed, the emissions will continue to be unavoidable. Methods of minimizing impacts, such as reducing the berthing time of vessels and therefore minimizing vessel hotelling emissions, can assist in reducing emissions, but cannot eliminate them.

3.3.4.4 Mitigation Monitoring Program

Potentially Significant Adverse Impact NOx and	Mitigation Measure Maintain equipment engines	Significance After Mitigation Significant	Monitoring Program Responsibility/Rep ort Recipient HNPC/LAHD	Frequency/ Timing At the beginning of construction
ROG emissions during construction	in proper tune in accordance with manufacturers specifications.			and annually thereafter.
COMBIN CONTON	Minimize concurrent use of construction equipment during the peak construction hour (construction phasing).	Significant	HNPC/LAHD	At the beginning of construction and annually thereafter.
	Encourage ridesharing and mass transit use among construction personnel.	Significant	HNPC/LAHD	At the beginning of construction and annually thereafter.
	Encourage tenant to use low emission engines, alternative fuels, and electrification whenever feasible	Significant	HNPC/LAHD	At the beginning of construction and annually thereafter.
	Schedule fuel truck deliveries for off-peak traffic hours, when feasible.	Significant	HNPC/LAHD	At the beginning of construction and annually thereafter.
NOx, ROG, and CO emissions during facility operation	Maintain equipment engines in proper tune in accordance with manufacturers specifications.	Significant	HNPC/LAHD	Annually
	When feasible, operate facility on a 24-hour schedule to spread emissions from support operations and transport of scrap over a greater time period and avoid peak traffic hours.	Significant	HNPC/LAHD	Annually
	Schedule fuel truck deliveries for off-peak traffic hours, when feasible.	Significant	HNPC/LAHD	Annually
	Encourage tenant to use low emission engines, alternative fuels, and electrification whenever feasible and use these criteria in the purchase of new equipment.	Significant	HNPC/LAHD	With purchase of major equipment

			ī
-			
	·		<i>:</i>
		,	

3.4 HYDROLOGY, WATER QUALITY AND OCEANOGRAPHY

3.4.1 Setting

Los Angeles Harbor is comprised of the Outer Harbor, the open waters between Terminal Island and the breakwaters, and Inner Harbor, the area behind Terminal Island, including the Main Channel, the East and West Basins, and the Cerritos Channel (Figure 3.4-1). Hugo Neu-Proler Company (HNPC) is located on the north side of Terminal Island in the Port of Los Angeles. HNPC is adjacent to the Inner Harbor areas of the East Basin and Cerritos Channel, at Berths 210-211. The Inner Harbor waters are primarily influenced by Pacific Ocean coastal marine conditions and to some extent by freshwater input from Dominguez Channel (during storm events). A summary of the pertinent water quality and oceanography parameters is presented in this section.

3.4.1.1 Hydrology and Flooding

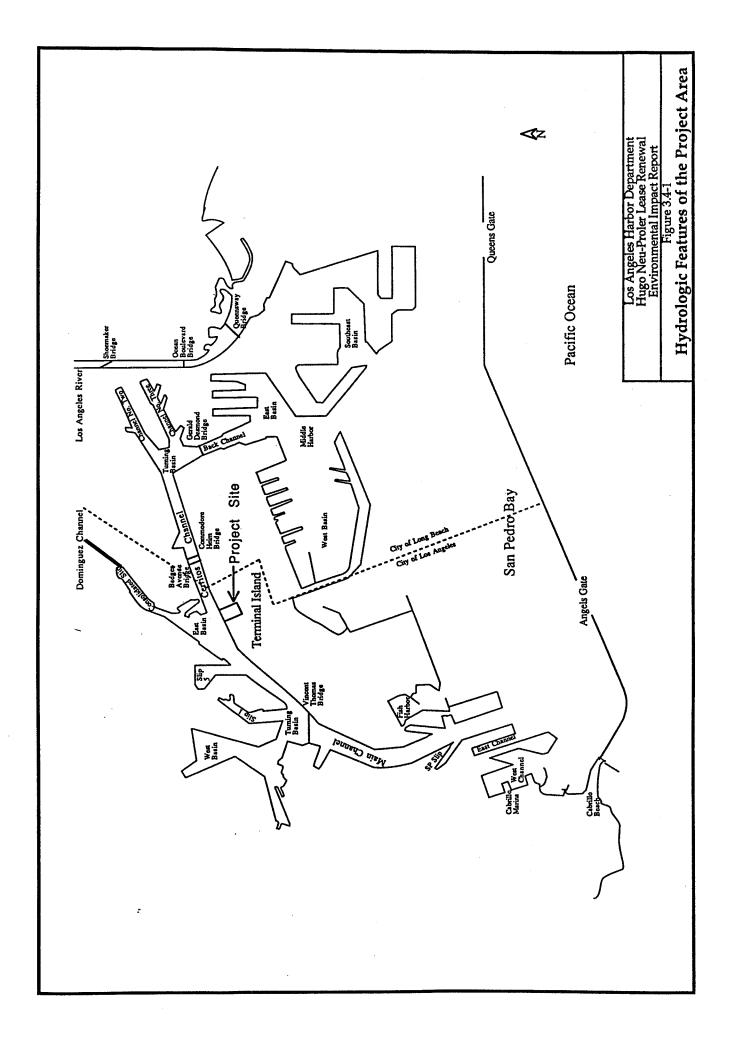
The principal surface drainage in the vicinity of the harbor is the Dominguez Channel, which drains from a densely urbanized area west of the Los Angeles River into the Consolidated Slip of the Los Angeles Inner Harbor. Dominguez Channel, an 8.5 mile long structure, drains an 80-square mile area west of the Los Angeles River basin and flows into the East Basin of the Los Angeles Harbor (Figure 3.4-1). Dominguez Channel historically transported untreated wastes into Los Angeles Harbor, but such discharges have been significantly reduced through regulations by the Regional Water Quality Control Board (RWQCB), Los Angeles Region. Present dry-weather flow consists primarily of 15 million gallons per day of regulated discharges (LAHD and BLM, 1985).

Discussions with personnel from the United States Army Corps of Engineers indicate that, in the harbor area, the estimated flood plain resulting from a 100-year storm extends east from Dominguez Channel across the Los Angeles River and includes a narrow section east of the river in the City of Long Beach. To the south, the general area of the flood plain extends down to the natural coastline. The flood plain boundary on Terminal Island has not been mapped. It should be noted that subsequent flood recurrence data indicate that the design capacity of the Los Angeles River Flood Control Channel likely only corresponds to that of a 25-year storm. However, the fact that Terminal Island is surrounded on three sides by waters of the harbor would suggest that flooding is a minimal threat to the proposed project (USACOE and LAHD, 1992).

3.4.1.2 Circulation

Tidal action is the primary cause of water circulation in Los Angeles Harbor. Along the coast of Southern California, tides are mixed-semi-diurnal with two low tides and two high tides per tidal day. The mean single tide range (between all high and low waters) is 3.8 feet, the mean diurnal range is 5.6 feet, and the maximum range is about 10.5 feet (USACOE, 1984b). The highest and lowest tides on record are 7.5 feet above mean lower low water (MLLW) and 2.6 feet below MLLW, respectively. MLLW is 2.8 feet below mean sea level (McAnally, 1975; LAHD, 1993a).

Physical and numerical model studies of Los Angeles Harbor indicate net inflows through Angels and Queens gates and a net outflow through the east opening of the breakwater. Flow volumes vary with the tidal range, and a large, clockwise gyre can form between the breakwaters and Terminal Island (LAHD, 1993a).



Flushing of Los Angeles Harbor is directly related to tidal exchange. Flood tides flow into the harbor and up the channels, while ebb tides flow down the channels and out of the harbor. Tidal velocities in the Inner Harbor range from 0.078 to 0.46 feet per second (LAHD, 1993b). Circulation patterns predicted from modeling studies show that during spring tides, water flows southwest from the East and West Basins to the Main Channel, while during mean and neap tides, water flows north-northwest from the Main Channel into the West Basin and west-southwest from the Cerritos Channel into the East Basin.

The U. S. Army Corps of Engineers and Los Angeles Harbor Department (USACOE and LAHD, 1980) estimated that tidal-induced water exchange in the Inner Harbor is 22% of the total harbor water per day. Flushing rates, however, are not necessarily good indicators of dilution or mixing of contaminants from a specific point source. Due to the complex series of basins and channels in the harbor, removal of a contaminant by flushing will vary greatly depending on location and time of the discharge, and the nature of the contaminant (LAHD, 1993a).

Wind induced mixing in Los Angeles Harbor has little impact below the surface layer of the water column (Smith, 1989; LAHD, 1993a). Water current measurements at 13 to 23 feet below MLLW did not show any correlation between wind and currents, and mixing and circulation from wind are insignificant compared to tidal action.

3.4.1.3 Water Quality

Extensive reviews of water quality in Los Angeles and Long Beach harbors can be found in numerous reports (Soule and Oguri, 1976; USACOE and LAHD, 1980, 1992; USACOE, 1984a; LAHD and BLM, 1985; POLA, 1987, 1988; Tekmarine, 1987). In summary, while water quality was poor during the 1950s and 1960s, increased environmental concern and regulations have greatly improved the quality of harbor waters, which today support a rich and diverse biotic community.

The water quality in Los Angeles Harbor is influenced by climate, circulation, surface runoff, and effluent discharges. In the 1960s, Dominguez Channel served as a receptor of untreated industrial effluent. The Regional Water Quality Control Board's (RWQCB's) establishment of industrial and waste discharge regulations, and the enactment of programs by the EPA and the RWQCB to improve the quality of industrial discharges through the issuance of National Pollution Discharge Elimination System (NPDES) permits, largely eliminated this source of contamination. Today, the major source of pollution in Dominguez Channel is storm runoff from residential areas, commercial areas, and industrial complexes.

Other sources of pollution include storm runoff from areas bordering the harbor, contact cooling wastes, washwater from miscellaneous facilities operating near the harbor (LAHD and BLM 1985), incidental dumping of wastes during loading and off-loading activities, vessel maintenance, accidental spills, and re-suspension of contaminated bottom sediments (this last source of contamination was partially removed during the Los Angeles Harbor Deepening Project in the early 1980s).

The remaining sources of pollution, and the different rates of water flushing and renewal through tidal action, result in the existence of a "water quality gradient" in the harbor. Inner Harbor waters are more contaminated than Outer Harbor waters, as numerous field studies have indicated. Results of the State Mussel Watch program, which collects mussel samples at various harbor locations, including a location near HNPC, show consistently high concentrations of toxic metals and synthetic organics at isolated locations in the Inner Harbor (LAHD, 1988).

Dissolved Oxygen

Dissolved oxygen (DO) is the amount of oxygen in the water. DO concentration varies considerably throughout the harbor by area, depth, and season. DO is a good indicator of water quality.

Prior to 1970, yearly average DO concentrations as low as 0.1 mg/l were recorded in the Inner Harbor; these low values were thought to be attributed to water pollution (USACOE, 1984a). After the enactment of water quality regulations in the early 1970s, the yearly average DO concentrations greatly increased and generally remained above 5 mg/l (the RWQCB recommended standard) everywhere in the harbor. Seasonal variations with localized reductions in DO, however, still occur. These localized, short-term reductions of DO usually are due to decomposition of phytoplankton following bloom conditions. A "red tide" is occasionally observed in the harbor during summer months; this condition is attributed to a high density of phytoplankton occurring under conditions of intense solar radiation in nutrient-rich waters (USACOE and LAHD, 1992).

Table 3.4-1 provides data collected by the LAHD in 1992 on DO concentrations in harbor water at two stations near Hugo Neu-Proler (see Figure 3.4-2 for station locations). These data, from samples collected at the surface and at a depth of 20 feet, indicate DO levels at these stations are generally between 5.0 and 7.0 mg/l. These levels indicate the water quality is relatively good with regard to the availability of oxygen.

Table 3.4-1. Dissolved Oxygen (DO) of harbor water at two stations near Hugo Neu-Proler (in mg/l, 1992 data).

Month	Station LA47		Station	LA55
	Surface	20-foot	Surface	20-foot
January	5.8	5.7	6.1	5.8
February	n/a	n/a	n/a	n/a
March	5.9	6.0	6.5	6.7
April	2.0	5.8	6.1	6.6
May	7.3	7.3	6.4	5.9
June	7.1	6.9	7.3	6.0
July	8.0	4.7	7.4	8.7
August	6.6	6.5	6.7	6.2
September	7.5	7.4	6.4	6.9
October	6.0	5.6	5.9	6.2
November	6.8	6.8	7.1	7.5

n/a= data not available

Temperature

Annual average water temperatures in Los Angeles Harbor showed little variation from 1967 through 1991 (LAHD, 1993a). Water temperature, however, does vary seasonally and spatially due to climate, currents, effluent discharge, and the configuration of the harbor. Table 3.4-2 provides data collected by the LAHD in 1992 on water temperature at two stations near Hugo Neu-Proler. Temperatures at these stations ranged from a low of 14.6°C in January to a high of 26.1°C in August. There was usually less than 1.0°C of difference between the surface and 20-foot depth during winter months, indicating considerable mixing down to that depth. During the summer, greater differences were noted between the surface and the 20-foot depth.

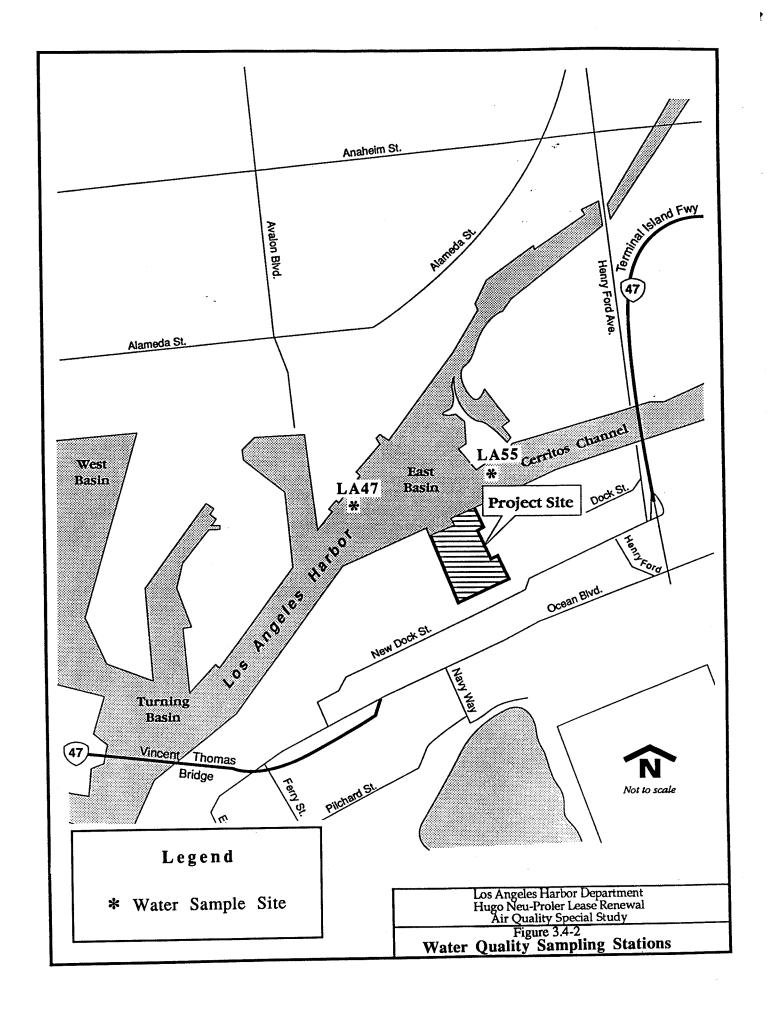


Table 3.4-2. Temperature of harbor water at two stations near Hugo Neu-Proler (°C, 1992 data).

Month	Station LA47		Station	on LA55	
	Surface	20-foot	Surface	20-foot	
January	14.8	14.6	14.7	14.6	
February	n/a	n/a	n/a	n/a	
March	17.2	16.9	16.8	16.7	
April	18.9	18.0	18.0	18.1	
May	19.0	18.4	20.0	18.7	
June	18.6	17.6	19.2	17.7	
July	22.6	21.0	22.0	21.4	
August	22.9	21.0	26.1	21.2	
September	20.6	19.0	20.0	19.2	
October	19.4	19.2	19.4	19.2	
November	18.2	18.4	18.5	18.4	

n/a= data not available

Transparency

Light transparency of harbor waters varies relative to the amount of suspended material in the water. Sediments from runoff, wastewater discharges, or dredging, as well as natural plankton blooms, reduce water clarity. Light transparency is important as the clarity of the water can affect photosynthetic activity. A decrease in transparency reduces the amount of light available for photosynthesis, which in turn affects primary production. Annual average transparency values for Los Angeles Harbor ranged from 2.0 to 24.4 feet, with most between 6.0 and 9.0 feet (POLA, 1987, 1988).

Table 3.4-3 provides data collected by the LAHD in 1992 on water transparency at two stations near Hugo Neu-Proler. Light transparency at these stations ranged from a low of 3 feet to a high of 12 feet; however transparency was usually greater than 6 feet at these two stations.

Table 3.4-3 Light transparency of harbor water at two stations near Hugo Neu-Proler (in feet, 1992 data).

Month	Station LA47	Station LA55
January	3.0	7.0
February	n/a	n/a
March	9.0	10.0
April	6.0	11.0
May	6.0	8.0
June	10.0	11.0
July	10.0	8.0
August	7.5	7.0
September	9.0	12.0
October	10.5	7.0
November	11.0	10.0

n/a= data not available

pН

Harbor waters generally have a pH of 7.0 to 8.7, with higher values at the surface during warmer periods and lower values in cooler, deeper waters (USACOE and LAHD, 1992).

Salinity

Salinity in Los Angeles Harbor is affected by seasonality, basin configuration, and factors such as storm water runoff, wastewater effluent discharge, rainfall, and evaporation. Salinity generally is between 30.0 and 34.2 parts per thousand (ppt), although extremes of 10.0 and 39.0 ppt have been reported (USACOE, 1984a). Salinity is higher in the summer and at shallower harbor locations (POLA, 1988).

Nutrients

Primary production also is affected by availability of nutrients. Inorganic nutrient concentrations in the harbor waters show wide ranges, from 0.12 to 119.28 mg/l for ammonia, 0.0 to 5.38 mg/l for nitrite, 0.0 to 82.97 mg/l for nitrate, and 0.17 to 12.39 mg/l for phosphate in 1978 (USACOE, 1984a). Concentrations tend to be lower in the summer when photosynthetic activity is greatest and higher in winter when day length is shortest and runoff from precipitation is increased. Concentrations also are affected by biological processes, wastewater discharges, and storm water runoff.

Contaminants

Contaminants can potentially be introduced into harbor waters by HNPC via the falling of scrap metal into harbor waters during ship loading, in runoff from the facility, and by dust from storage piles, facility operations, or generated from loading operations.

HNPC has installed a system of spill plates, catch pans, and curtains suspended beneath the loading conveyor and have enclosed portions of the loading conveyor to prevent metal falling into harbor waters. The system appears to be effective in preventing scrap metal from entering harbor waters.

The facility presently collects storm water runoff in various sumps and depressions located throughout the site. The collected water is transferred to Baker tanks for storage and used for dust suppression. During storm events in January and February 1993, the facility was not able to collect and store all of the storm water, thus the facility was forced to discharge storm water to the storm drain.

HNPC has prepared a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program for the management of storm water runoff. HNPC submitted a Notice of Intent to operate under the conditions of the Statewide General Industrial Activities Storm Water Discharge Permit. The SWPPP contained a review of facility operations which identified the following pollution prevention measures for implementation:

- Improve hazardous waste storage. Designation of a single hazardous waste storage area with adequate overhead shelter and containment berming to prevent direct contact with precipitation.
- Berm/re-grade property perimeter. The berm/re-grading would be designed to eliminate discharge of storm water off the facility. Accumulated water could be left to evaporate, pumped into a storage tank for reuse, or transported off-site.

- Install berms around operational areas. Areas to be bermed include fuel dispensers and equipment maintenance areas.
- Capture water and use for dust control. This requires a discharge diversion system, a collection system, and storage tanks.

In addition to the measures noted in the SWPPP, one of the proposed site improvements is the construction of storm water settling basins and a treatment facility. Water treatment will include removal of suspended particulates.

On May 15, 1991, the RWQCB issued a Cleanup and Abatement Order to HNPC. The RWQCB found that HNPC was "creating a condition of pollution through discharge of metal shredder waste into Los Angeles Inner Harbor waters and sediment" (RWQCB, 1991) and ordered HNPC to implement corrective actions. The order included the use of best available control technology to permanently stop the waterborne and airborne discharge of water generated during metal shredding operations by June 15, 1991, and by December 15, 1991 stop the waterborne and airborne discharge of metal shredder waste. On October 24, 1991, HNPC entered into an agreement with the RWQCB over the Cleanup and Abatement Order and agreed to implement specific operational and engineering changes at the facility in order to cease discharge of metal shredder waste into harbor waters and sediment. After instituting the operational changes and installation of pollution control equipment, HNPC, on December 7, 1993, requested the RWQCB to rescind the Cleanup and Abatement Order to HNPC. After review of the reports submitted by HNPC, inspection of the facility and equipment in operation, and discussions with boaters from marinas located across the Cerritos Channel from the HNPC facility, the RWQCB concluded that the conditions of the agreement had been satisfied in that no visible discharge to surface waters was occurring from the HNPC facility (RWQCB, 1994). Since all of the requirements of the Order had been satisfactorily fulfilled, the order was rescinded on June 21, 1994.

3.4.2 Impacts

3.4.2.1 Significance Criteria

The impact of the proposed project would be considered significant if it caused one or more of the following:

- Generation of on-site runoff rates which exceed the capacity of existing storm drain systems.
- Substantial alteration of flood water flow due to a 100-year standard flood, resulting in onsite flooding.
- Discharges that create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code.
- Release of toxic substances that would be deleterious to humans, fish, bird, or plant life.
- Creation of site conditions which may result in soil erosion and sediment runoff during construction or following project completion.

Release of hydrocarbon or related contaminants to the surface waters in such concentrations
that they would violate existing local (RWQCB, Los Angeles Region), State or Federal
statutes, or cause noticeable degradation to the biota within and proximal to the project site
such that recovery of the biota would be substantially impaired, prevented or prolonged for
extended periods.

3.4.2.2 Impact Analysis

Hydrology and Flooding

Construction activities for proposed improvements at the facility would be relatively minor in scope and would occur intermittently during the first few years of the lease. However, during the term of the lease the contaminated soils on the site will be remediated. Remediation of the site requires that all contaminated soils be accessible; therefore, during remediation activities certain of the paved areas will have to be uncovered. Measures to comply with the RWQCB storm water permit for construction activities would prevent erosion from occurring during remediation and construction activities. These measure would include restriction of site drainage using sandbags, berms, and/or channels to manage storm waters and to prevent excessive erosion or wash-off of materials. Therefore, remediation and construction activities are not expected to significantly alter runoff rates.

The proposed project would not alter the 100-year flood water flow. No adverse impacts to hydrology parameters would result from the implementation of the proposed project.

Operation of the proposed project involves improvements to the storm water control system, including the construction and use of three storm water retention basins. The storm water control system will improve on-site drainage and help to reduce the area of temporary flooding during storm events. Additional storage capacity for storm water which will be used for dust control will help to reduce the amount of water needed for this purpose from public water supplies.

Circulation

The project may involve maintenance dredging to increase the water depth at Berths 210-211 by two feet, from the current 35 feet to the design depth of 37 feet. The alteration to water circulation in the vicinity of Berths 210-211 and the harbor in general will be insignificant.

Water Quality

Project Construction

Impacts of construction to water quality may include increased levels of contaminants and increased turbidity. Activities for soil remediation, installation of the surface water containment facility, and construction of new buildings may result in release of soil or other contaminants into harbor waters. Construction materials such as solvents, paints, construction vehicle fuels also may reach the water. HNPC has prepared a Storm Water Pollution Prevention Plan (SWPPP) which includes several pollution prevention measures, discussed below, which will help to reduce impacts of contaminated storm water runoff from the site. Since HNPC will be operating during the construction period, implementation of the SWPPP will ensure that impacts to water quality from construction activities are not significant.

Minor maintenance dredging, adjacent to Berths 210-211, may impact water quality by increasing turbidity and water column contaminant concentrations, and by decreasing water transparency and dissolved oxygen concentration. Sediment re-suspension during dredging would increase turbidity and light attenuation, thus decreasing transparency. Pollutants such as heavy metals and polychlorinated biphenols, that may be trapped in the sediments, could be introduced into the water column through re-suspension, causing increased receiving water concentrations of these toxic constituents. A beneficial impact, however, would result from the removal of sediments with high concentrations of pollutants. Unoxidized organic material deposited with the sediments could be re-suspended in the water column and come in contact with oxygenated sea water. Oxidation of the organic material could reduce dissolved oxygen concentration in the local area. These impacts are not considered to be significant because they are limited to a small area adjacent to Berths 210-211, and they are short-term impacts that will not persist into project operations.

Project Operation

Some operational aspects of the HNPC facilities have the potential to lead to decreased water quality of the adjacent waters. Contamination sources, along with a description of HNPC proposed facility changes or improvements, included in the proposed project, which would help to eliminate or reduce the potential contamination, are summarized as follows:

Storm water runoff from contaminated soil. HNPC will be undertaking a soil remediation program which will remove contamination and/or prevent contamination of storm water runoff. In addition, HNPC will complete paving of the site which will help to prevent contamination of surface runoff from the contaminated soils. These measures are sufficient to eliminate this source of contamination for both surface waters and marine sediments.

Storm water runoff containing dust, dirt, and metallic and non-metallic contaminants from the scrap metal stockpiles. HNPC has prepared a Storm Water Pollution Prevention Plan which includes several pollution prevention measures which will help to reduce impacts of contaminated storm water runoff. These measures include: (1) providing overhead covering of hazardous waste storage areas to prevent contact with precipitation; (2) berms or re-grading of the site to prevent uncontrolled runoff; (3) berms around fuel dispensers and equipment maintenance areas; and, (4) capture of storm water for use in dust control. In addition, three storm water retention basins and a treatment facility (see Figure 1.1-4) will be constructed. The retention basins will capture runoff from the operational area and allow settling. The treatment facility will further remove suspended materials from the storm water before it is discharged into a storm drain. The storm water retention basins and treatment facility are expected to effectively prevent dust, dirt, and metallic and non-metallic contaminants from entering the storm water drainage system which leads to harbor waters and sediments, thus reducing potential impacts to a level of insignificance.

3.4.3 Cumulative Impacts

The proposed project and a number of the related projects planned for the Los Angeles Harbor area (refer to Table 2.2-1) result in an increase in vessel traffic. Increased traffic can increase the potential for water contamination due to accidental leaks or discharges during ship fueling and other operations. The Office of Spill Prevention and Response, which is administered by the California Department of Fish and Game, anticipates that the rate of spills would decrease, despite the increase in vessel traffic, due to the implementation of the California Oil Spill Prevention and Response Act of 1990, which addresses the prevention, removal, abatement, response, containment, and clean-up of spills.

Although a vessel related spill could have a significant impact on water quality, the likelihood of occurrence would not be increased by the implementation of related projects. Therefore, no cumulative impacts to hydrology, water quality, or oceanography of the harbor area would result from the implementation of the proposed project.

3.4.4 Mitigation Measures

3.4.4.1 Recommended Mitigation Measures

No significant impacts were identified, therefore no additional mitigation measures are proposed.

3.4.4.2 Impacts Mitigated to Insignificance

No significant impacts were identified.

3.4.4.3 Unavoidable Significant Adverse Impacts

No unavoidable significant adverse impacts to hydrology, water quality and oceanography would result from the proposed project.

3.4.4.4 Mitigation Monitoring Program

None required.

3.5 BIOTA AND HABITATS

3.5.1 Setting

Los Angeles Harbor is comprised of the Outer Harbor, the open waters between Terminal Island and the breakwaters, and the Inner Harbor, a manmade system of channels, slips, and basins behind Terminal Island. Hugo Neu-Proler Company (HNPC) is located adjacent to the East Basin in the Inner Harbor.

The biological resources within the region of influence of HNPC include organisms occurring in benthic, pelagic, and other marine habitats. Benthic habitats are the soft bottom and hard substrate of the harbor, and in this section are considered specifically for areas adjacent to HNPC. Pelagic refers to the water column and contains plankton and species of higher mobility. The description of pelagic habitats in this section includes the Inner Harbor area. Birds utilize diverse habitats and are discussed in a Section 3.5.1.4. Species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and by the California Department of Fish and Game (CDFG) are discussed separately in Section 3.5.1.5.

Comprehensive descriptions of the biota and habitats in Los Angeles Harbor are found in the Draft EIR/EIS for the Proposed Pacific Texas Pipeline Project (Engineering-Science, 1985), the Biological Baseline and Ecological Evaluation of Existing Habitats in Los Angeles Harbor and Adjacent Waters (POLA, 1988), and Appendices for Los Angeles-Long Beach Harbors Channel Improvement and Landfill Development (USACOE, 1984b). Descriptions of the biological resources within the region of influence of HNPC are drawn from these and other sources.

The natural environment within Los Angeles Harbor has changed substantially over the past 100 years, due primarily to harbor development and urbanization/industrialization of the surrounding area (LAHD, 1993a). Breakwater construction, dredge and fill activities, and construction of associated harbor structures (e.g., piers and wharves) have both altered the natural physical environment and created artificial habitats that support a high diversity of biological communities. Urbanization and industrialization have changed sediment and water quality in the harbor through waste discharges, although stricter regulations have resulted in a decrease in this type of pollution in recent years. Thus, even though the harbor has a high level of disturbance, it supports a wide variety of marine organisms.

3.5.1.1 Benthic Habitats

The benthic environment of Los Angeles Harbor supports a diverse community of invertebrate organisms, including infauna (animals living within the soft muddy bottom) and epifauna (animals living on the harbor bottom). Benthic organisms have important roles in harbor ecology. Many modify the sediment through burrowing, structuring, or feeding activities that increase oxygenation, enhance breakdown of organic matter, and redistribute sediment layers. Benthic fauna also are an important food source for fish and larger invertebrates. Historical data show that an overall decrease in relative abundance of pollution-tolerant species has occurred in Los Angeles Harbor since the 1950s, as stricter pollution control measures have been enacted (POLA, 1988).

Infauna

During a 1986-87 survey of the harbor (POLA, 1988), a total of 126 taxa of benthic invertebrates were found from four stations in the area of HNPC. Twenty-six of the taxa would be considered abundant (relative abundance's greater than 0.20), with 73% (19 taxa) of these typically associated

with open coastal areas, 19% (5 taxa) associated with bay environments, and the remaining 8% (2 taxa) associated with either. Most of the more common taxa are known to tolerate slight to moderate sewage pollution and/or environmental stress.

Epifauna

Epifauna habitats in the areas adjacent to HNPC consist of surfaces of wooden or cement pier pilings. The structures provide a suitable surface for invertebrate and benthic algae colonization and can greatly enhance the forage potential for fish and birds. Characteristic epifauna include barnacles, of which both coastal and bay associated organisms are represented. Distribution of these species is related to water movement, which is relatively strong in the East Basin and Cerritos Channel (HEP, 1976; POLA, 1988).

3.5.1.2 Water Column Habitat

The water column habitat comprises the area from the surface of the water to the bottom substrate and supports phytoplankton, zooplankton, and pelagic fish. Phytoplankton are single cell or colonial algae which account for most of the primary productivity in Los Angeles Harbor and provide food for herbivorous invertebrates and fish. The species composition and abundance of phytoplankton varies with nutrient availability, temperature, dissolved oxygen, pH, and concentration of phosphorus and nitrogen. Phytoplankton blooms are typical in spring and fall (LAHD, 1980). The Inner Harbor shows higher concentrations of phytoplankton than does the Outer Harbor; particularly high values are found near wastewater discharges (USACOE, 1984b). Zooplankton are free-floating, non-photosynthetic aquatic organisms that consume other organisms or organic material. The zooplankton component includes forms that are planktonic throughout their life cycle (holoplankton) as well as eggs and larval forms of many invertebrates and fish (meroplankton).

The zooplankton of Los Angeles-Long Beach Harbor consists primarily of copepods (63%), cladocerans (21%), and larvaceans (2.9%) (LAHD, 1980; LA-LBHD, 1990). The larvae of barnacles (3.2%) and brittle stars (2.8%) also are fairly common.

Fish

Los Angeles Harbor has a rather abundant and diverse fish population. This has been attributed to the complex variety of protective structures and habitats, good circulation of water, and abundant food supplies (USACOE, 1984b; LAHD, 1993b). More than 130 species of fish (permanent and transient) have been identified in Los Angeles-Long Beach Harbor, with some utilizing the area as a breeding ground/nursery (Horn and Allen, 1981; POLB, 1984; POLA, 1988). Several species are taken by recreational fishermen.

Fish populations in the Inner Harbor are smaller in number than in the Outer Harbor, probably due to circulation and flushing characteristics. Surveys of the Inner Harbor have shown that populations are dominated by a few species. These are white croaker (Genyonemus lineatus), northern anchovy (Engraulis mordax), bay goby (Lepidogobius lepidus), queenfish (Seriphus politus), California tonguefish (Symphurus atricauda), white seaperch (Phanerodon furcatus), shiner perch (Cymatogaster aggregata), and Pacific pompano (Peprilus simillimus) (USACOE, 1984b; LAHD, 1993b). Diversity and richness of species decreases along a gradient from Outer to Inner Harbor environments (USACOE, 1984b; Engineering-Science, 1985). Seasonal variations in fish populations in the Inner Harbor have been observed, with increased richness and abundance occurring during winter and early spring.

Marine Mammals

Marine mammals are uncommon in Los Angeles Harbor, particularly in the Inner Harbor. However, the gray whale (Eschrichtius robustus), California sea lion (Zaolphus californianus), common dolphin (Delphinus delphus), Pacific white-sided dolphin (Lagenorhynchus obliquidens), and harbor seal (Phoca vitulina) occasionally have been observed in Outer Harbor areas, although the harbor does not provide breeding habitat for these species (Engineering-Science, 1985; LAHD, 1993b). There have been no dolphin or whale sightings in the Inner Harbor.

3.5.1.3 Other Habitats

No special designation habitats (e.g., ecological reserves, marine life refuges, and national wildlife refuges) are present within the harbor (LAHD, 1993a). The Point Fermin Ecological Reserve, located just west of the harbor, is the closest such habitat. Wildlife in the area are species adapted to a disturbed environment, such as feral cats and rats.

3.5.1.4 Birds

Birds are an important ecological component of Los Angeles Harbor due to their high trophic position. The strong avian diversity of the harbor is attributable to the variety of habitat and food resources present. Habitats include riprap, sandy beach shoreline, sheltered waters, open water, and breakwaters. These habitats are occupied by resident shorebirds throughout the year, and also by overwintering birds, and fall and spring migrants. Avifaunal surveys have revealed that the greatest abundance's and numbers of species occur between September and March (LA-LBHD, 1984; POLB, 1984; POLA, 1988; LAHD, 1993a).

Los Angeles Harbor surveys in 1986 and 1987 revealed 86 bird species, with 61 species being water associated (POLA, 1988). The dominant species were the surf scoter, western gull, California brown pelican, Heermann's gull, western grebe, ring-billed gull, black-bellied plover, double-crested cormorant, and Brandt's cormorant.

Habitats are used in varying degrees by individual bird groups. Although they utilize all areas of the harbor, gulls prefer the Outer Harbor. The double-crested cormorant uses the Inner Harbor. Loons, grebes, and ducks prefer protected, nearshore waters, and the endangered California least tern nests on Terminal Island from spring through the end of summer.

3.5.1.5 Threatened, Endangered, and Other Special Status Species

Two state and federally listed endangered species, the California least tern and the California brown pelican, regularly use the harbor area. Each is discussed in more detail below. The federally endangered peregrine falcon (Falco peregrinus) is an uncommon transient visitor in this area, with one observed at Shoreline Aquatic Park in Long Beach (POLB, 1984). Peregrine falcons have also been observed on Terminal Island in 1993 and 1994 (K. Keane, personal communication, 1994). The state endangered Belding's savannah sparrow (Passerculus sandwichensis beldingi) may be a transient visitor in the area, although no apparent habitat for this species is present in the harbor. One was observed on the south side of Queensway Bay in March of 1984 (POLB, 1984).

The federally threatened western snowy plover (*Charadrius alexandrinus*) inhabits coastal sandy beaches and flats. Two individuals were sighted in Los Angeles Harbor in September 1989, and a few have been observed in earlier studies (POLA, 1988). The category 2 candidate elegant tern (*Sterna elegans*) occurs in low numbers in the harbor. Individuals of this species forage on fish over shallow and deep waters in the harbor (POLA, 1988).

Marine mammals are protected under the Marine Mammal Protection Act of 1972, and many are also protected under the Endangered Species Act. These are discussed below.

California Least Tern

The California least tern (Sterna antillarum) is listed as endangered by both state and federal governments. This small seabird migrates north to southern and central California in May to breed (Massey, 1974). California least terns nest in coastal areas adjacent to shallow marine and estuarine habitats, where they can forage on fish at the water surface by diving into the water. The chicks hatch by mid-June and mature into fledglings and begin flying and diving by early July (Cimberg and Dock, 1987). The terns generally depart for their wintering grounds in August (Massey and Atwood, 1981).

The location of one major nesting colony for California least tern is on Terminal Island. This nesting site is near the shallow water habitat, south of the Seaplane Anchorage. The number of nesting pairs in this colony and their reproductive success have fluctuated considerably from year to year. Fourteen nests were observed in 1973, the first year of documentation. The number of nesting pairs ranged from zero in 1978, 1979, and 1980 to 109 in 1984, and the average number of fledglings per pair varied from 0.13 in 1987 to 1.5 in 1975 (Keane 1986, 1987). This variability is related in part to the influence of predation on eggs, chicks, and adults by American crows, American kestrels, and feral cats, as well as to changing levels of human activity at the nesting sites. The current colony site appears suitable, and in 1993 there were ten nests, with 6-10 fledglings; in 1994 there were 32 nests, with 4-8 fledglings (K. Keane, personnel communication, 1994). Terminal Island is sometimes used as a renesting site for least terns from other colonies and occasionally serves as a post-breeding congregation area (Massey and Atwood, 1985).

Adult California least terns observed in the Outer Harbor in 1986 and 1987 were feeding off Terminal Island in shallow water areas and off the Middle Breakwater (POLA, 1988). After chicks hatched, foraging was more concentrated in the shallow waters adjacent to the colony. Primary prey items of the California least tern are the northern anchovy, topsmelt, and jacksmelt (Atwood and Kelly, 1984; Massey and Atwood, 1984). Because the northern anchovy is among the most abundant fish species in the Inner Harbor, it is possible that California least terns use the waters adjacent to HNPC for foraging, although no least tern foraging surveys have been conducted in Inner Harbor waters (K. Keane, personal communication, 1993).

California Brown Pelican

The California brown pelican (*Pelecanus occidentalis californicus*) is protected as an endangered species by both state and federal legislation. This species originally was listed because of its low reproductive success, attributed to the production of thin-shelled eggs as a consequence of pesticide contamination. The discharge of DDT was prohibited in 1970, and it appears that the brown pelican population has largely recovered (Anderson et al., 1975; Schreiber, 1980; Gress and Anderson, 1983).

California brown pelicans forage along the coast of California all year, but in smaller numbers during the breeding season (approximately January through June). Breeding occurs in Mexico, in the Gulf of California, and at Anacapa Island, Santa Barbara Island, and Scorpion Rock (Santa Cruz Island) off the coast of California (Gress and Anderson, 1983).

Brown pelicans have been observed year-round in the harbor complex, although their numbers fluctuate seasonally due to an influx of post-breeding birds from Mexico in the summer (Gress et al., 1990). Studies conducted in 1983 and 1984 (POLB, 1984) indicated that the highest densities

of brown pelicans occur between early July and early November (several thousand birds), with a sharp decrease in numbers after November. Minimum densities were noted in late March. Brown pelicans were one of the most abundant species observed in the Outer Harbor during studies conducted in 1986 and 1987 (POLA, 1988).

Pelicans are diving birds that feed exclusively on fish. During the POLA (1988) study, pelicans were observed foraging in open waters off Terminal Island and in shallow waters adjacent to the Seaplane Anchorage.

Marine Mammals

Although many species of cetaceans traverse waters outside Los Angeles Harbor, none are resident inside the harbor breakwaters. Visitors have included the common dolphin, and Pacific white-sided dolphin, and gray whale (LAHD and BLM, 1985). The California sea lion and harbor seal are present in the area. The harbor seal is present sporadically, while the sea lion is seen more often. The latter haul-out on the breakwaters and buoys of the Outer Harbor and sometimes swim in the harbor.

3.5.2 Impacts

3.5.2.1 Significance Criteria

Criteria for determining the significance of project-related impacts are based on the importance of the resource, the proportion of the resource that would be affected relative to its occurrence in the project region, the sensitivity of the resource to activities associated with the proposed project, and the duration or the ecological ramifications associated with the effect.

Impacts are considered significant if they would result in:

- Impacts to aquatic plants for ten years or longer directly or indirectly resulting in measurable changes in (a) species composition or abundance beyond that or normal variability or (b) ecological function within a localized area.
- Loss of any rare, endangered, or sensitive plant species or degradation of the habitat of those species.
- Impacts to attached or free-swimming aquatic animals for ten years or longer directly or indirectly resulting in measurable changes in (a) species composition or abundance beyond that of normal variability or (b) ecological function within a localized area.
- Loss of any rare, endangered, or sensitive animal species or degradation of the habitat of those species.
- Permanent deterioration or contamination of the aquatic habitat such that the aquatic ecosystem of the harbor is substantially disrupted.

3.5.2.2 Impact Analysis

Project Construction

Impacts to marine biota during construction may include increased exposure to contaminants and turbidity. Activities for soil remediation, installation of the surface water containment facility, and construction of new buildings may result in release of soil or other contaminants into harbor waters. HNPC has prepared a Storm Water Pollution Prevention Plan (SWPPP) which includes several pollution prevention measures which will help to reduce impacts of contaminated storm water runoff from the site. Since HNPC will be operating during the construction period, implementation of the SWPPP will ensure that impacts to biota and habitats from construction activities are not significant.

Minor maintenance dredging, adjacent to Berths 210-211, may impact biota and habitats by direct removal of substrate and by increasing turbidity and water column contaminant concentrations, and by decreasing water transparency and dissolved oxygen concentration (see also Section 3.4.1.3. Water Quality). A beneficial impact, however, would result from the removal of sediments with high concentrations of pollutants. Bottom areas exposed after dredging are expected to be recolonized by invertebrates from adjacent areas in a short time. Maintenance dredging impacts are not considered to be significant because they are limited to a small area adjacent to Berths 210-211, and the loss of biota and any resuspension of contaminants will be a short-term impact that will not persist into project operations.

Project Operation

Of the state and federally listed endangered species known from harbor areas, only the California least tern has the potential for being affected by the proposed project. California brown pelicans do not use the area for nesting or breeding, and their primary foraging areas are Outer Harbor and offshore waters. Other sensitive bird and mammal species that occasionally have been reported in the Inner Harbor are transients passing through the area and would not be adversely affected.

Because the northern anchovy is among the most abundant fish species in the Inner Harbor, it is possible that California least terns use the waters adjacent to HNPC for foraging (K. Keane, personal communication, 1993). The primary waters utilized are Outer Harbor waters, including the shallow waters adjacent to the nesting site and the middle breakwater area. If Inner Harbor waters are used for foraging, the anticipated increased vessel activity would reduce foraging time available by only a small amount and would not adversely impact the species.

Some operational aspects of the HNPC facilities have the potential for contaminating adjacent waters and exposure to marine biota. Contamination sources, along with a description of HNPC proposed facility changes or improvements included in the proposed project which would help to eliminate or reduce the potential contamination, are summarized as follows:

Storm water runoff from contaminated soil. HNPC will be undertaking a soil remediation program which will remove contamination and/or prevent contamination of storm water runoff. In addition, HNPC will complete paving of the site which will help to prevent contamination of surface runoff from the contaminated soils. These measures should be sufficient to eliminate this source of contamination.

Storm water runoff containing dust, dirt, and metallic and non-metallic contaminants from the scrap metal stockpiles. HNPC has prepared a Storm Water Pollution Prevention Plan (refer to Section 3.4.1.3) which includes several pollution prevention measures which will help to reduce impacts of contaminated storm water runoff. These measures include: (1) providing overhead covering of hazardous waste storage areas to prevent contact with precipitation; (2) berms or regrading of the site to prevent uncontrolled runoff; (3) berms around fuel dispensers and equipment maintenance areas; and, (4) capture of storm water for use in dust control. In addition, three storm water retention basins and a treatment facility (see Figure 1.1-4) will be constructed. The retention basins will capture runoff from the operational area and allow settling. The treatment facility will further remove suspended materials from the storm water before it is discharged into a storm drain. The storm water retention basins and treatment facility are expected to effectively prevent dust, dirt, and metallic and non-metallic contaminants from entering the storm water drainage system which leads to harbor waters and sediments, thus reducing potential impacts to a level of insignificance.

With regard to the landscaping of the new building and paving of the land, resident vegetation and animals characteristic of disturbed areas are the only flora and fauna found on the facility. No sensitive plants or animals inhabit the grounds, so no adverse effects would occur.

3.5.3 Cumulative Impacts

Implementation of related projects has the potential to result in significant impacts to biological resources. However, the proposed project would not result in adverse effects to biological resources and, therefore, would not contribute to the cumulative impacts of related projects.

3.5.4 Mitigation Measures

3.5.4.1 Recommended Mitigation Measures

No significant impacts were identified, therefore no mitigation measures are proposed.

3.5.4.2 Impacts Mitigated to Insignificance

No impacts to biota and habitats were considered significant.

3.5.4.3 Unavoidable Significant Adverse Impacts

No unavoidable significant adverse impacts to marine biota would result from the proposed project.

3.5.4.4 Mitigation Monitoring Program

None required.

3.6 TRANSPORTATION AND CIRCULATION

3.6.1 Setting

The transportation system that would be affected by the project includes the local and regional highway and rail facilities which provide access to Terminal Island and to the HNPC site. These facilities accommodate train, truck, and automobile travel to and from the project site. The affected marine facilities would be the waterways of the Los Angeles Harbor.

The highway and rail transportation systems serving the port area are subject to various regulations as mandated by a hierarchy of local, regional, state, and federal agencies. On the local level, most of the streets and arterial roadways in the study area are under the jurisdiction of a city government, in this case the Cities of Los Angeles, Long Beach, and Carson, while the freeways, the Vincent Thomas Bridge, the Commodore Heim Bridge, and Pacific Coast Highway are in the State of California's (Caltrans) jurisdiction. The state routes are also subject to the provisions of the U.S. Department of Transportation - Federal Highway Administration (FHWA), as federal funding is used for construction, maintenance, and improvements on these facilities. Each of these agencies has a set of standards and guidelines relative to the planning, design, and operation of the roadways and intersections within their jurisdiction.

3.6.1.1 Highway Transportation System

The existing roadway system in the study area is comprised of a network of freeways, regional arterial routes, and local access streets. Outlined below is a description of these facilities, followed by a discussion of existing traffic volumes and operating conditions on each route.

Street and Highway Network

Regional access to the harbor area is provided by the Harbor Freeway (Interstate 110), the Long Beach Freeway (Interstate 710), the Terminal Island Freeway (State Route 47), and the San Diego Freeway (Interstate 405), as shown on Figure 1.1-1. The Harbor and Long Beach Freeways are north-south highways that extend from the port area to downtown Los Angeles. They each have six lanes in the vicinity of the harbor and widen to eight lanes to the north. The San Diego Freeway is an eight-lane highway that passes through the Los Angeles region generally parallel to the coast. The Terminal Island Freeway is a short highway that extends north from Terminal Island across the Heim Bridge and terminates at Willow Street approximately 800 feet east of the ICTF rail facility. It is six lanes wide on the southern segment, narrowing to four lanes at Anaheim Street.

The freeways are linked to Terminal Island by three highway bridges: The Vincent Thomas Bridge on the west, the Gerald Desmond Bridge on the east, and the Commodore Schuyler F. Heim Bridge on the north. The Vincent Thomas Bridge is a four-lane suspension bridge providing an east-west connection between Terminal Island and the Harbor Freeway across the Los Angeles Harbor Main Channel. A toll is collected for westbound vehicles. The Gerald Desmond Bridge is a four-lane facility that connects Terminal Island with downtown Long Beach and the Long Beach Freeway by crossing the Long Beach Harbor Back Channel. The Commodore Heim Bridge is a six-lane lift bridge that crosses the Cerritos Channel and connects Terminal Island with the area to the north via the Terminal Island Freeway.

The area to the north of Terminal Island has a network of arterial streets which are used as access routes to the port area. North-south circulation is provided by Henry Ford Avenue and Alameda Street. These four-lane arterial roadways serve as a direct travel route between the Terminal Island Freeway and the San Diego Freeway. Alameda Street continues to the north and serves as a key

truck roune between the harbor area and downtown Los Angeles. East-west circulation in this area north and a circulation in this area north and circulation

The contents on Terminal Island which serve as primary access routes to the project site are New Dock Street, Seaside Avenue, Ocean Boulevard, and Henry Ford Avenue, as shown on Figure 1.1-2. New Dock Street is a four-lane east-west street which runs along the north side of Terminal Island. Direct site access is provided from New Dock Street. Seaside Avenue/Ocean Boulevard is a six-lane east-west road which extends virtually the content width of Terminal Island. All three bridges feed into this roadway, which is named Seaside Avenue in Los Angeles and Ocean Boulevard in Long Beach. Henry Ford Avenue is a four-lane street which provides a north-south link between New Dock Street and Ocean Boulevard.

Traffic Volumes

Average daily and peak hour traffic volume data were collected to quantify the existing traffic conditions on the streets and intersections in the project vicinity. Average daily traffic (ADT) volumes were obtained from the City of Los Angeles Department of Transportation (LADOT), the State of California Department of Transportation (Caltrans), and the Los Angeles Harbor Department (LAHD), while peak hour traffic counts were taken by Stevens-Garland Associates at the study area intersections in November 1993.

The daily traffic volumes on each study area roadway segment are shown on Table 3.6-1 for the Terminal Island roadways and Table 3.6-2 for the regional access routes. The peak hour traffic volumes at each intersection are shown on Figure 3.6-1 for the A.M. and P.M. peak hours.

Intersection Levels Of Service

To quantify the existing traffic conditions on the study area roadways, seven intersections in the project vicinity have been analyzed to determine their operating conditions during the morning and afternoon peak periods. Based on the peak hour traffic volumes shown on Figure 3.6-1, the turning movement counts, and the existing number of lanes at each intersection, the volume to capacity (V/C) ratios and corresponding levels of service (LOS) have been determined at each intersection using the critical movement analysis technique. Table 3.6-3 indicates the existing V/C ratios and levels of service for the intersections during the morning and afternoon peak hours. All of the study area intersections currently operate at level of service C or better.

Volume to capacity ratio is a measure of an intersection's traffic volumes as compared to the theoretical capacity of the intersection. Level of service is a qualitative indicator of an intersection's operating conditions as represented by congestion, delay, and volume to capacity ratio. It is measured from LOS A (excellent conditions) to LOS F (extreme congestion) with LOS D (V/C ratio of 0.90) considered by the LADOT and LAHD to be the threshold of acceptability. The relationship between V/C ratio and level of service is shown in Table 3.6-4.

TABLE 3.6-1
EXISTING DAILY TRAFFIC VOLUMES - TERMINAL ISLAND ROADWAYS

Roadway/Location	Average Daily Traffic Volume
New Dock Street West of Project Site East of Project Site West of T.I. Freeway	5,000 8,000 12,400
Henry Ford Avenue New Dock Street to Ocean Boulevard	8,000
Seaside Avenue East of Toll Plaza	44,400
Ocean Boulevard West of Henry Ford Avenue East of Henry Ford Avenue East of Gate 3	40,600 41,000 42,000
Vincent Thomas Bridge	30,000
Gerald Desmond Bridge	40,000
Commodore Heim Bridge	22,000

TABLE 3.6-2
EXISTING DAILY TRAFFIC VOLUMES - REGIONAL ACCESS ROUTES

Roadway/Location	Average Daily
	Traffic Volume
Harbor Freeway (I-110)	
North of Vincent Thomas Bridge	67,000
Channel Street to Anaheim Street	85,000
Anaheim Street to Pacific Coast Hwy.	99,000
PCH to Sepulveda Boulevard	•
Sepulveda Boulevard to Carson Street	127,000
Carson Street to I-405	160,000
Long Beach Freeway (I-710)	216,000
Ocean Boulevard to Pacific Coast Hwy.	117 000
PCH to Willow Street	117,000
Willow Street to I-405	135,000
Terminal Island Freeway (Route 47)	150,000
Heim Bridge to Anaheim Street	22.000
Anaheim Street to Pacific Coast Hwy.	22,000
PCH to Willow Street	18,000
San Diego Freeway (I-405)	15,000
West of Harbor Freeway	201 000
West of Harbor Freeway West of Long Beach Freeway	281,000
East of Long Beach Freeway	243,000
Henry Ford Avenue	249,000
	0.000
T.I. Freeway to Anaheim Street Anaheim Street to Alameda Street	9,000
Alameda Street	7,000
Henry Ford Avenue to PCH	16,000
	16,000
PCH to Sepulveda Boulevard	16,000
Sepulveda Boulevard to I-405 Sepulveda Boulevard	19,000
	10.000
West of T.I. Freeway	19,000
T.I. Freeway to Long Beach Freeway	31,000
Pacific Coast Highway (Route 1)	21 500
West of T.I. Freeway	31,500
T.I. Freeway to Long Beach Freeway	34,500
Anaheim Street	06.000
West of Alameda Street	26,000
West of T.I. Freeway	36,000
T.I. Freeway to Long Beach Freeway	34,000

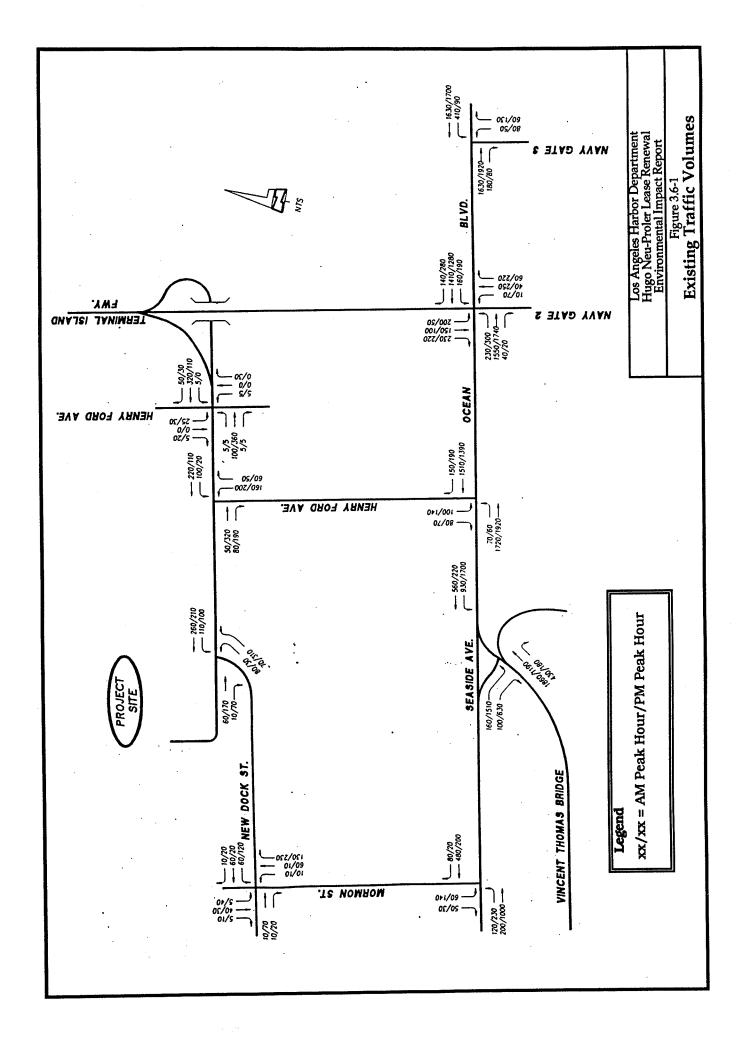


TABLE 3.6-3 EXISTING INTERSECTION LEVELS OF SERVICE

	Volume/Capacity Ratio & Level of Service		
Intersection	AM Peak Hour	PM Peak Hour	
New Dock Street/Site Access	0.18 A	0.14 A	
New Dock Street/Henry Ford Avenue	0.21 A	0.32 A	
New Dock Street/Henry Ford Bridge	0.15 A	0.15 A	
Seaside Avenue/Toll Plaza	0.67 B	0.57 A	
Ocean Boulevard/Henry Ford Avenue	0.50 A	0.52 A	
Ocean Boulevard/T.I. Freeway	0.67 B	0.77 C	
Ocean Boulevard/Navy Gate 3	0.74 C	0.63 B	

Table 3.6-4
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	V/C Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
В	0.601 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
С	0.701 - 0.800	GOOD. Occasionally, drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	POOR. Represents the most vehicles that intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

3.6.1.2 Site Access, Circulation, and Parking

Access to the HNPC site is provided by a short roadway which extends westerly from New Dock Street at the point where there is a jog in the New Dock Street alignment. The access road, which forms a "T" intersection with New Dock Street, is shared by HNPC and the Yusen Container Terminal. It has two inbound (westbound) lanes and two outbound (eastbound) lanes and is used by the HNPC haul trucks as well as employees. Inbound trucks use this access road as a queuing area while waiting to be weighed and checked in at the entrance.

Haul trucks enter the site through the check-in station/truck scales and then proceed northerly along an internal circulation road which extends through the center of the site. The trucks branch off from this internal road to their on-site destinations and park adjacent to their respective stock piles for unloading. When the unloading activity is completed, the trucks then leave the HNPC site.

The parking lot for employees and visitors is located at the south end of the site adjacent to the access road. Drivers can enter and exit this lot directly from the access road. This parking lot is approximately one acre is size and can accommodate the existing parking demand generated by the 150 HNPC, contract employees, and visitors.

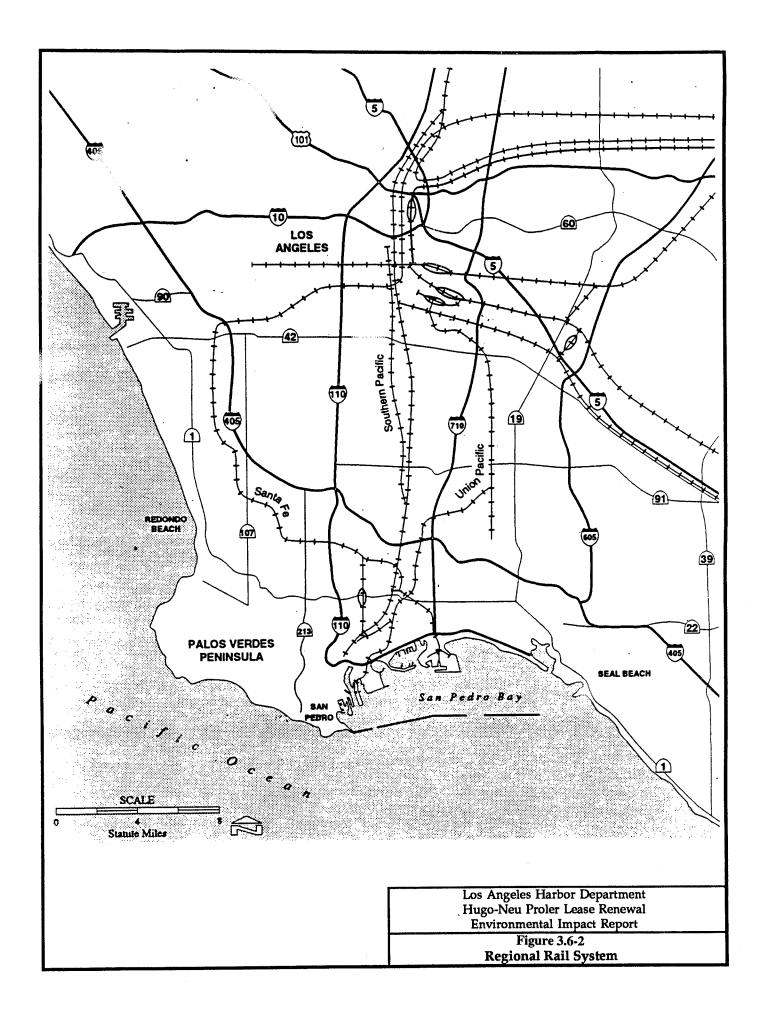
3.6.1.3 Rail Transportation System

Regional rail access to and from the port area is provided by three major railroad companies: the Southern Pacific Transportation Company, the Santa Fe Railway, and the Union Pacific Railroad Company. These companies operate on railroad tracks which extend between the harbor area and downtown Los Angeles along three basic rail corridors, each one operated by a separate railroad company. The regional rail system is shown on Figure 3.6-2.

The eastern most rail line is operated by the Union Pacific Railroad. This San Pedro Branch extends south from the East Los Angeles Yard through the cities of Vernon, Maywood, Huntington Park, Bell, South Gate, Paramount, and Long Beach. It then crosses the Los Angeles River and the Long Beach Freeway (north of I-405) and runs south to Terminal Island.

The westernmost rail line between the harbor and downtown Los Angeles is operated by the Santa Fe Railway. This Harbor District Branch extends west from the Redondo Junction in downtown Los Angeles along Slauson Avenue and Florence Avenue into Inglewood, then south along Aviation Boulevard through El Segundo and continuing south through Redondo Beach, Lawndale, Torrance, Carson and Wilmington.

The most direct rail route between downtown Los Angeles and the harbor area is operated by the Southern Pacific Transportation Company, which has two parallel lines. The San Pedro Branch begins in downtown Los Angeles and extends south along Alameda Street while the Wilmington Branch runs along a more westerly alignment. The two branch lines join south of the Artesia Freeway and function as a double track along Alameda Street. The tracks pass through Los Angeles, Vernon, Huntington Park, South Gate, Lynwood, Compton, Carson, and Wilmington.



The existing volumes of through train movements operating between the port area and downtown Los Angeles are shown below. These volumes are subject to variations from day to day and from season to season.

EXISTING DAILY THROUGH TRAIN VOLUMES

Rail Line	Number
Santa Fe	2
Southern Pacific	22
Union Pacific	<u>.7</u>
TOTAL	31

Source: Pier 300 Dry Bulk Terminal EIR, LAHD, January 1993

For the years 1990-1992, the number of rail cars moved in to the port area by the Harbor Belt Line for delivery to business averaged 21,000 per year, with movement into Terminal Island averaging 3,891 rail cars per year (LAHD, 1992 and personal communication, R. Davidson, 1995). Presently, the two tenants that accounted for 73% of the rail car movements on Terminal Island have ceased operations.

Currently, HNPC transports containers containing waste to the Union Pacific railroad yard at Brighton Beach, on Terminal Island and are loaded directly on the rail cars for transport to Utah. A special train is not dispatched for these containers, instead they are transported via regularly scheduled rail service.

A proposal which is currently being studied is the development of the Southern Pacific San Pedro Branch line as the Alameda Corridor. Under this scenario, the rail line would be upgraded along the Alameda Street Corridor and the route would be used by all three rail carriers. This would decrease the total miles traveled, alleviate various environmental impacts (noise, fuel consumption, and emissions), and allow for a consolidation of capital improvements, including the construction of grade separations. It is assumed that the proposed Alameda Corridor would not be operational when the HNPC facility improvements are completed.

Rail access to Terminal Island is provided by a single track Union Pacific Railroad line, which is operated by the Harbor Belt Line Railroad (a joint operation of the three railroad companies and the LAHD, which has operating rights over the Union Pacific tracks onto Terminal Island). The railroad line approaches Terminal Island from the north via the Badger Avenue Bridge, a double-leaf bascule bridge which crosses the Cerritos Channel adjacent to the Commodore Heim Bridge. On Terminal Island the tracks run generally east-west and are located between New Dock Street and Ocean Boulevard/Seaside Avenue. This main line has numerous spur tracks which serve the various developments and port facilities on Terminal Island. Union Pacific Railroad's Brighton Beach Yard switching operation is located between Seaside Avenue and New Dock Street in the center of Terminal Island south of the HNPC site. The LAHD proposes to improve the rail facilities at Brighton Beach Yard as part of a project referred to as the Terminal Island Container Transfer Facility (TICTF).

The Badger Avenue Bridge was previously a combination railroad and highway facility; however, the bridge was limited only to rail use in 1978 because of deterioration of the approach trestles. With regard to operation, the bridge remains in the up position (closed to trains) until a train movement is necessary. This procedure facilitates the passage of marine vessels under the bridge but limits the bridge's rail capacity. The average train volume is nine movements per day across the bridge, and most of the current rail activity occurs at night. The LAHD is in the process of

replacing the Badger Avenue Bridge to improve rail service to Terminal Island.

Train movements often create delays for vehicular traffic at locations where the rail lines cross streets and highways at grade. Vehicular traffic must stop at these crossings and wait while the trains pass by. The duration of the traffic delay, which is dependent upon the speed of travel and the length of the train, typically ranges from 30 seconds to as high as eight minutes.

The number of highway/railroad crossings on the four rail lines between the port area and downtown Los Angeles is shown below for the at-grade and grade-separated crossings.

HIGHWAY/RAILROAD CROSSINGS

Rail Line	Grade Separated	At Grade
ATSF Harbor District Branch	13	92
UP San Pedro Branch	9	33
SP Wilmington Branch	1	35
SP San Pedro Branch	2	34
TOTAL	25	194

Source: Pier 300 Dry Bulk Terminal EIR, LAHD, January 1993.

3.6.1.4 Marine Transportation System

The Port of Los Angeles is one of the three components of San Pedro Bay; the other two being the Port of Long Beach and the U.S. Naval Station. This large maritime complex, which is the hub of Southern California's commercial shipping industry, has a network of waterways and berths which accommodate a variety of marine activity. The Port of Los Angeles alone has over 100 piers and wharves which serve many types of commercial and recreational vessels.

San Pedro Bay is protected by three breakwaters: San Pedro Breakwater, Middle Breakwater, and Long Beach Breakwater. The openings between these breakwaters, known as Angels Gate and Queens Gate, provide entry to the Port of Los Angeles and the Port of Long Beach, respectively.

Vessels destined for the HNPC site (Berths 210-211) enter the outer Los Angeles Harbor through Angels Gate then proceed north along the Glenn Anderson Ship Channel to the Main Channel of Los Angeles Harbor. After passing beneath the Vincent Thomas Bridge, the vessels travel northeasterly through the Turning Basin to the East Basin. Berths 210 and 211 are located on the north side of Terminal Island at the confluence of the East Basin and Cerritos Channel. In the area surrounding the HNPC site, there are other major commercial shipping operations as well as several marinas for recreational craft (on the north side of Cerritos channel).

A Vessel Traffic Information Service (VTIS), has been established within the main approaches to the Ports of Los Angeles and Long Beach. This mandatory service, administered by the Marine Exchange, is designed to enhance vessel safety in the main approaches to the Port area. The service consists of a coordinating office, specific reporting points, and VHF-FM radio communications used to communicate with vessels.

3.6.2 Impacts

The transportation impacts of the proposed HNPC project were determined by quantifying the before-and-after conditions on the study area's rail, waterway, and highway facilities for the scenarios with and without the project. The projected future traffic volumes for the year 2000 were used as the base year for purposes of comparison as that is when the proposed operational modifications and improvements are anticipated to be completed. The methodology for the impact analysis, in general, was to (1) establish the baseline conditions, (2) determine the traffic generation characteristics of the proposed project, and (3) conduct a comparative analysis of conditions with and without the project.

3.6.2.1 Significance Criteria

The project's impacts on traffic conditions are considered to be significant if the project results in:

- Creation of excessive grade differential between public and private property.
- Inadequate parking facilities.
- Exceedance of vehicle weight limits on light duty streets.
- Adverse effects on other existing or planned land uses in the vicinity or an inadequate access or on-site circulation system.
- Creation of hazardous traffic conditions.
- An increase in an intersection's volume/capacity (V/C) ratio or an increase in average daily traffic volumes on a local residential street in accordance with the following guidelines:

SIGNIFICANT INTERSECTION IMPACT				
Level of Service	Final V/C Ratio	Project-Related Increase in V/C		
С	> 0.700 - 0.800	Equal to or greater than 0.040		
D	> 0.800 - 0.900	Equal to or greater than 0.020		
E, F	> 0.900	Equal to or greater than 0.010		

SIGNIFICANT RES	IDENTIAL STREET IMPACT		
Projected Average Project-Related Daily Traffic (ADT) Increase in ADT			
1,000 or more 12 percent or more of final ADT			
2,000 or more	10 percent or more of final ADT		
3,000 or more	8 percent or more of final ADT		

 Results in an inconsistency or incompatibility with local or regional transportation plans or adverse effects on other existing or planned uses in the vicinity.

- Results in (1) a violation of Public Utilities Commission or railroad company guidelines for operating speeds, volumes, distribution, or mix of rail traffic to and from the project, (2) an increased accident rate at railroad/highway at-grade crossings, or (3) an unacceptable increase in traffic delays and/or vehicle queuing at railroad/highway at-grade crossings.
- Results in a reduction of current safety levels for vessels navigating the Main Channel and/or the project vicinity.

3.6.2.2 Impacts on Highway Traffic Conditions

Project Construction

There would be temporary impacts on the study area roadway system during construction of the proposed HNPC facilities. The construction activities would generate vehicular traffic associated with construction workers' vehicles and trucks delivering materials to the site. This site-generated traffic would result in increased traffic volumes on the study area roadways for the duration of the construction period.

The level of traffic expected to be generated by the construction activities has been estimated to range from 80 daily trips on an average day to 160 daily trips during a heavy month of construction activity. The average figure is based on a construction worker force of 20 people with 20 round-trip truck deliveries throughout the day. The peak figure is based on a maximum work force of 40 construction workers with 40 round-trip truck movements assumed.

During construction of the railroad spur the access road to HNPC and New Dock Street will be blocked at various times. Such blockages will impede or deny access to the site and have the potential of being a significant impact.

The traffic generated during construction would not result in significant traffic impacts since the volume of construction traffic (average of 80, maximum of 160 trips per day) would be less than the volume generated during operation (268 additional trips per day), which was determined (see below) not to be significant.

The impacts of the rail construction in the New Dock Street right-of-way could potentially result in significant traffic impacts. However, construction of the rail line across New Dock Street will be carried out during the weekend, a period of light traffic in the area of HNPC, to minimize disruption to road traffic and at least one lane will remain open at all times. During the construction phase along the access road, the contractor will be required to maintain open one inbound and one outbound lane of traffic to HNPC, and queuing along the access road in the construction zone will not be allowed. The construction of the railroad tracks will be limited in duration (5 months), and with the above mitigation, the impacts from the project will be insignificant.

Project Operation

Project Generated Traffic

The levels of traffic expected to be generated by the upgraded HNPC facility were determined in order to estimate the impacts of the project on the study area streets and intersections. Table 3.6-5 shows the volumes of traffic currently generated by the facility, the traffic volumes projected for the expanded facility, and the net increase in traffic for the morning and afternoon peak hours and for average daily traffic volumes on a typical weekday. The existing traffic

TABLE 3.6-5
PROJECT GENERATED TRAFFIC

	Da	ily	AM	Peak I	lour	PM Pea	k Hou	r
Category	Round Trips	One- way Trips	Total	In	Out	Total	In	Out
EXISTING CONDITIONS								
Scrap Delivery Trucks	180	360	36	18	18	36	18	18
Non-Ferrous Export Trucks	1	2	0	0	0	0	0	0
Shredder/Recycling Trucks	12	24	2	1	1	2	1	1
Employee Automobiles	150	300	90	75	15	90	15	75
Total Traffic	343	686	128	94	34	128	34	94
PROPOSED CONDITIONS								
Scrap Delivery Trucks	301	602	60	30	30	60	30	30
Non-Ferrous Export Trucks	2	4	2	1	1	2	1	1
Shredder/Recycling Trucks	0	0	0	0	0	0	0	0
Remediation Trucks	10	20	2	1	1	2	1	1
Employee Automobiles	164	328	98	82	16	98	16	82
Total Traffic	477	954	162	114	48	162	48	114
NET INCREASE								
Trucks	120	240	26	13	13	26	13	13
Automobiles	14	28	8	7	1	8	1	7
Total Traffic	134	268	34	20	14	34	14	20

volumes represent the current number of employees and truck trips for a facility which in 1992 exported 787,500 tons of scrap metal, while the proposed facility represents a maximum capacity of 1,300,000 tons per year using both truck and rail transport.

The assumptions used to develop the existing and projected traffic volumes are as follows:

 Number of truck loads per year of scrap delivery Existing - 53,900 Proposed - 90,400

• Number of truck loads per year of non-ferrous metal and residue shipped from site.

Existing - 358 Proposed - 591

 Number of truck loads per year of auto shredder and metal recycling residue shipped from site.

Existing - 3,472

Proposed - -0- (transferred to rail cars)

- The daily truck volumes for a typical day represent the annual truck volume divided by 300 (50 weeks per year, 6 days per week).
- The peak hour truck volume is ten percent of the daily truck volume.
- Number of employees (HNPC, contract, & shiploading).

Existing - 150 Proposed - 164

- Average automobile occupancy is 1.2 persons per vehicle and 20% of the employees are dropped off/picked up.
- Peak hour morning arrivals and afternoon departures represent sixty percent of the total employee trips.

As shown on Table 3.6-5 the proposed project is estimated to generate 954 average daily vehicle trips, 162 trips during the morning peak hour (114 in and 48 out), and 162 trips during the afternoon peak hour (48 in and 114 out). As the existing facility currently generates 686 daily trips, 128 trips during the morning peak hour (94 in and 34 out), and 128 trips during the afternoon peak hour (34 in and 94 out), the net traffic increase would be 268 daily trips (240 trucks and 28 autos), 34 morning peak hour trips (20 in and 14 out), and 34 afternoon peak hour trips (14 in and 20 out).

The project generated traffic was geographically distributed onto the roadway network based on the existing travel patterns for trucks and automobiles and the layout of the area's roadway network. The additional volume of project traffic at each study area intersection was determined for the morning and afternoon peak hours. Details regarding the assignment of project traffic to each of the study area roadways and intersections are presented in Appendix C Traffic Special Study Report.

Traffic Impacts During Project Operation

The anticipated traffic impacts during the operation of the proposed project are described below for the roadways and intersections in the study area. First, the peak hour intersection impacts are presented followed by an evaluation of daily traffic volumes on the roadway links.

The analysis of peak hour traffic impacts was conducted by quantifying the traffic conditions at the study area intersections for the future scenario with and without the project. Four scenarios were analyzed for the traffic impact analysis: existing conditions, existing plus ambient growth (1% annual growth rate projected to the year 2000), year 2000 cumulative conditions without the project, and year 2000 conditions with the project.

The project's impacts on the year 2000 volume to capacity ratios and levels of service at the study area intersections are summarized on Table 3.6-6 for the morning and afternoon peak periods. The last column of Table 3.6-6 indicates the incremental increase in V/C ratio caused by the project. The V/C ratio at the intersection of New Dock Street and the site access road, for example, would increase from 0.204 to 0.210 in the morning peak hour and from 0.169 to 0.176 in the afternoon peak hour.

Based on the significance criteria for traffic impacts, the analysis indicates that the proposed project would not have a significant impact in the study area.

The project's impacts on daily traffic volumes on each roadway link in the study area have also been evaluated, as summarized on Table 3.6-7 for the Terminal Island roadways and Table 3.6-8 for the regional access routes. The tables show the projected traffic volumes for the "with project" and "without project" scenarios as well as the percentage increase in traffic. Since all of the roadways would experience a traffic increase of approximately one percent or less except for New Dock Street, which would experience a 3% increase, and since none of the affected routes are residential streets, there would be no significant impacts on the roadway links in the study area.

Project Operation Impacts on Site Access, Hazardous traffic Conditions, Circulation, and Parking

Access to the HNPC site is provided by a short roadway which extends westerly from New Dock Street at the point where there is a jog in the New Dock Street alignment. The access road has two inbound (westbound) lanes and two outbound (eastbound) lanes and is used by the HNPC haul trucks as well as employees. Inbound trucks use the westbound shoulder of this access road as a queuing area while waiting to be weighed and checked in at the entrance. The proposed project will include placement of the railroad spur line across New Dock Street and down the middle of the access road to HNPC. During the operation of the facility, railcars will be delivered once a day between 5 p.m. and midnight. During the delivery, New Dock Street will be blocked as well as one westbound and one east bound land of the access road to HNPC. However, blockage of New Dock Street during the switching of 12 rail cars (see Section 3.6.2.3) is estimated to last only four minutes (in two two-minute increments for the inbound and outbound movements). The access road will be impacted for approximately twelve minutes (in two six-minute increments for the inbound and outbound movements), however, only one westbound lane will be blocked during switching and the westbound lane will remain open. These blockages will have an insignificant impact on site access and New Dock Street.

TABLE 3.6-6
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE

	V/C Ra	tio & Level	of Service		
Intersection	Existing Conditions	2000 Ambient	2000 Without Project*	2000 With Project*	Project Impact
New Dock St./Site Access					
AM Peak Hour	0.177 A	0.189 A	0.204 A	0.210 A	0.006
PM Peak Hour	0.143 A	0.153 A	0.169 A	0.176 A	0.007
New Dock St./H. Ford Ave.					
AM Peak Hour	0.213 A	0.228 A	0.269 A	0.281 A	0.012
PM Peak Hour	0.317 A	0.339 A	0.373 A	0.384 A	0.011
New Dock St./ H. Ford					
Bridge					
AM Peak Hour	0.145 A	0.155 A	0.179 A	0.183 A	0.004
PM Peak Hour	0.147 A	0.157 A	0.203 A	0.206 A	0.003
Seaside Ave./Toll Plaza					
AM Peak Hour	0.673 B	0.720 B	0.735 C	0.737 C	0.002
PM Peak Hour	0.567 A	0.607 A	0.621 B	0.622 B	0.001
Ocean Blvd./H. Ford Ave.					
AM Peak Hour	0.500 A	0.535 A	0.619 B	0.626 B	0 007
PM Peak Hour	0.523 A	0.560 A	0.625 B	0.631 B	0.006
Ocean Blvd./T.I. Fwy.					
AM Peak Hour	0.667 B	0.714 B	0.922 E	0.923 E	0.001
PM Peak Hour	0.772 C	0.826 D	0.903 D	0.904 E	0.001
Ocean Blvd./Gate 3					
AM Peak Hour	0.744 C	0.796 C	0.813 C	0.814 D	0.001
PM Peak Hour	0.632 B	0.676 B	0.707 B	0.708 C	0.001

^{*} Includes ambient growth and the cumulative impact of other proposed development.

TABLE 3.6-7
PROJECT IMPACT ON DAILY TRAFFIC VOLUMES
TERMINAL ISLAND ROADWAYS

Daily Traffic Volumes					
Roadway/Location	2000 Without Project	Project Traffic	2000 With Project	Percent Increase	
New Dock Street			0.460	2.0	
East of Project Site	9,200	268	9,468	2.9	
West of T.I. Fwy.	14,000	164	14,164	1.2	
Henry Ford Avenue					
New Dock to Ocean	8,900	104	9,004	1.2	
Seaside Avenue					
East of Toll Plaza	48,800	41	48,841	0.1	
Ocean Boulevard	•				
West of Henry Ford Ave.	44,700	41	45,741	0.1	
East of Henry Ford Ave.	46,300	63	46,363	0.1	
East of Gate 3	45,900	63	45,963	0.1	
Vincent Thomas Bridge	32,800	41	32,841	0.1	
Gerald Desmond Bridge	43,800	63	43,863	0.1	
Commodore Heim Bridge	25,800	164	25,964	0.6	

TABLE 3.6-8

PROJECT IMPACT ON DAILY TRAFFIC VOLUMES

REGIONAL ACCESS ROUTES

	Dail	y Traffic	Volumes	
Roadway/Location	2000	V	2000	
-	Without	Project	With	Percent
	Project	Traffic	Project	Increase
Harbor Freeway (I-110)	· · · · · · · · · · · · · · · · · · ·	·····		
North of Vincent Thomas Bridge	72,600	40	72,640	0.1
Channel St. to Anaheim St.	92,100	40	92,140	0.0
Anaheim St. to PCH	108,000	40	108,040	0.0
PCH to Sepulveda Blvd.	138,000	40	138,040	0.0
Sepulveda Blvd. to Carson St.	174,000	40	174,040	0.0
Carson St. to I-405	233,000	40	233,040	0.0
Long Beach Freeway (I-710)	•		•	
Ocean Blvd. to PCH	129,000	60	129,060	0.0
PCH to Willow St.	148,000	80	148,080	0.1
Willow St. to I-105	163,000	140	163,140	0.1
Terminal Island Freeway (Route 47)	,	_	, .	
Heim Bridge to Anaheim St.	25,800	160	25,960	0.6
Anaheim St. to PCH	20,500	100	20,600	0.5
PCH to Willow St.	16,900	80	16,980	0.5
San Diego Freeway (I-405)	-,			
West of Harbor Freeway	302,000	40	302,040	0.0
West of Long Beach Fwy.	261,000	30	261,030	0.0
East of Long Beach Fwy.	267,000	70	267,070	0.0
Henry Ford Avenue	, , , , , , , , , , , , , , , , , , , ,		•	
T.I. Freeway to Anaheim St.	10,400	50	10,450	0.5
Anaheim St. to Alameda St.	8,300	50	8,350	0.6
Alameda Street	-,		-,	
Henry Ford Ave. to PCH	19,000	50	19,050	0.3
PCH to Sepulveda Blvd.	18,900	50	18,950	0.3
Sepulveda Blvd. to I-405	21,900	50	21,950	0.2
Sepulveda Boulevard	21,700			3.2
West of T.I. Fwy.	20,900	10	20,910	0.0
T.I. Fwy. to Long Beach Fwy.	33,400	80	33,480	0.2
Pacific Coast Highway (Route 1)	22,.00	00	22,.00	5.2
West of T.I. Fwy.	34,000	10	34,010	0.0
T.I. Fwy. to Long Beach Fwy.	37,400	10	37,410	0.0
Anaheim Street	27,100		5.,.20	3.0
West of Alameda St.	29,100	10	29,110	0.0
West of T.I. Fwy.	39,600	10	39,610	0.0
T.I. Fwy. to Long Beach Fwy.	37,700	10	37,710	0.0

The analysis indicates that the proposed project will not have a significant impact at any of the study area intersections, therefore no increase in traffic hazards is expected as a result of the project. For traffic hazards related to rail traffic, it is not anticipated that the frequency of accident occurrence would increase as a result of the additional rail cars because the number of trains at each crossing would not increase. There will be no significant impact to traffic hazards as a result of the proposed project.

The parking lot for employees and visitors is located at the south end of the site adjacent to the access road. Drivers can enter and exit this lot directly from the access road. This parking lot, which can currently accommodate the existing parking demand generated by the 150 HNPC and contract employees, would be partially displaced by the proposed office building. As part of the facility improvements a new parking lot will be constructed. An area of approximately one acre, currently used for storage of equipment to the east of the present parking area, will be converted to parking with sufficient capacity to accommodate the projected 164 employees. There will be no significant impact to parking at the site.

Haul trucks enter the site through the check-in station/truck scales and then proceed northerly along an internal circulation road which extends through the center of the site. The trucks branch off from this internal road to their on-site destinations and park adjacent to their respective stock piles for unloading. When the unloading activity is completed, the trucks then leave the HNPC site. There is, therefore, no long term on-site parking demand for trucks at this facility, and there will not be any significant impacts to on-site traffic circulation.

Consistency with Local or Regional Plans

The Los Angeles County Congestion Management Program (CMP) guidelines state that a traffic analysis shall examine all intersections on the CMP network where a proposed project would add 50 or more vehicle trips during either the AM or PM peak hour. Since the proposed HNPC facility is expected to add fewer than 50 trips during the peak hours the project would not have an impact on the CMP network and the project is consistent with regional plans.

3.6.2.3 Impacts on Rail Conditions

If the HNPC site were provided with rail service as proposed, the facility would generate a demand for additional rail car movements on the tracks which provide access to Terminal Island. This includes the three main rail corridors described above, the Badger Avenue Bridge, and the eastwest tracks on Terminal Island. Current projections indicate that the facility would generate the following rail car volumes.

As shown below, if rail access were to be provided, HNPC would generate a demand for 12 rail cars on an average day; seven cars carrying scrap material to the site and five cars hauling auto shredder and metal recycling residue away from the site. If the rail cars that were used to carry scrap material to the site were efficiently reused to haul away the residue, then the total number of rail car movements would be fourteen per day in the best case scenario (seven in and seven out). If the rail cars were not reused (i.e., if the scrap material cars arrived full and left empty and the residue cars arrived empty and left full), the facility would generate a total of 24 car movements per day in the worst case scenario (twelve in and twelve out).

PROJECTED RAIL NEEDS

_		Nun	l Cars*	
Description	Annual Tonnage	Annual		Daily
Scrap Deliveries (inbound)	140,000	1,750	35	7
Residue Shipment (outbound)	98,900	1,250	25	5
Total	238,900	3,000	60	12

^{*} Based on a rail car capacity of 80 tons, with 50 weeks of operation per year and 5 operating days per week. Fractional rail care week rounded up.

Number of Rail Cars Moved into HNPC

Description	Annual	Weekly	Daily
Best case	1,750	35	7
Worst case	3,000	60	12

This rail activity would have an impact on rail operations and at-grade crossings as it would increase the number of cars on the trains traveling between the port and downtown Los Angeles and increase the number of switching movements on the Terminal Island tracks. With regard to railroad operations, the impact would not be significant as the additional 14 to 24 cars per day would be negligible compared to the level of rail activity on the tracks serving the port area and the capacity of the railroad system.

With regard to the potential impacts at the railroad/roadway at-grade crossings, the additional rail cars generated by HNPC would have an adverse effect on vehicular traffic conditions as the increased train lengths would increase the amount of delay at the crossings along each rail corridor that would be used. The severity of the impact depends on the number of rail cars that are attached to a particular train and the time of day that the train passes through the affected crossings. The additional number of cars on a given train would range from 1 to 12, with the typical scenario being three or four additional rail cars destined to or from HNPC.

If it is assumed that a typical train is 5,000 feet long, that the average travel speed is 20 miles per hour, and that the automatic gates would close 20 seconds prior to the arrival of a train, a train passage would block a given street for 3 minutes and 10 seconds. The impact of the additional rail cars generated by the project are shown below for a one-car, four-car, seven-car, and 12-car scenario, assuming that each additional rail car is 50 feet long.

PROJECT IMPACT AT RAILROAD CROSSINGS

Train Scenario	Blockage Duration
5,000-foot Train	3 min. 10 sec.
Plus 1 Car	3 min. 12 sec.
Plus 4 Cars	3 min. 17 sec.
Plus 7 Cars	3 min. 22 sec.
Plus 12 Cars	3 min. 31 sec.

The typical scenario is that an additional four rail cars would be attached to an existing train which would result in an increased blockage duration of seven seconds at each railroad crossing. The significance criteria established by the LAHD for traffic impacts at railroad crossings indicates that an unacceptable increase in traffic delays and/or vehicle queuing at a crossing is considered significant. Since seven seconds of additional blockage at a grade crossing would not likely create an unacceptable increase in delay or queuing, the HNPC project would not have a significant rail impact.

Although the impacts would not be significant at each individual at-grade crossing, the cumulative effects associated with the total delay for drivers at all of the crossings between the port and downtown Los Angeles would be adverse, particularly if the train passage were to occur during periods of peak traffic flow. The traffic delay impacts could be alleviated by constructing one or more grade separations along the rail corridors that serve the Port, as the benefits of a grade separation would offset the impacts of the additional rail cars. Several grade separation projects have been approved and are proceeding, including the New Dock Street separation that would be constructed in conjunction with the TICTF project.

In addition to the impacts associated with the increased train lengths at the existing railroad crossings, the project would create a new at-grade crossing as the proposed rail spur to the HNPC site would cross New Dock Street near the HNPC/Yusen Container Terminal access road. This would result in traffic impacts during operation when a switching movement to transport rail cars into or out of HNPC site temporarily blocks the street. These impacts would not be significant since the switching movements would occur between 5:00 p.m. and midnight when traffic volumes are light (peak traffic in the Terminal Island area occurs between 4:14 and 5:15 p.m.). With regard to safety, it is not anticipated that the frequency of accident occurrence would increase as a result of the additional rail cars because the number of trains at each crossing would not increase.

3.6.2.4 Impacts on Marine Vessel Operations

It is estimated that the proposed expansion of the HNPC operation would result in 14 additional ship calls per year, since the current level of 27 ships per year (1992 data) is expected to increase to approximately 41 ships per year. Compared to the current level of vessel activity at the port (6,107 ship calls in 1992), the additional 14 annual ship calls would be negligible and would not result in any significant impacts to marine traffic or safety.

3.6.3 Cumulative Impacts

The proposed Terminal Island Container Transfer Facility (TICTF), a project in the immediate vicinity of the HNPC site, could result in cumulative traffic and rail impacts. This facility would be located south of New Dock Street across the street from the HNPC site. If constructed, it will alter the circulation patterns on Terminal Island since it will result in the closure of New Dock Street west of HNPC and the relocation of existing rail lines. It could also have a cumulative impact during construction if the construction activities occurred simultaneously with the HNPC rail construction. Another project with potential for cumulative impacts is the proposed Alameda highway/rail transportation corridor project. This project would consolidate several rail lines entering the port area, provide grade separations, and generally improve road and rail interaction and traffic conditions.

3.6.4 Mitigation Measures

3.6.4.1 Recommended Mitigation Measures

During construction of the railroad spur there is a potential of a significant impact on access to the HNPC site and the adjacent Yusen Container Terminal. The impact results from the potential for blockage of the access road to HNPC and New Dock Street during construction of the spur. Requiring the contractor to construct the railroad spur across New Dock Street during the weekend, a period of light traffic in the area of HNPC, will lessen the impact. The construction contractor will be required to maintain open one westbound and one eastbound lane of traffic along the access road and New Dock Street at all times during construction. Also, during construction, there will no queuing of trucks allowed in the construction area. These measures will reduce the impact to a level of insignificance.

3.6.4.2 Impacts Mitigated to Insignificance

Impact from disruption of access to the HNPC site and the adjacent Yusen Container Terminal during construction of the railroad spur were mitigated to insignificance.

3.6.4.3 Unavoidable Significant Adverse Impacts

No unavoidable significant adverse impacts to transportation and circulation would result from the proposed project.

3.6.4.4 Mitigation Monitoring Program

Potentially Significant Adverse Impact	Mitigation Measure	Significance After Mitigation	Monitoring Program Responsibility/Rep ort Recipient	Timing
Construction of railroad spur to project site would disrupt access to the site and adjacent facilities	Contractor shall construct the track crossing New Dock St. during the weekend	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.
	Contractor shall maintain open one eastbound and westbound lane of traffic along New Dock St. and the HNPC access road during construction	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.
	Contractor shall post No Parking" signs along the access road during construction to prevent truck queuing from blocking access to the project site or adjacent facilities	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.

3.7 NOISE

3.7.1 Setting

Regulatory Setting

The City of Los Angeles Noise Ordinance (Municipal Code, Chapter XI - Noise Regulations) governs allowable noise levels from the Hugo Neu-Proler site. Allowable levels in the City of Los Angeles for various types of land use are presented below (Table 3.7-1) for day and night periods. These are average noise levels measured over minimum time periods of 15 minutes at any location.

Table 3.7-1. City of Los Angeles Noise Ordinance (Presumed Ambient Noise Levels)

Land Use	Allowable Average Noise Level (dBA)		
	Day (7 a.m 10 p.m.)	Night (10 p.m 7 a.m.)	
Residential	50	40	
Commercial	60	55	
Light Industrial	65	65	
Heavy Industrial	70	70	

Reference: Los Angeles Municipal Code Section 111.03

Adjustments to measured levels of a noise source are made based upon the character and duration of noise produced. Tonal and impulsive noises are adjusted upward by 5 dBA or, conversely, the noise limit is adjusted downward by 5 dBA. During ship loading operations, noise from Hugo Neu-Proler is subject to the 5 dBA adjustment because of the impulsive nature of the sound associated with loading of cargo. Thus, a level of 65 dBA, rather than 70 dBA, will be employed as the appropriate limit for ship loading noise.

Ground vibration is another major source of annoyance at residences near railroads. However, there are no generally approved standards for what constitutes acceptable levels of ground-borne vibration from freight trains. Most criteria for annoyance from building vibration have been based on standards prepared by the Acoustical Society of America and the International Organization for Standardization, both of which acknowledge the lack of consistent quantitative data on human perception and response to building vibration. Experience with rail rapid transit systems suggests that building induced vibration levels below a root-mean-square (RMS) level of 72 dB (0.004 in/sec) will be acceptable to most residents, even with a high level of train traffic. Since vibration from locomotives occurs over a much shorter time period than that of rail cars or rapid transit trains, higher levels could produce a similar degree of impact or intrusion. A level of 77 dB (0.007 in/sec) was proposed for locomotives in the Alameda Corridor (ACTA, 1992).

Region of Influence

The region of influence (ROI) is defined as the area surrounding the offshore and onshore elements of the project. The ROI also includes the corridors adjoining the ground transportation routes that would be used to access the Hugo Neu-Proler facility, including both vehicular traffic and rail traffic routes. Noise sensitive receptors that could be affected by noise from project construction or operation, both on site and off site, are included in the ROI.

Existing Conditions

The noise in and around the port results from a wide variety of sources at the port and in the surrounding communities. Primary noise sources at the port include bulk coal loading facilities, cranes to load and unload containers, bulk metal dumping, and traffic. Ongoing maintenance activities (including grading, dredging, and filling), and helicopter, general aviation, and jet aircraft overflights also contribute to the noise environment.

Outside the port's boundaries, port-related truck and train traffic are substantial sources of noise in the surrounding communities. The noise environments in communities surrounding the port are also affected by vehicular traffic on the local streets, aircraft flying overhead, and other typical neighborhood noises. In the residential neighborhoods of San Pedro to the west and on Reservation Point, noise from the port is heard as a steady background sound punctuated by individual identifiable sounds such as truck or locomotive horns, a ship's engine, or a train.

The nearest residential receptors in the vicinity of HNPC (Figure 3.7-1) are in Wilmington more than a mile to the north and San Pedro about two miles to the west. Navy housing is located about 3/4 mile south of the ship loader at the Long Beach Naval Station within the port area.

The following non-residential sensitive receptors within the industrially zoned port area are also currently located near the proposed project (Figure 3.7-1):

- Several marinas immediately across the narrow Cerritos Channel north-northeast of HNPC. The nearest boats are about 1000 feet from the ship loader.
- City of Los Angeles Fire Boat Station Number 4 about 2000 ft. north-northwest

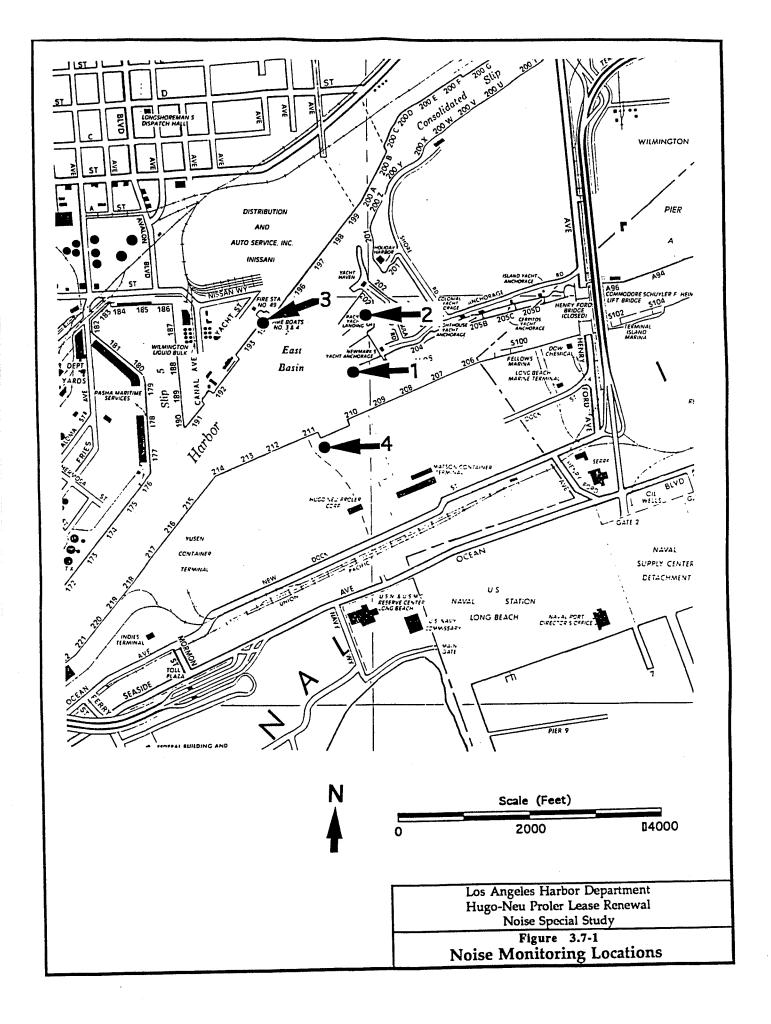
Although these facilities are within the industrially zoned port area, some boat owners live aboard their boats and the firemen are required to sleep at the Fire Boat Station.

3.7.1.1 Noise Monitoring Program

Noise Monitoring Methods

A noise monitoring program was conducted to quantify existing noise levels at sensitive receptors in the area. The program concentrated on documenting noise during ship loading operations since these have been the primary source of noise complaints. Methods and results of the program are documented in a special study report (Appendix D).

Four monitoring locations, representative of the nearest noise-sensitive receptors and the HNPC industrial noise sources, were selected for continuous and simultaneous monitoring over four separate 68-hour periods (Figure 3.7-1). Sixty-eight hours simply represents the maximum data storage capacity of the particular instruments used in the program. The first period was October 16-19, 1993 when no ship loading was taking place. The remaining three periods, from October 31 to November 13, 1993, each included significant ship loading operations. Location 4 was on the HNPC site near the ship loader and the other three locations were adjacent to noise-sensitive receptors. A brief description of each monitoring location and the types of sounds heard during the surveys are presented below:



- Location 1 On the upper deck of the motor yacht "Cherokee" which is moored in Newmark Marina and is the nearest boat to HNPC. The owner of the boat lives aboard. Sources of noise included container handling operations at Matson Container Terminal, scrap metal processing and ship loading at HNPC and general boat maintenance activities at the marinas. This location is adjacent to the monitoring location used by HNPC's noise consultant.
- Location 2 On the radar mast of Rich McCorkle's boat moored in the center of the marinas about 2000 ft. north-northeast of the ship loader. This location is representative of boats moored in the marina, but further from the ship loader. Noises heard were the same as at Location 1 on the Cherokee.
- Location 3 On a catwalk railing on the water side of Fire Boat Station Number 4 about 2000 ft. north-northwest of HNPC. Container terminal operations and HNPC activities were the primary sources of noise.
- Location 4 Near the HNPC ship loader at the ramp where loads of processed scrap metal are dumped from trucks into the ship loader conveyor. Most other HNPC processing activities could also be heard at this location. The purpose of the monitoring site was to document near-field noise levels produced by HNPC for correlation with other measurements at the three distant locations. Actual levels measured at the HNPC site are not as important to this study as the temporal pattern of levels. If the same temporal patterns are seen in the far-field data, it is assumed that HNPC was the source of noise. If the pattern is not the same, HNPC was not the source.

Continuous measurements of the A-weighted sound level (fast response) were made simultaneously at all four locations over the complete 68-hour periods. HNPC provided operational data logs for each hour, coincident with noise monitoring, which described HNPC activities in progress during the hour. This information provides further corroboration of the sources of noise which was recorded.

Noise Monitoring Results

A total of 257 hours of valid data were obtained during the four monitoring sessions conducted between October 16 and November 13, 1993. A summary of results is presented below, complete data are available in the Noise Special Study Report (Appendix D).

The most continuous source of noise which seemed to be in operation all the time was container loading and unloading at the Matson Container Terminal about 200 yards south of the Cherokee across Cerritos Channel. Matson is adjacent to HNPC. The noise was not judged to be intrusive or highly annoying because of the rather low level of noise produced. Electrical generators on some of the container ships would occasionally operate for several hours at a time at higher levels of noise. Normal scrap processing activities at HNPC were audible at a low level. However, HNPC ship loading noise was highly intrusive because of the high level and impulsive nature of metal-to-metal contact. This occurred when dump trucks dumped loads of metal onto the ship loading conveyor receiving floor, when metal fell from the conveyor onto the ship loader deflector chute and when metal dropped onto other metal within the holds of the ships.

The hourly L_{eq} data were correlated with HNPC activities, via the HNPC operating log, and an overall L_{eq} was calculated for each of three conditions. The first condition was no activity at HNPC. The second condition included all processing activities, such as stockpiling, shredding and shearing. The third condition was ship loading. Table 3.7-2 presents the results of this L_{eq} analysis.

Table 3.7-2 Long-Term Equivalent Noise Levels (dBA)

Monitoring Location	Background No HNPC Activity (71 hours)	HNPC Scrap Metal Processing (85 hours)	HNPC Ship Loading (101 hours)
Near HNPC Ship Loader	60.4	77.5	90.8
Deck of Cherokee	61.5	66.0	69.3
Deck of McCorkle Boat	53.1	56.8	60.3
Fire Boat Station	58.6	63.3	67.3

The background levels in the first column of Table 3.7-2 are largely controlled by container terminal operations adjacent to HNPC and near the Cherokee. The McCorkle boat was in a more distant location where the lowest level of 53.1 dBA was recorded. Normal HNPC scrap metal processing activities increased Leq levels about 4-5 dBA at the receptor locations. None of the long-term Leq levels during processing exceeded the 70 dBA industrial noise limit for continuous type noise.

Ship loading of scrap metal caused greater increases of between 7 and 9 dBA at the three receptors over normal background levels. The applicable City of Los Angeles ordinance level of 65 dBA (70 dBA - 5 dBA for impulsive noises) was exceeded at all three receptors during ship loading (Table 3.7-3). The maximum 1-hr L_{eq} levels attributable to HNPC ship loading were 78.5 dBA, 67.0 dBA and 72.5 dBA at the Cherokee, McCorkle boat and fire station, respectively. Thus, there are significant exceedances of the ordinance level during ship loading.

Table 3.7-3. Maximum 1- Hour Equivalent Noise Level (Leq) During Ship Loading Operations at HNPC

Location	Max 1-Hr Leq (dBA)	Date	Time
Deck of Cherokee	78.5	Nov 11, 1993	1300-1400
Deck of McCorkle Boat	67.0	Nov 13, 1993	1100-1200
Fire Boat Station	72.5	Nov 12, 1993	1341-1441

The nature of noise produced during ship loading is very impulsive (short duration high noise level events) caused by the banging around of the metal. This type of noise is not adequately characterized by an L_{eq} analysis as above because the peak levels produced are hidden by the averaging process. The L_{peak} and L_{max} graphs in Appendix D show many hours where levels above 90 dBA were experienced at the receptors. A subjective impression of the noise environment during ship loading, expressed by tenants of the marina and firemen at the fire station, is that it is highly intrusive and disruptive to activities such as conversation and sleeping. The data in these graphs support that impression.

Figure 3.7-2 presents graphs of the 1-minute L_{eq} levels during ship loading on Saturday, November 13, 1993 for all four monitoring locations. The correlation between noise produced at HNPC and levels measured at the receptors can be seen in these graphs. The hours from midnight to 3 a.m. show the correlation most clearly when a 10-15 minute break was taken at 1 a.m. and the noise level at every location, including HNPC, dropped to the normal background level of 50-55 dBA. When ship loading resumed, receptor levels increased to the 65 to 70 dBA level. A 10 dBA increase is perceived as a doubling of the sound level. Many of the 1-minute average levels at the receptors are above 70 dBA due to ship loading.

In summary, the continuous type of noise produced by normal processing of scrap metal does not appear to exceed the industrial noise limit nor result in noise complaints. However, the impulsive nature and high level of noise produced by ship loading does occasionally produce noise levels above the 65 dBA adjusted limit and does produce an intrusive noise environment that has resulted in noise complaints.

3.7.2 Impacts

The methodology used to prepare the assessment consisted of the following steps: (1) noise measurements were conducted at the nearest sensitive receptors to the project to define existing baseline conditions; (2) project operational and construction noise levels were projected for each of these locations based on measurements of similar activity; (3) the resulting noise levels were compared with existing noise levels and with applicable local criteria to evaluate impacts; (4) where significant impacts were identified, mitigation measures were evaluated that could reduce the impact to less than significant.

3.7.2.1 Significance Criteria

Project noise impacts would be significant if:

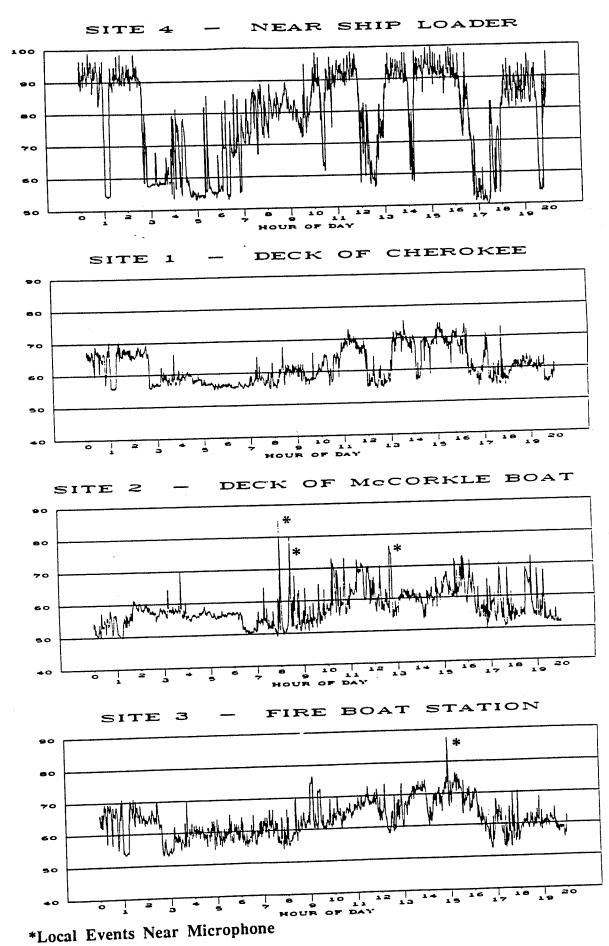
- The project raised existing (ambient) levels from below to above the applicable criteria (see Table 3.7-3),
- Noise resulting from the project increased average ambient levels which are already above the applicable criteria by more than 3 dB, or
- Project-generated noise resulted in a 5 dB increase and the resulting level remained below the maximum considered normally acceptable.

3.7.2.2 Impact Analysis

Project Construction Noise Impacts

HNPC proposes to extend the bulkloader (ship loader) ramp and conveyor by 35 feet and 25 feet, respectively, and to upgrade the conveyor to increase the loading rate by 20 to 40 percent. A duty cycle material crane may be added at the dock to facilitate ship loading when the ship cannot be positioned under the bulk loader. Construction of a perimeter wall made of empty sea containers is also proposed. This activity would consist of pouring a concrete pad around the perimeter and stacking the containers up to four high to form the wall. Movable bin walls will also be constructed of poured concrete blocks (2' x 4' x 2') which would be stacked up to 12 feet high. Other minor construction activities are also proposed.

Figure 3.7-2 SHIP LOADING 1-MIN LEQ LEVELS SATURDAY, NOVEMBER 13, 1993



Noise from the proposed construction activities will not produce a noise impact at off-site receptors for several reasons, as follows:

- The required construction equipment, such as ready mix concrete trucks and cranes, is quieter than existing equipment, such as Euclid dump trucks and shredder, which operate routinely on the HNPC site.
- The level of construction activity will be much lower than the normal level of scrap metal processing.
- Noise from existing processing of scrap metal has been shown not to produce a noise impact.
- Construction noise will be indistinguishable from, and at a lower level than normal HNPC operating noise.
- The expected increase in noise level would be a small fraction of one decibel and would not be measurable.

Project Operational Noise Impacts

Site Operations

Operational noise has been divided into two categories called "processing" and "ship loading" because of the very different characteristics of noise produced. Processing noise is somewhat continuous and constant in level and is dominated by engine noise. Ship loading is characterized as a sporadic impulsive type noise dominated by metal to metal impact. Processing includes receiving, sorting, shredding, shearing and stockpiling of scrap metal. These activities generally start as early as 4 a.m. and continue until about midnight on weekdays. Saturday is generally a short work day with all work stopping at 3:30 p.m. Sunday is a non-work day. Ship loading is performed around the clock, even on Sundays, when a ship is berthed.

Equipment associated with processing produces high levels of noise which is largely shielded from off-site receptors by the stockpiles of metal. The proposed perimeter wall will supplement this self-shielding and replace it at times when stockpiles are low.

Proposed changes to existing operations include increasing the maximum throughput about 36 percent from 950,000 to 1,300,000 tons per year (TPY) of scrap metal and reintroducing rail service. The rate of ship loading will be increased proportionately which will also increase noise levels. A 36 percent increase in activity level is equivalent to an increase in long-term equivalent noise levels of 1.4 dBA, based on the decibel addition equation of 10 log 1.36. This slight increase would not be considered significant because it is below the 3 dBA noted in Section 3.7.2.1 Significance Criteria.

HNPC is aware of the excess noise created by their activities and, as part of their plan for capacity improvements, they are proposing to construct a noise and visual barrier wall around portions of the facility using empty sea containers stacked to a height of 32 feet. The most important portion of the barrier would be along the pier and would shield processing noise and noise from off-highway dump trucks delivering loads of metal to the ship loader conveyor during loading operations. HNPC's own noise data (Houten, 1993) show that the dumping of metal onto the conveyor ramp produces levels of about 80 dBA at the marina. The 32-foot high barrier would reduce this noise by about 16 dBA, to an acceptable level of 64 dBA. The barrier would be in two overlapping segments with an opening to provide access to the dock by vehicles. One segment

would be adjacent to the ramp and the other nearer the dock crane. Lines-of-sight to the marina and fire station would be broken. Construction of the barrier as part of the proposed project would have an overall benefit of reducing the noise levels from this source.

HNPC's noise consultant is also studying ways to reduce noise from the other two major sources of ship loading noise. These include metal impacting the deflector plate at the discharge end of the loader and noise produced within the hold of the ship. HNPC noise data indicate that each of these sources produce levels of 68 dBA at the marina. The combined level would be 71 dBA for current HNPC operations. It is unclear how the two sources of noise were separated at the marina monitor since both activities occur simultaneously. Nonetheless, data from the Port of Los Angeles monitors presented in this report indicate that the combined level of 71 dBA is approximately correct, but the loading of some types of metal produced higher levels.

The method proposed by HNPC to reduce noise from the deflector plate is to apply a damping material to the backside of the plate. The expected reduction in noise levels from this source is 6 to 8 dBA. Field tests already conducted at HNPC indicate that this approach is feasible. Implementation of damping material on the deflection plate would lower the noise from this source as well as the combined level of noise associated with the discharge of the loader into the ship hold, noted above.

Two project features, the barrier wall and damping material on the deflection plate, will reduce existing and future maximum noise levels from these sources at the nearby marinas and Fire Boat Station Number 4. These measures will reduce noise to levels below the industrial noise limit of 70 dBA (65 dBA for impulsive noises). Some of the sensitive receptors at the nearby marinas may experience occasional sleep and speech interference but at a much reduced level.

Truck Traffic

During 1992, approximately 180 trucks per day delivered scrap metal to the HNPC facility. Trucks use the existing roadway network, including the freeway system, Highway 47, and Seaside Avenue. Sensitive receptors include residences adjoining the freeway systems. The project-generated truck trips make an insignificant addition to the total number of trucks generated by the Port. The proposed increase in scrap metal handling capacity to 1,300,000 TPY would increase the number of truck trips to approximately 301 per day. However, the additional traffic would still be insignificant and would result in no increase over existing average noise levels along all of the streets serving HNPC. This would not be a significant noise impact.

The traffic resulting from the project and the proposed increase in capacity would result in no increase to the overall noise levels along any of the freeway network. There would be no significant noise impacts along the freeways as a result of project generated truck traffic.

Rail Traffic

The proposed reinstitution of rail traffic to HNPC and expansion of capacity to 1,300,000 TPY would result in a rail traffic level of about 60 rail cars per week. Regional rail service to the port area is provided by Santa Fe, Southern Pacific, and Union Pacific railways, with Union Pacific serving Terminal Island. There are currently nine trains per day on the Union Pacific tracks with two or three trains during the nighttime period (LAHD, 1993). Rail cars for HNPC would likely arrive on Terminal Island as part of larger trains from which they would be cut for delivery to HNPC. The addition of approximately 60 rail cars per week represents an insignificant increase in rail traffic levels past residential areas. There are no sensitive receptors on Terminal Island in the vicinity of the proposed rail spur to HNPC. Thus, no new receptors will be impacted and receptors currently subject to rail noise will not be able to detect any difference in the level of rail-generated noise. Noise impacts along the existing rail lines would, therefore, be insignificant.

Vibration levels generated by the proposed trains would be similar to vibration generated by existing trains. The vibration levels would be expected to be perceptible at residences located less than 100 feet from the rail lines (POLB and POLA, 1983). Such residences do exist along the Union Pacific Railroad line. The addition of a few more cars to the trains would, therefore, result in a slight increase in the amount of time potentially perceptible vibration exists along the rail lines. However, since the time required for approximately 60 rail cars per week to pass any residence is short, the potential impact is considered to be insignificant.

3.7.3 Cumulative Impacts

The proposed project will result in a reduction in the maximum noise levels from daily activities at the site, but will increase the number of days on which makes activities occur. Noise, however, is not an additive impact, and consequently, the combination of existing noise levels and the noise generated from construction and operation activities will make the overall noise level by less than two decibels. The project is located in an industrial area where noise is generated from sources such as truck and rail traffic, container handling, and ship loading activities. Given the industrialized nature of the project site and vicinity, the anticipated cumulative increase is not expected to be significant.

3.7.4 Mitigation Measures

3.7.4.1 Recommended Mitigation Measures

Project Construction

No significant impacts are expected, therefore no mitigation measures are required for construction noise.

Project Operation

The proposed project will lower the maximum noise levels while at the same time it will increase the number of days on which maximum noise levels occur. Using the significance criteria outlined in Section 3.7.2.1, the project will not produce a significant impact and no additional mitigation measures are necessary.

3.7.4.2 Impacts Mitigated to Insignificance

The project will not cause significant noise impacts.

3.7.4.3 Unavoidable Significant Adverse Impacts

The project will not result in unavoidable significant adverse noise impacts.

3.7.4.4 Mitigation Monitoring Program

None required.

3.8 PUBLIC HEALTH AND SAFETY (RISK OF UPSET)

This section describes public health and safety and risk of upset of scrap metal processing, storage and shipping as proposed by HNPC. Potential public health and safety impacts are associated with fires, accidental release of hazardous materials, emissions of air toxics from routine processing, storage and shipping of scrap metal, hazardous wastes generated at the site, and remediation of soil and groundwater contamination at the site.

3.8.1 Setting

The HNPC facility is located in an area devoted to industrial use and warehousing activities. There are no sensitive receptors in the immediate vicinity of the project site. The facility is approximately one mile from the nearest residential area, located in Wilmington, and 660 feet from a marina which is across the Cerritos Channel. For purposes of the risk assessment, the marinas were considered a residential area because of some "live-aboards" on private boats.

Fire Protection Services

Fire protection at the Port of Los Angeles is provided by the City of Los Angeles Fire Department (LAFD). The LAFD facilities include land-based fire stations and fireboat companies located in the vicinity of the project site. The capabilities of the LAFD to serve the site area are described in Section 3.9 Public Services.

Security

The HNPC facility has a secured land access consisting of a fence and gated entrances. The main gate entrance to the facility is monitored by a security guard at all times. Law enforcement resources are described in Section 3.9 Public Services.

Hazardous Materials Management

State law requires businesses to implement a Hazardous Materials Business Plan if they handle hazardous material in quantities above the threshold amounts of 500 pounds of solid materials, 55 gallons of liquid, or 200 cubic feet of compressed gas. The business plan is designed to facilitate quick action by the LAFD during emergency situations.

A list of the hazardous materials used by HNPC on the site as reported in HNPC's Business Plan is provided in Table 3.8-1. In addition to these materials, HNPC uses smaller quantities of a large variety of chemicals, paints, solvents, and other hazardous materials commonly used by industry for vehicle and equipment maintenance.

The transportation of hazardous material by air, rail, road, and water is controlled through a complex set of federal, state, and local rules and regulations. Under federal law, a complete set of regulations is administered by the U.S. Department of Transportation under 49 CFR Parts 100 through 179. Under state law, regulations are administered by the California Highway Patrol under Title 13 CCR Sections 1150-1216. These regulations cover maintenance and inspection of vehicles, requirements for motor carrier safety, packing and shipping of hazardous materials, record keeping, manifesting, labeling, and placarding requirements for vehicles. In addition, the City of Los Angeles has designated a truck route in the harbor area which avoids residential areas. Trucks would then travel along approved highways to their destination points.

Table 3.8-1. Hazardous Materials Used by HNPC.

Material	Maximum Quantity On-site		
Diesel fuel	50,000 gallons		
Unleaded gasoline	1,000 gallons		
Propane	1,800 gallons		
Waste oil	1,500 gallons		
Acetylene	1,200 cu ft		
Oxygen	65,000 cu ft		
Hydraulic fluid	2,000 gallons		
Motor oil	800 gallons		
Industrial grease	3,000 pounds		
Solvents (Petroleum distillates)	100 gallons		

Source: HNPC, 1994 Inventory.

HNPC does not accept hazardous materials for processing or shipping. Hazardous materials may be present in some loads delivered to the site, however, all loads are inspected. A list of materials that HNPC does not accept is presented in Section 1.5.1.

HNPC has an established process for inspecting incoming scrap for hazardous materials, and for handling hazardous materials if they are found. The most common hazardous materials are capacitors, ballasts, and electronic items. When these are found during the receiving inspection, the load may be rejected or the hazardous material is separated and placed back on the truck to be returned to its source. If the material is found after the load is dumped, the company who shipped the material is notified to pick up the material. If the hazardous material is found after the load is dumped and the shipper cannot be identified, the material is collected and stored in lined drums until disposed of at an approved hazardous waste facility.

An employee health and safety program has been developed by HNPC for the facility. Health and safety policies and programs of the facility incorporate procedures based on industry experience, standards of trade associations, and federal, state, and local regulations, such as the Occupational Safety and Health Act. Material Safety Data Sheets, which outline the hazards associated with each product, procedures for safe chemical handling, and appropriate personal protective equipment is available at the facility. In addition, safety rules and regulations governing individual employee conduct, including protective equipment and clothing requirements, have been promulgated and included in HNPC's Policy and Procedures Manual.

Air Toxics

Air Toxics Hot Spots (AB 2588)

Assembly Bill 2588, the Air Toxics "Hot Spot" Information and Assessment Act (Section 44360 et. seq., Health and Safety Code; also known as AB 2588) was enacted by the California State Legislature in 1987 to gather information on substances which may pose a chronic or acute threat to public health when present in the ambient air. The legislation requires each Air Pollution Control District to prepare a Toxic Air Contaminant Emission Inventory that reflects significant sources of toxic air emissions within its district. Enforcement of AB 2588 is the responsibility of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD has requested an Emission Inventory Report for operations at the existing HNPC facility. The inventory plan for the facility was submitted to the SCAQMD on September 30, 1991, and was subsequently approved. The inventory report was submitted to the SCAQMD on February 1, 1993.

New Source Review of Carcinogenic Air Contaminants (SCAQMD Rule 1401) SCAQMD Rule 1401 specifies limits for maximum individual cancer risks and excess cancer burden (i.e. additional cancer cases within a defined population) resulting from new or modified stationary sources emitting carcinogenic air contaminants. According to Rule 1401, SCAQMD permits for construction of new or modified sources without the use of best available control technology for toxics (T-BACT) would be granted only if their installation would result in a maximum individual cancer risk of less than one-in-million (1 x 10-6) at any receptor location. Permits for construction of new or modified sources with the use of T-BACT would be granted only if their installation would result in a maximum individual cancer risk of less than ten-in-million (1 x 10-5) at any receptor location. Any modifications made to SCAQMD-permitted units would be subject to this regulation if they would cause the emission of substances governed by Rule 1401.

Toxic Air Contaminants from Existing Sources (SCAQMD Rule 1402) SCAQMD Rule 1402 specifies that facilities exceeding a significant risk level, maximum individual cancer risk level of one hundred in one million (1 x 10-4) or a total acute or chronic hazard index of five (5.0), are required to submit a risk reduction plan. The risk reduction plan is a plan for reducing the risks below the significant risk levels as quickly as feasible, but no later than five years from the initial plan submittal date.

Auto Shredder Waste Management

Approximately 45,700 tons of auto shredder residue is currently produced per year. Untreated auto shredder residue is classified as a California-only hazardous waste by the California Department of Toxic Substances Control (DTSC) because of excessive soluble levels of metals. Presently, the shredder residue is placed into containers, hauled by truck a short distance to a rail siding on Terminal Island, and placed on rail cars. The loaded containers are taken by rail for disposed at a landfill in Utah. The proposed project includes re-establishment of rail access to the site, after which the auto shredder waste will be shipped directly out by rail and truck use would be discontinued.

In June 1991, HNPC was cited by the Los Angeles County Department of Health Service for various violations of the California Health and Safety Code concerning the handling of hazardous waste. Two violations were referred to the DTSC and the remainder were either vacated by Los Angeles County or they were corrected by HNPC. After the referral by Los Angeles County, DTSC conduced an inspection of the HNPC facility in September, 1991, and issued a Report of Violation in March 1992 alleging two violations of the California Health and Safety Code concerning the handling of hazardous waste. These violations were corrected by HNPC, and verified during an April 21, 1994 inspection of the HNPC facility by DTSC (DTSC, 1995). However, as a result of the April 21, 1994, inspection, a Report of Violation was issued in November, 1994, for the storage of untreated auto shredder waste on concrete at the facility while the waste awaited shipment from the site. This Report of Violation will be corrected with the construction of the auto shredder waste storage facility, and construction of the rail spur. This will allow for direct shipment of the waste by rail from the HNPC facility to a permitted disposal point.

Soil and Groundwater Remediation

The presence of hazardous materials in soil and groundwater at the HNPC facility is known from several site characterizations conducted at the facility. The magnitude and extent of contamination and remedial actions initiated and under consideration are discussed in Section 3.1.

In a Memorandum of Understanding with the LAHD, HNPC has agreed to proceed with remediation of the site under the direction and oversight of the RWQCB to levels below: (a) hazardous waste threshold levels as said defined under state and federal regulations, provided

contamination levels in excess of said regulatory levels may be left on the premises if certified in writing by the DTSC as being non-hazardous: and (b) contamination levels that are demonstrated through a risk assessment process as part of a RAP, to protect human health and the environment consistent with Tidelands Trust purposes. Restoration and remediation of the site will be performed in accordance with a RAP approved by the RWQCB, the DTSC and the LAHD and would be performed whether or not the lease is renewed for continued use of the site by HNPC.

Emergency Response

Access by emergency vehicles to the Hugo Neu-Proler site is provided by a short roadway which extends westerly from New Dock Street at the point where there is a jog in the New Dock Street alignment. The access road, which forms a "T" intersection with New Dock Street, is shared by Hugo Neu-Proler and the Yusen Container Terminal. It has two inbound (westbound) lanes and two outbound (eastbound) lanes and is used by the Hugo Neu-Proler haul trucks as well as employees. Inbound trucks use one inbound land of this access road as a queuing area while waiting to be weighed and checked in at the entrance.

3.8.2 Impacts

Potential impacts to public health and safety are associated with fires, accidental release of hazardous materials, emissions of air toxics from routine processing, storage and shipping of scrap metal, hazardous wastes generated at the site, and remediation of soil and groundwater contamination at the site.

3.8.2.1 Significance Criteria

Impacts are considered significant if they would result in:

- Toxic air emissions which cause an increase over existing conditions at the maximally exposed sensitive, residential, or occupational receptor as follows:
 - 1. an increase in the maximum individual cancer risk (MICR) or greater than 10 in one million $(10x10^{-6})$;
 - 2. an increase of greater than 0.5 excess cancer cases in the population subject to a risk greater than one in a million $(1x10^{-6})$;
 - 3. an increase of greater than 1.0 in the chronic exposure level hazard index; or,
 - 4. an increase of greater than 1.0 in the acute exposure level hazard index at any receptor location.
- Construction or operation activities that would interfere with emergency response plans or emergency evacuation plans.
- Exposure of the public to hazardous substances which pose a substantial threat to human health and safety.
- Accidental release of hazardous materials from the proposed project, and fire and
 explosion hazards associated with the proposed project would be considered
 significant if the health and safety of the general public or workers are adversely
 effected. To determine the risk of an accidental release of hazardous materials, fire,

or explosion, the Los Angeles County Fire Department risk criticality matrix is employed (LACoFD, 1991). The probability of an occurrence has been divided into five categories:

A - Frequent

0 to 1 years -- More than one year.

B - Periodical

Every 1 to 10 years -- At least once each decade. Every 10 to 100 years -- Probably during the lifetime of the plant.

C - Occasional D - Possible

Every 100 to 10,000 years -- Not expected, but could occur.

E - Improbable

Not for 10,000 or more years -- Not expected or likely to occur at all.

It is also necessary to classify accidents according to their severity of consequences to people or property. There are four categories of LACoFD classifications:

I - Catastrophic

Results in death (or damage and production losses > \$1,0000,000)

II - Severe

Results in multiple injuries (or losses between \$100,000 and

\$1,000,000)

III - Moderate

Results in a single injury (or losses between \$10,000 and \$100,000)

IV - Slight

Results in operational problems only (or losses < \$10,000)

The risk criticality matrix shown in Table 3.9-2 combines accidental probability with the severity of consequences to identify the risk criticality. Four categories of risk have been defined by the LACoFD as:

1 - Critical

Mitigate within six months with administrative or engineering

control (to reduce the Risk code to 3 or less).

2 - Undesirable

Mitigate within one year with administrative or engineering control

(to reduce the Risk code to 3 or less).

3 - Acceptable

Verify need for engineering controls, or that administrative control

are in place for hazard.

4 - Acceptable

No action required for the identified hazard.

Impacts for accidental releases are considered to be significant if the risks fall in categories 1 or 2 on the risk matrix.

Table 3.8-2. Risk Criticality Matrix

	Frequency				
Severity of Consequence	A Frequent	B Periodic	C Occasional	Possible	Improbable
I Catastrophic	1	1	2	4	4
II Severe	1	3	3	4	4
III Moderate	2	3	4	4	4
IV Slight	4	4	4	4	4

3.8.2.2 Impacts Analysis

3.8.2.2.1 Fire, Explosion, or Accidental Release of Hazardous Materials

Fire and Explosion Hazard during Operation

The potential for fires and explosion at the HNPC facility exists from storage of flammable fuels and gases, fires and/or explosions resulting from the accidental processing of flammable materials, and fires in storage piles.

Relocation of the fuel storage area with installation of new tanks and fire suppression equipment are improvements included in the proposed project. HNPC proposes to replace the existing aboveground diesel storage tank with two 20,000 to 25,000 gallon vaulted tanks, and the existing underground gasoline storage tanks would be replaced by a 1,000 gallon vaulted tank. These new tanks would be subject to applicable current regulatory and safety standards. HNPC has a written contingency plan which addresses the equipment and procedures available for response to potential emergencies which could result from facility operations. The new equipment would be installed to the latest fire protection standards and is expected to reduce the fire hazard at the project site.

HNPC has implemented scrap purchasing programs and conducts load inspections designed to detect and remove hazardous materials before they can enter the facility or processing systems used on the site. These programs and inspections also serve to remove materials which could cause fires or explosions. HNPC personnel monitor and manage storage piles (both scrap and auto shredder waste) to prevent fire. The water used in dust suppression also helps to inhibit fire within the storage piles. There has not been a fire in a storage pile for the past ten years (personal communications, Neil Kerney, 1995). The proposed construction of an auto shredder waste storage facility will also decrease the risk of fire in the material by removing it from open storage and isolating it from potential ignition sources. The processing equipment at HNPC is designed to withstand and contain explosions which may occur within the equipment when scrap is being processed. This design reduces the impact of any mishap which may occur in the process line. The specialized equipment, programs, procedures, on-site fire suppression equipment, and availability of LAFD equipment and personnel, will control and contain fires or explosions, if they occur. However, despite these precautions, a fire or explosion would probably occur (Occasional Category) on-site during the life of the 30 year lease to HNPC. The numerous safety mechanisms required by federal, state, and local regulations serve, along with the above measures, would minimize the potential severity of a major accident to occur. It is anticipated that any impact will be limited to the facility itself and that the severity of consequences would fall in the Moderate Category. According to the criticality matrix in Table 3.9.2, the risk code for fire and explosion is Acceptable (4), indicating that impact of such an event to public health and safety would be insignificant.

Accidental Release of Hazardous Materials

Hazardous materials, such as those listed in Table 3.8-1, are used in the processing of the scrap and in the maintenance of the facility. Various federal, state, and local regulations are in place to prevent or mitigate releases of hazardous materials into the environment. Since these materials are in routine use at HNPC, a release of hazardous materials would probably occur during the 30 year lease to HNPC (Occasional Category). The nature of the hazardous materials used at HNPC due not lend themselves to sever impacts to public health. The severity of consequences of a release of material routinely stored at the facility (Table 3.8-1) would be in the Moderate Category. Using the criticality matrix in Table 3.9.2, the risk code for release of hazardous materials routinely used at HNPC is Acceptable (4), indicating that impact of such an event to public health and safety would be insignificant.

Hazardous materials may also be brought into the facility hidden in scrap shipments. HNPC has implemented scrap purchasing programs and conducts load inspections designed to detect and remove hazardous materials before they can enter the facility or processing systems. With these programs in place an accidental release of hazardous material from the site could occur, but is unlikely (Possible Category). However, given that the nature of hazardous materials that could be hidden in scrap loads is unknown, a worst case scenario for an accidental release would be in the Catastrophic Category. Using the criticality matrix in Table 3.9.2, the risk code for this scenario is Acceptable (4), indicating that impact of such an event to public health and safety would be insignificant.

Accidental Release of Hazardous Waste during Transportation

The proposed project would result in an increase in rail transport of hazardous waste out of the facility. The frequency of an accidental release of hazardous waste being transported by rail is judged to be probable during the lifetime of the project (Occasional Category). The waste removed from the HNPC facility, soil or residue from the processing of scrap, contains primarily metals and PCBs. The waste is classified California-only hazardous waste because of the metal concentration (primarily lead, and zinc). Metals and PCBs are non-volatile and their route of exposure for the waste would be primarily via direct contact or ingestion. During a release of hazardous materials, public safety agencies respond to reduce or prevent exposure of the public to the hazardous materials. Given the chemicals of concern are non-volatile and public contact would be limited, there is low risk (Slight Category) to the public from an accidental release. Using the criticality matrix in Table 3.9.2, the risk code for this scenario is Acceptable (4), indicating that impact of such an event to public health and safety would be insignificant.

3.8.2.2.2 Emissions of Air Toxics

An Air Quality Special Study was conducted to develop ambient air quality data and assess the potential health risk posed by emissions from HNPC operations. The Air Quality Special Study report is presented in Appendix B and results are summarized below.

One of the major pollutants associated with site operations is particulate matter smaller than 10 microns in diameter (PM10). PM10 is generated during normal site operations. Air toxics such as heavy metals and PCBs are associated with the PM10 generated at the site, including PM10 resulting from mobile source exhaust emissions. This association of PM10 with toxics is known from previous ambient air monitoring conducted by the South Coast Air Quality Management District (SCAQMD, 1989). Results from that study indicated a correlation between PM10 concentrations and heavy metals. Therefore, emission estimates and subsequent modeling was performed in the present study for PM10 because a direct relationship to air toxics was expected.

Air dispersion modeling was conducted to estimate the concentration of airborne particulate matter for the area surrounding the HNPC facility. An ambient air sampling program provided data on the actual concentrations of air toxics and airborne particulates around the facility. Sampling was conducted at upwind, downwind, and background locations. Laboratory chemical analysis of airborne particulate samples was used to estimate the air toxics concentration associated with particulates attributable to emissions from HNPC operations. Data from modeling and the analysis of toxics in the particulate samples was combined to produce a risk assessment of the cancer and non-cancer health risks resulting from HNPC air toxic emissions.

A health risk assessment was conducted of potential effects caused by emissions from current and proposed HNPC operations. The risk assessment followed general methodology presented in the California Air Pollution Control Officers Association (CAPCOA, 1992) guidance, Risk

Assessment Guidelines for the Air Toxics "Hot Spots" Program. Cancer and non-cancer health risks were assessed for estimated air toxic impacts caused by HNPC. All toxic air pollutants were assessed for the inhalation pathway and PCB impacts were also assessed for certain non-inhalation pathways.

Receptor Identification

The receptors of concern are people potentially living or visiting areas where they may be exposed to emissions from HNPC. A search was conducted to identify sensitive receptors, such as day care centers, hospitals, schools, convalescent homes, etc., located within a 3 mile radius of the site. Nine schools were identified, and are illustrated on Figure 3.8-1. Areas surrounding HNPC are generally commercial/industrial, with the exception of the marina located across the channel to the north of HNPC, which may be considered a residential area due to a number of live-aboards on private boats, and nearby Navy housing located to the southeast of HNPC.

Model results were compared at these residential receptors to determine the location of the maximum exposed actual person (MEAP). The MEAP is a person currently living in an area influenced by HNPC emissions. The MEAP is the residential receptor receiving the largest impact concentration based on modeling, and in this case the MEAP is a person living at the marina. The maximum exposed individual (MEI) is assumed to be the off-site receptor location for which maximum exposure occurs, regardless of the likelihood of an actual person being exposed at that location. The model indicates that the off-site MEI is located near the eastern property line of HNPC.

Annual Average and Hourly Impact Concentrations

Modeling generated an estimate of the maximum hourly, 24-hr average, and average annual concentration of PM10 in the site vicinity for current operations. Using the 1991 and 1992 meteorological data, the maximum modeled concentrations for PM10 are presented in Table 3.8-3. The maximum hourly concentrations occur near the HNPC pier line while the 24-hour and annual average concentrations occur near the center of the HNPC site. Predicted PM10 values for the off-site MEI and MEAP are presented in Table 3.8-4.

Concentrations decrease rapidly with distance from the center of the property. Annual impact concentrations decrease to 1 ug/m3 or less at a distance of approximately 2300 to 3300 feet from the property boundary. The closest sensitive receptor is located at a distance of about 9100 feet from the property boundary. The closest residential receptor (at the marina) is located approximately 660 feet north of the property boundary.

To determine the concentrations of metals and PCBs in the particulate which could be attributed to HNPC, concentrations in the background samples were averaged on a daily basis and subtracted from the concentrations in the downwind samples. This yielded metals and PCBs attributable to particulate generated by HNPC activities. These concentrations were then correlated to TSP concentrations (minus background) to establish a ratio between TSP and the air toxic. When TSP and individual toxics were found to be correlated with a high level of significance (probability greater than 95%), a regression line equation was calculated to predict the air toxic concentration based on particulate concentration.

Exposures were calculated for the maximum exposed actual person (MEAP; a person currently living in the marina opposite from the facility), and for the nearby sensitive receptors. The MEAP determination assumes that a single individual will be exposed to a constant dose of a toxic emission at the same location for 24 hours per day, over a 70-year period in accordance with CAPCOA (1992) Risk Assessment Guidelines. This is considered a worst-case condition since no

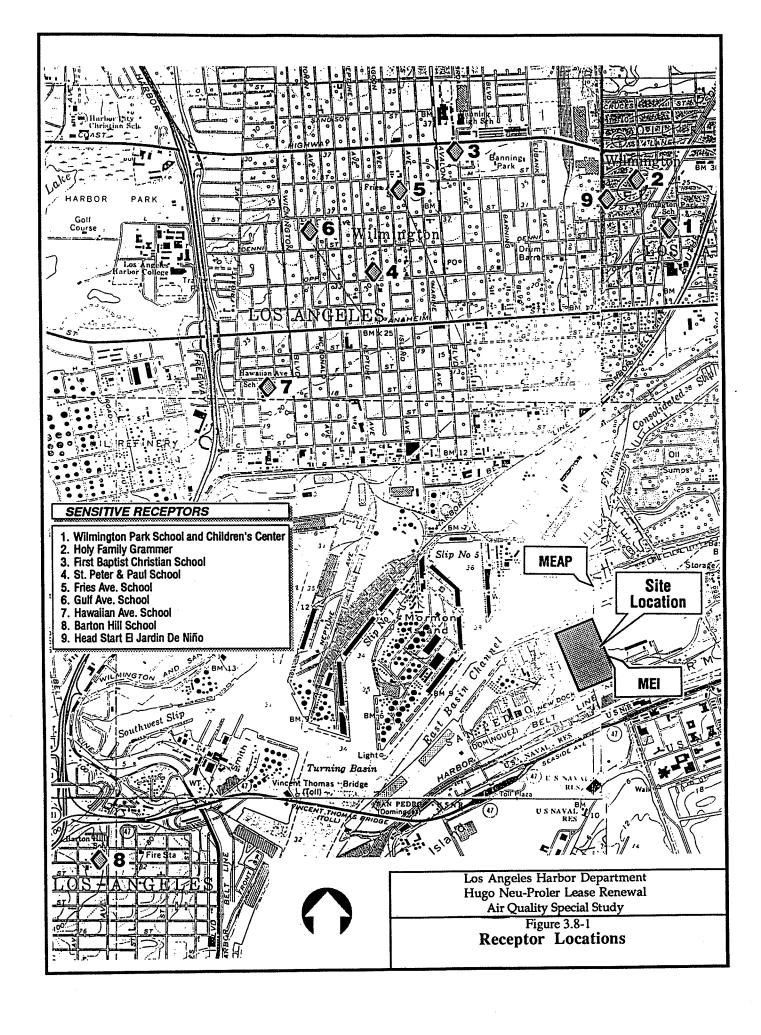


Table 3.8-3 Maximum Modeled Impacts of PM₁₀ from Current and Proposed Operations Based on 1991 and 1992 Meteorological Data.

	PM ₁₀ Concentration (ug/m ³)			
Averaging Period	1991	1992	1991 and 1992 Average	
Current Operation				
Maximum 1-hr	296.9	288.4	292.7	
Maximum 24-hr	102.3	166.3	134.3	
Maximum Annual	53.7	66.4	60.1	
Proposed Operation				
Maximum 1-hr	486.9	474.9	480.9	
Maximum 24-hr	169.3	272.9	221.1	
Maximum Annual	88.1	109.1	98.6	
Increase from Current to Proposed Operation				
Maximum 1-hr	190	186.5	188.2	
Maximum 24-hr	67	106.6	86.8	
Maximum Annual	34.4	42.7	38.5	

Table 3.8-4. Predicted PM_{10} Concentrations for the Off-site MEI and MEAP Locations (ug/m³).

	Ye	ar	
Averaging Period	1991	1992	Average
MEI			
Existing Operation			
1-hour	223	232	227.5
Annual	14	18	16
Proposed Operation			
1-hour	369	384	376.5
Annual	23	29	26
MEAP			
Existing Operation			
1-hour	116.7	115.7	116.3
Annual	5.2	3.5	4.4
Proposed Operation			
1-hour	187.7	185.8	186.8
Annual	8	5.8	6.9

person is expected to be located for 70 years at the site where modeling indicated maximum impacts. The location of the off-site maximum exposed individual (MEI; located along the eastern property line of HNPC) is in a non-residential area and calculations are therefore based on a worker who is at the site 8-hours per day, 240 days per year, for 46 years. This also represents a worst case situation. Table 3.8-5 summarizes the calculated air toxic concentrations for both the off-site MEI and MEAP receptors.

Sensitive receptors were located from 1.7 miles to 2.2 miles from HNPC. The average annual impacts predicted at the sensitive receptors were all 0 ug/m3 particulates for both existing and proposed operations. Therefore, data suggest that neither HNPC's existing nor proposed operations are not likely to have an impact on these receptors. Hourly impact concentrations for sensitive receptors were more than an order of magnitude less than the MEAP maximum hourly impact concentrations.

Exposure Pathways

For the exposure analysis, the receptors were assumed to be exposed to all of the pollutants via the inhalation pathway. Additionally, as recommended by the CAPCOA (1992) guidelines, the exposure to PCBs by other pathways, such as soil ingestion and dermal exposure, needs to be considered. Because the concentrations of PCBs for the MEI and MEAP were 0 ug/m3 (see Table 3.8-5), all MEI and MEAP exposure doses were 0 mg/kg/day and no further analysis was done for PCBs.

Table 3.8-5 Predicted Worst Case Air Toxics Concentrations (ug/m³) for off-site MEI and MEAP (Average for 1991 and 1992 Meteorological Data).

Pollutant	М	EI	ME	AP
_	Hourly	Average Annual	Hourly	Average Annual
Current Operation				
PM ₁₀	227.5	16.0	116.3	4.4
Cadmium, Cd	1.38E-02	1.36E-03	7.28E-03	6.80E-04
Copper, Cu	2.91E-01	5.88E-02	1.69E-01	4.60E-02
Iron, Fe	1.79E+01	3.69E+00	1.04E+01	2.91E+00
Lead, Pb	1.01E+00	0.00E+00	4.74E-01	0.00E+00
Nickel, Ni	5.53E-02	4.73E-03	2.87E-02	1.96E-03
Zinc, Zn	3.05E+00	4.72E-02		0.00E+00
PCBs	1.47E-01	0.00E+00	6.28E-02	0.00E+00
Proposed Operation				
PM ₁₀	376.5	26.0	186.8	6.9
Cadmium, Cd	2.26E-02	1.95E-03	1.14E-02	8.27E-04
Copper, Cu	4.55E-01	6.98E-02	2.47E-01	4.88E-02
Iron, Fe	2.79E+01	4.36E+00	1.52E+01	3.07E+00
Lead, Pb	1.72E+00	4.07E-02	8.13E-01	0.00E+00
Nickel, Ni	9.09E-02	7.12E-03	4.56E-02	2.56E-03
Zinc, Zn	5.17E+00	1.89E-01	2.47E+00	0.00E+00
PCBs	2.59E-01	0.00E+00	1.16E-01	0.00E+00

Health Risk Characterization

Cancer Risks

The risk assessment quantifies both and all and population health risks. Both estimate cancer risks using cancer potency values considered with the estimated exposure dose (CAPCOA, 1992). Table 3.8-6 shows the calculated can be for the off-site MEI and MEAP, for both existing and proposed operations. When compared to significance criteria, the potential increase in cancer risk posed by the proposed project is not considered significant for the nearest resident MEAP risk is 0.7x10-6 compared to a significance level of 10x10-6). No person actually live at the HNPC eastern property that which is the least of the MEI, therefore the MEI was calculated for an off-site worker being exposed for eight of the MEI, therefore the MEI was calculated for an off-site worker being exposed for eight of the MEI, therefore the MEI was calculated for an off-site worker being exposed for eight (0.4x10-6 compared to a significance level of 10x10-6).

Table 3.8-6. Summary of Risk Parameter Calculations.

Risk Parameter	Existing Facilities	Proposed Facilities	Change Due to Proposed Project	Significance Level for Change due to Project
MEI				
Inhalation Cancer Risk Excess Cancer Burden (Population at MEI= 190)	1.0x10 ⁻⁶ 1.9x10 ⁻⁴	1.4x10 ⁻⁶ 2.6x10 ⁻⁴	0.4x10 ⁻⁶ 7.6x10 ⁻⁵	10x10-6 0.5
Acute Hazard Index	0.76	1.28	0.52	1.0
Chronic Hazard Index	0.02	0.14	0.12	1.0
MEAP				
Inhalation Cancer Risk	3.4x10 ⁻⁶	4.1x10 ⁻⁶	0.7x10 ⁻⁶	10x10 ⁻⁶
Excess Cancer Burden (Population at MEAP= 420)	1.4x10 ⁻³	1.7x10 ⁻³	0.3×10^{-3}	0.5
Acute Hazard Index	0.36	0.61	0.25	1.0
Chronic Hazard Index	0.03	0.03	0	1.0

To assess the population wide health risk posed by the facility, the total population excess cancer burden is calculated. The population excess cancer burden is an estimate of the increased number of cancer cases in a population as a result of exposure to emitted substances. Excess cancer burden is calculated by multiplying the number of people in a population unit by the estimated individual risk. The number of exposed people living in the nearby marinas is approximately 420 (Port of Los Angeles, 1994). The additional maximum individual cancer risk due to the proposed project in the exposed residential population (MEAP) was calculated to be 0.7×10^{-6} . For a conservative analysis, this risk (0.7×10^{-6}) is multiplied by the number of people (420) to yield an excess population cancer burden of 0.3×10^{-3} . This is well below the significance level of 0.5 and is, therefore, considered insignificant. The off-site worker population cancer burden resulting from the proposed project of 7.0×10^{-5} for the MEI is also well below the significance level of 0.5 and is, therefore, considered insignificant.

Non-Cancer Risks

Non-cancer risks include non-cancer health effects for both chronic and acute exposures. The potential for chronic non-cancer health effects is evaluated by comparing the long-term exposure

levels from all pathways with the acceptable exposure levels (AELs) (CAPCOA, 1992). AELs are used as indicators of potential adverse health effects, and they are generally designed to protect the most sensitive individuals. The potential for acute non-cancer health effects is evaluated by dividing the one-hour maximum concentrations with the applicable acute AELs. The resulting hazard index is the ratio of predicted exposure to acceptable exposure levels. An index less than 1.0 generally means that the hazard is minimal at that exposure concentration. Table 3.8-6 shows the hazard index for the off-site MEI and MEAP for chronic (inhalation and ingestion) and acute (inhalation only) health effects. In both cases the increase of the hazard index is below 1.0 and both are therefore insignificant.

Modeled concentrations of PM10 are compared to federal and state ambient air quality standards to estimate the impact particulate emissions have on ambient air quality. To determine the potential impact, emissions attributable to the proposed operations at HNPC are added to background concentrations and compared to the ambient air quality standard. There are four ambient air quality standards for PM10: federal 24-hr and annual, and a state 24-hr and annual. The state standard is more stringent than the federal standard. Background PM10 concentrations are available from the Air Quality Data collected in Long Beach. The ambient air quality standards and background concentrations are summarized in Table 3.8-7.

Table 3.8-7. PM₁₀ Ambient Air Quality Standards and Background Concentrations at the HNPC Property Line (ug/m³⁾

	Federal 24-hr	State 24-hr	Federal Annual (arithmetic avg.)	State Annual (geometric mean)
HNPC Current	83	83	31	31
HNPC Proposed	137	137	51	51
Increase Due to Project	54	54	20	20
Background (1991) ug/m	92	92	40	37
Project Plus Background	146	146	60	57
Standard	150	50	50	30

Predicted concentrations decrease rapidly with distance from the property. As discussed in Section 2.3, concentrations of PM10 on an annual basis decrease to 0 ug/m3 at a distance of between 2300 to 3300 feet from the facility, and maximum 24-hr impacts are about 10 ug/m3 at a distance of 2300 to 3000 feet from the property. Therefore, model results suggest that PM10 impacts are a very localized phenomena.

The risks calculated for HNPC are conservative. Each variable input into the risk assessment calculation contains a "safety factor" so that risks are never underestimated. For example, assumptions in the air dispersion model include no particle deposition or removal in the environment. Unit potency slopes have many degrees of safety built in, such as assuming exposure of an individual for 24 hours per day over a 70 year lifetime. Therefore, the health risks calculated for receptors near HNPC are probably overstated. The risks presented should be considered the maximum that could be present.

3.8.2.2.3 Auto Shredder Waste Management

In order to store and better manage the auto shredder residue prior to shipment, HNPC proposes to construct a storage facility (100 feet x 100 feet x 20 feet high) in the area between the auto shredder process line and the railroad tracks. The storage facility will consist of a floor with bermed concrete containment area enclosed on three sides and covered by a roof in which the shredder

residue will be placed while awaiting loading for shipment. The storage facility will be equipped with a portable loading hopper powered by a diesel generator (<50 h.p.) which will be used to load the residue into containers or trucks. It will be constructed in conjunction with the paving which will be completed after remediation of the area. When rail access is provided to the HNPC facility, the residue will be shipped directly out by rail and trucking of the waste to the railroad siding will be discontinued.

The construction of the proposed covered storage facility and the proposed reintroduction of railway access to the site will reduce the amount of material handling required, allow for more secure material storage and reduce the potential of exposure to the public. The storage facility will meet all state requirements governing the handling of hazardous waste. Impacts of storage and handling of the auto shredder waste with the implementation of this storage facility are expected to be insignificant.

3.8.2.2.4 Hazardous Waste Management

The California Health and Safety Code requires all hazardous waste generators to implement procedures which ensure that these wastes are safely handled and properly disposed. Generators are subject to specific requirements including:

- Responsibility to characterize waste to determine whether the waste is hazardous based on its chemical composition and the criteria in Title 22, California Code of Regulations.
- Storage time limits and proper storage of hazardous wastes on-site in accordance with applicable regulations.
- Compliance with personnel training and emergency response requirements.
- Proper shipment and off-site disposal or management of hazardous wastes.
- Maintenance of required records.
- Preparation of a hazardous waste source reduction plan.

Part of a Storm Water Pollution Prevention Plan being implemented by HNPC includes a hazardous waste storage area (see Figure 1.1-3) which has been constructed and is now in use. Compliance with Title 22, California Code of Regulations, and proper handling of these wastes in the storage area will reduce potential impacts to a level of insignificance.

3.8.2.2.5 Soil and Groundwater Contamination

Toxic substances known to be present in the soil and groundwater at the HNPC site could adversely affect humans through inhalation, skin contact, and by incidental ingestion. A health risk assessment (McLaren/Hart, 1994) was prepared for HNPC to evaluate the risk from the contamination of the soil and groundwater at the site to workers and persons outside the boundaries of the facility. The assessment was reviewed and, after revision, accepted by the California Office of Environmental Health Hazard Assessment (April, 1995). The risk assessment found that soil and groundwater posed no unacceptable threat to either on-site workers or persons outside the boundaries of the facility. RWQCB is in the process of developing soil and groundwater cleanup levels designed to protect marine resources and harbor waters. Based on these cleanup levels, the remediation will treat and/or remove contaminated soil and groundwater at the site. Any remaining contamination at the site will be at levels which do not constitute a threat to

public health, environmental health, or harbor waters. There will be no significant impact from any remaining contamination at the site after remediation.

Worst case construction impacts would involve the following:

- Soil contamination occurs at various depths throughout the site, but most of the contamination is concentrated in the upper 2 feet of the soil. Excavation and treatment or disposal of contaminated soil will take place in unpaved areas of the facility totaling approximately 300,000 square feet. This would result in the excavation of 25,000 tons of contaminated soil.
- For the approximately 650,000 square feet of the facility presently covered by pavement, the underlying soil will be tested during routine removal and replacement of the concrete covering. Although some of the contaminated soil had been reportedly removed previous to paving, for evaluation of worst case remediation impact the soils are assumed to be contaminated down to an average depth of approximately 2 feet for the entire paved area. Remediation of the soils in the paved areas of the site would result in excavation and processing of approximately 40,000 tons of contaminated soil.

Remediation options include fixation of soil contaminants followed by (1) use of the fixated soil on-site or (2) disposal at a landfill. A third option includes off-site disposal of contaminated soils at a permitted landfill in Utah. The remediation will be completed within five years after a new lease is entered into by HNPC and LAHD.

For all activities associated with the selected remediation method, a Site Health and Safety Plan (HASP) required by Cal-OSHA regulations will be implemented to provide for the protection of the health and safety of site workers and the public. The HASP will address the health and safety hazards of the specific soil and groundwater contaminants found at the site and the selected remediation methods. The RAP will be carried out in accordance with the HASP governing work at hazardous waste site. With adherence to the HASP there will be no significant impact to workers involved in the remediation or persons off-site.

During groundwater and soil remediation at HNPC, air toxics may be emitted. These toxics could include emissions of benzene if air stripping is used as a groundwater remediation technology. Emission controls for VOCs including benzene, such as installation of a carbon adsorption system, would be required by the SCAQMD. Emissions of VOCs from excavation of contaminated soils during remediation and/or construction activities would be regulated and controlled under SCAQMD Rule 1166. With these controls, toxic emissions associated with contaminated soils and groundwater would be reduced to a level which would not cause significant health and safety impacts.

3.8.2.2.6 Emergency Response

During construction of the railroad spur there is a potential of significant impact on access during emergency response to the HNPC site and the adjacent Yusen Container Terminal. The impact results from the potential for blockage of the access road to HNPC and New Dock Street during construction of the spur. Requiring the contractor to construct the railroad spur across New Dock Street during the weekend, a period of light traffic in the area of HNPC, will lessen the impact. The construction contractor will be required to maintain open one westbound and one eastbound lane of traffic along the access road and New Dock Street at all times during construction. In addition, there will no queuing of trucks allowed in the construction area during construction. These measures will maintain emergency access routes into the facility and reduce the potential impacts to a level of insignificance.

After the construction of the railroad tracts, new office building, parking lot and other elements of the project there is a potential for an adverse impact if these improvements are constructed in such a manner that they interfere with access to the site. However, all new construction will need to comply with LAFD requirements concerning access of emergency equipment to and within the facility, therefore, there will be no significant impact from the project.

3.8.3 Cumulative Impacts

Several of the related projects considered for potential cumulative impacts (refer to Table 2.2-1) have the potential for release of carcinogenic air contaminants during routine operation. However, since each of these projects are required to comply with the requirements of SCAQMD rules governing, cumulative impacts to public health are not expected to be significant.

3.8.4 Mitigation Measures

3.8.4.1 Recommended Mitigation Measures

The potential blockage of emergency access during construction of the railroad spur can be mitigated by implementing the following recommended procedures during construction:

- Contractor should construct the track crossing New Dock St. during the weekend
- Contractor should maintain open one eastbound and westbound lane of traffic along New Dock St. and the HNPC access road during construction
- Contractor should post "No Parking" signs along the access road during construction to prevent truck queuing from blocking access to the project site or adjacent facilities.

Implementation of these recommended mitigation measures will reduce impacts to a level of insignificance.

3.6.4.2 Impacts Mitigated to Insignificance

Impact to emergency response during construction of the railroad spur were mitigated to insignificance.

3.8.4.3 Unavoidable Significant Adverse Impacts

There are no unavoidable significant impacts to public health and safety from the proposed project..

3.6.4.4 Mitigation Monitoring Program

Potentially Significant Adverse Impact	Mitigation Measure	Significance After Mitigation	Monitoring Program Responsibility/Rep ort Recipient	Frequency/ Timing
Disruption of emergency response to project site and adjacent facilities during construction of the rail	Contractor shall construct the track crossing New Dock St. during the weekend	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.
spur	Contractor shall maintain open one eastbound and westbound lane of traffic along New Dock St. and the HNPC access road during construction	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.
	Contractor shall post No Parking" signs along the access road during construction to prevent truck queuing from blocking access to the project site or adjacent facilities	Insignificant	Contractor/ LAHD	Once, at the beginning of construction.

3.9 PUBLIC SERVICES

This section describes the City of Los Angeles Fire Department (LAFD), U.S. Coast Guard and police support services that would be used in case of emergencies at the proposed project. Schools, parks, hospitals, and other government services are not expected to be impacted by the proposed project and, therefore, are not discussed.

3.9.1 Setting

3.9.1.1 Fire Protection Services

Fire protection at the Port of Los Angeles is provided by the City of Los Angeles Fire Department. The LAFD facilities include land-based fire stations and fireboat companies located in the vicinity of the project site.

The LAFD provides first alarm response protection capability from three stations in the project area (personal communication, David Jones, LAFD, 1994):

Fire Station No. 40, the closest land-based fire station, is located 0.8 miles by land from the proposed project site, is equipped with one engine, and would have an average response time of 3 minutes to the site.

Fire Station No. 38, located 3.3 miles from the site at 124 East "I" Street, is equipped with a engine company with two engines and a truck company of a single truck, and would have an average response time of 7 minutes.

Station No. 49, with Fireboats No. 3 and No. 4, is located at Berth 194, 0.4 water miles from the project site. The fireboats would have a 3 to 4 minute average response time. The land-based engine company located at Station No. 49 could respond in 8 minutes.

The LAFD also provides second alarm response capability (personal communication, David Jones, LAFD, 1994):

Fire Station No. 112 located near Berth 85, approximately 1.6 miles by water from the project site, and can respond with Fireboat No. 2 in approximately 13 minutes.

Fire Station No. 110 is located approximately 4 miles by water from the site and is equipped with Fireboat No. 5, with a response time of approximately 16 minutes.

Fire Station No. 111 located at Berth 258, approximately 4.5 miles by water from the site would respond with Fireboat No. 1, with a response time of approximately 18 minutes.

Fire suppression equipment would be provided at the facility. Primary fire suppression equipment would consist of portable fire extinguishers and fire hoses. New Dock Street provides surface access for heavy fire fighting equipment. Fireboat access would be via the East Basin. The required LAFD minimum flow pressure of 20 psi and flow quantity of 1,500 gpm is available from any hydrant on or near the project site. The maximum pressure in the vicinity of the facility is 100 psi. HNPC has three hydrants on-site which can deliver a minimum of 4500 gpm (personal communication, R. Lorenzo, LAHD, 1994). Also, there is adequate infrastructure in the project area to supply fire flow of up to 15,000 gpm to the project site (LADWP, 1993)

3.9.1.2 U.S. Coast Guard

U.S. Coast Guard facilities in the vicinity of the project site are under the jurisdiction of the Eleventh Coast Guard district. The U.S. Coast Guard's main responsibility is to ensure the safety of vessel traffic in the channels of the port and coastal waters. They are also responsible for the maintenance of all navigational aids to guide vessels away from hazardous areas. Also, U.S. Coast Guard personnel are assigned to the Marine Exchange, a private non-profit operation serving the maritime community, to support the Marine Exchange's VTIS operation in San Pedro Bay. The current staffing at the Marine Exchange, both Coast Guard and private personnel, is adequate to accommodate the projected increase in ship calls for both Ports (Long Beach and Los Angeles) for the foreseeable future (personal communication, D. McKenna, 1995).

3.9.1.3 Law Enforcement/Security Services

The project site is served by both the Los Angeles Police Department (LAPD) and the Los Angeles Harbor Department Port Police. The Los Angeles Harbor Department Port Police Division is the primary law enforcement entity for all Harbor Department properties and operations. The LAPD serves as backup for the Port Police.

The Los Angeles Harbor Department Port Police Division is charged with the responsibility of ensuring the safe and uninterrupted operations of the Port of Los Angeles. The Port Police Division currently employs 55 sworn officers to enforce the Port of Los Angeles Tariff, municipal regulations, State laws, and Federal laws as they pertain to the operations of the Harbor. These tasks are accomplished by maintaining twenty-four hour land and water patrols for the protection of persons, Los Angeles Harbor Department facilities, and vessels within the Port. The control center for the Port Police is located on the first floor of the Harbor Administration Building, located at 425 South Palos Verdes Street, San Pedro, California.

The project site is located in the LAPD's Harbor Area Division, Reporting District 559. Approximately 9 sworn officers are assigned to the patrol cars which covers this Reporting District.

The HNPC facility has a secured land access consisting of a fence and gated entrances. The main gate entrance to the facility is monitored by a security guard at all times.

3.9.2 Impacts

3.9.2.1 Significance Criteria

Impacts on public services would be significant if the project results in:

- Demand generated by the project would meet or exceed the capacity of existing public service systems, require expansion of existing service systems, or construction of major new facilities.
- Reduction in acceptable response for emergency situations, as determined by the LAFD for fire protection.

3.9.2.2 Impacts Analysis

The proposed new office building and other new facilities will meet applicable fire codes and LAFD requirements. Also, fire suppression equipment is currently on the site and adequate water supplies are available. The new office building and facilities associated with the proposed project would potentially increase the demand for fire services, however, there is adequate fire services available for the project.

The increase number of ship calls at HNPC will need to be handled by the VTIS and Coast Guard. The current staffing at the Marine Exchange, both Coast Guard and private personnel, is adequate to accommodate the additional HNPC ship calls. Also, the need navigational aids will not be increased by the increased ship calls. No additional U.S. Coast Guard resources nor Marine Exchange resources will be require by the proposed project.

The existing facility supples its own security personnel and is surrounded by a security fence. HNPC present security will remain in-place for the proposed project and the need for law enforcement services will not increase. There will be a small adverse impacts on public services from the proposed project but it will insignificant.

3.9.3 Cumulative Impacts

There are no significant cumulative impacts associated with public services for the proposed project. The Marine Exchange has adequate capacity to handle the foreseeable growth in commercial traffic for both the Ports of Los Angeles and Long Beach.

3.9.4 Mitigation Measures

3.9.4.1 Recommended Mitigation Measures

None required.

3.9.4.2 Impacts Mitigated to Insignificance

No public service impacts were considered to be significant.

3.9.4.3 Unavoidable Significant Adverse Impacts

There will not be any unavoidable significant impacts to public services as a result of the proposed project.

3.9.4.4 Mitigation Monitoring Program

None required.

3.10 ENERGY

Resources addressed in this Section include electricity, natural gas, and other fossil fuels such as gasoline, diesel, and LPG.

3.10.1 **Setting**

Electric Power

The total amount of electrical power consumed in the Los Angeles Basin is approximately 98 billion (98 x 10⁹) kilowatt-hours (Kwh) per year. The sources of electric power include fossil fuel and nuclear generating plants, hydroelectricity generated within and outside the state of California, and a small amount of wind and solar generated electricity. Most of this electric power is generated then distributed to residential, commercial, and industrial customers in the Los Angeles Basin by the Southern California Edison Company and the City of Los Angeles Department of Water and Power (DWP).

The Port of Los Angeles and its tenants receive electrical power from the DWP. HNPC used approximately 6.8 million Kwh of electricity during 1992. HNPC operates equipment with high electricity usage, such as the auto shredder, during off-peak hours, which reduces peak hour demands on the DWP.

Natural Gas

The Southern California Gas Company is the only natural gas supplier in the area, acquiring natural gas supplies from sources inside and outside of California. The customers of the Southern California Gas Company consume approximately 2 billion (2.0 x 10⁹) standard cubic feet (scf) of natural gas per year. This is well below the company's maximum distribution capacity of 4 billion cubic feet per year. Approximately one-third of the total annual consumption is devoted to generating electricity in fossil fuel plants in the area (LAHD 1993b).

HNPC used approximately 24,000 scf of natural gas during 1992, primarily for heating offices and workshop areas.

Liquid Fuels

According to the California Energy Commission, 1992 consumption of liquid fuels for the State of California included 326.9 million barrels of gasoline and 90.7 million barrels of distillates; approximately 95 percent of which was diesel fuel. Current liquid fuel consumption in Los Angeles County as reported by the California Air Resources Board (LAHD, 1993) includes:

- 8,822,000 gallons of gasoline per day for a projected annual total of 3.22 billion gallons.
- 1,092,000 gallons per day of diesel for a projected annual total of 398 million gallons.

During 1992 HNPC used approximately 395,000 gallons of diesel fuel, 10,000 gallons of gasoline, and 7,600 gallons of liquefied petroleum gas.

3.10.2 Impacs

3.10.2.1 Significance Criteria

The impacts of the proposed project on energy are analyzed with regard to how the level of service rently provided by utility companies and local agencies is able to accommodate the project-act demand. Project impacts would be significant if:

- Project-related demand for fuel or energy met or exceeded existing supplies or capacity, or otherwise caused supply or capacity restraints.
- There is a substantial increase in the rate of use of fossil fuels resulting from implementation of the project.

3.10.2.2 Impacts Analysis

Electric Power

The posed project includes increased throughput and the installation of new equipment, both of which would increase the electrical demand of the proposed project is expected to be 0.7 million Kwh for a total of 7.5 million Kwh. This increase in electric load may require some modifications to the electrical distribution system on the site, but no off-site modifications would be required. The increase in electrical power for the project would be very small compared to total DWP power system demand and would not result in a shortfall in electrical generating capacity. Therefore, the proposed project would not result in a significant impact to electrical utilities.

Natural Gas

The proposed project would require negligible amounts of natural gas beyond that which is currently being consumed. Future natural gas demand is expected to increase by 2,300 scf to 26,300 scf per year. The proposed increase in natural gas use is small and will not have any significant impact on SCG's supply or capacity.

Liquid Fuels

Upon completion, proposed project-related activities are expected to consume 600,000 gallons of diesel fuel, 15,600 gallons of gasoline, and 12,000 gallons of liquefied petroleum gas per year. While this represents a substantial increase over present consumption levels, it is not anticipated that the proposed project would result in fuel supply constraints. Since project fuel use would represent an insignificant portion of the overall fuel use and available fuel supply capacity in the Los Angeles area, the proposed project would not result in significant energy impacts.

3.10.3 Cumulative Impacts

The related projects in the proposed project vicinity would create additional demands on electricity and natural gas. However, these impacts would not be significant because the increase in demand would not exceed the existing supply or capacity (USACOE and LAHD, 1992). Increased consumption of liquid fuels would be adverse since these are non-renewable resources, but the

impact would be insignificant because the total annual use represents a small percentage of the total fuel used in California (USACOE and LAHD, 1992).

3.10.4 Mitigation Measures

3.10.4.1 Recommended Mitigation Measures

None required.

3.10.4.2 Impacts Mitigated to Insignificance

No significant impacts were identified.

3.10.4.3 Unavoidable Significant Adverse Impacts

There are no unavoidable significant adverse impacts to energy resources as a result of the proposed project.

3.10.4.4 Mitigation Monitoring Program

None required.

3.11 UTILITIES AND WASTE MANAGEMENT

3.11.1 Setting

County and city governments, as well as private agencies, provide utility services to HNPC. These services include water supplies, wastewater treatment facilities, solid waste disposal capability, storm drainage systems, and telecommunications. These utility services are discussed in this section.

3.11.1.1 Water Supply

Water for the City and the Port of Los Angeles is provided by the Los Angeles Department of Water and Power (LADWP). Water supply lines in the vicinity of the proposed project include a 16-inch line east-west through the project site and a 20-inch waterline which runs the south side of New Dock Street. Water is provided to the Port of Los Angeles by way of the Palos Verdes Reservoir. HNPC currently uses an estimated 16.1 million gallons per year.

The Terminal Island Treatment Plant (TITP) is the sewage treatment plant located on Terminal Island that currently discharges its waste water into Los Angeles Harbor. To comply with an order issued by the Regional Water Quality Control Board, the City of Los Angeles will be installing water reclamation equipment at the plant. The City plans to begin supplying reclaimed water for industrial use by the year 1999. Currently, the effluent contains high concentrations of total dissolved solids and salts, but the installation of the equipment and conversion of the plant to a water reclamation facility should improve the water quality. If the quality improves and water can be supplied to HNPC, it can be used for dust suppression and for landscaping at the HNPC facility.

3.11.1.2 Wastewater

The City of Los Angeles Sanitation Bureau provides sewer systems that transport wastewater to the TITP where treatment includes preliminary, primary, and secondary treatment, followed by discharge to Los Angeles Harbor. The flow volumes for the TITP average 18 million gallons per day (mgd) for residential and commercial uses. The facility currently operates at a design capacity rate of 30 mgd, and has a maximum handling capacity of 55 mgd (USACOE and LAHD 1992). TITP has the capacity to provide secondary treatment of an average flow volume of 30 mgd. No expansion of the TITP is expected for the next decade (USACOE and LAHD 1992).

The existing sewage collection system on Terminal Island consists of a network of lines made of materials such as vitrified clay and cast iron. They range from 20 to 33 inches in diameter, and include 5-sewer force main lines and pumping stations to deliver wastes to the treatment plant. Sewage collector lines in the project area range in size from 4 to 8 inches and are located along Old Dock Street and New Dock Street. The treated effluent is discharged through the existing TITP outfall pipe, which extends south along Ferry Street and continues about 1,000 feet into the harbor. There it discharges at a depth of 25 feet below mean lower low water (-25 ft. MLLW) into San Pedro Bay through a 60-inch pipe.

HNPC currently disposes 6000 gpd of sewage to the collection system serving the New Dock Street area.

3.11.1.3 Storm Drainage Systems

The Los Angeles County Flood Control District operates and maintains the major storm drainage systems in the area around the project site. Dominguez Channel is used to collect storm water flows and discharge them into the East Basin of the Port of Los Angeles. Smaller collector systems maintained by the City of Los Angeles discharge flood water into San Pedro Bay. The Port of Los Angeles constructs and maintains its own systems and uses the harbor as the stormwater discharge area. The site has access to an existing storm water system which ultimately empties into the East Basin.

3.11.1.4 Solid Waste

The Los Angeles metropolitan area, including the city of Los Angeles, disposes of approximately 35,000 tons per day, or approximately 10.9 million tons per year, of solid waste (L.A.Co.P.W., 1994). The city of Los Angeles disposes of approximately 12,000 tons per day or 4.4 million tons per year. The total waste stream comprises three waste types: residential, commercial and industrial, and solid fill. The total capacity of the eight permitted major landfill sites, BKK, Bradley West, Calabassas, Chiquita Canyon, Lopez Canyon, Puente Hills, Scholl Canyon, and the Spadra landfill, serving the region may not have the capacity to meet demand past 1995 (L.A.Co.P.W., 1994).

The city and county of Los Angeles are currently considering several options to meet future solid waste disposal needs. These include extending the permits or permitting the expansion of existing local landfills and sending solid waste to outlying areas. Four developers are currently trying to obtain permits to open landfills outside the county of Los Angeles that could receive waste from Los Angeles metropolitan area, and a fifth facility, located in Carbon County, Utah, is already permitted to receive waste. The Utah landfill has a current capacity of 180 million cubic yards with a projected life expectancy of 40-90 years (personal communication, T. Thorne, 1995).

Legislation passed in 1989 required counties to divert 25 percent of all solid waste from landfills by January 1, 1995. This percentage must increase to 50 percent by January 1, 2000 (Sections 41000, 41070, and 41780 of the Public Resources Code). Materials which are diverted from the landfills include metals, a large portion of which eventually is processed for reuse and/or export by HNPC and similar facilities. HNPC annually shreds and recycles more than 130,000 abandoned vehicles and 87,000 tons of discarded household appliances which might otherwise be landfilled. From the processing of scrap metal, HNPC produces approximately 45,700 tons per year of auto shredder residue and 6,400 tons per year of metal recycling residue which are disposed of in the Carbon County, Utah landfill as non-hazardous waste. HNPC produces small amounts of other solid wastes, such as paper and office waste, and 2,000 tons per year of non-ferrous residue (a non-hazardous waste) which are disposed of in local landfills. The operation of HNPC recycles a large amount of metal waste that would otherwise be placed in local landfills.

3.11.1.5 Telecommunications

San Pedro and the Port of Los Angeles are located within the service area of Pacific Bell, which works with the Port to design and provide telecommunications services for new facilities. Pacific Bell determines where new lines will be located, and requires that the Port install underground structures and conduits accessible from the surface. Telephone service and hookup stations currently exist within the project site.

3.11.2 Impacts

3.11.2.1 Significance Criteria

Impacts on utilities are considered significant if the expected demand for utilities would exceed the capacity of existing utility systems or would require their expansion or the construction of major new facilities.

3.11.2.2 Impact Analysis

Water Supply

Construction activities are not expected to cause an increase in water use. Most of HNPC's operational water use is related to dust suppression. When construction is taking place, operations will be discontinued at affected areas on the site. Water which would have been used for operational dust suppression will be used for construction activities.

With the proposed increase in scrap handling capacity, HNPC would require additional water to provide for dust suppression and other purposes. It is estimated that water requirements would increase from approximately 44,600 to 53,600 gallons per day. This increase of 9,000 gallons per day is considered to be an insignificant impact when compared to current water use and available capacity. If recycled water becomes available from the TITP, use of potable water at HNPC would be reduced.

Sewage

It is estimated that sewage discharge would increase to 6,600 gallons per day, which is only about 600 gallons per day more than the facility currently produces. The TITP currently has the capacity to process an additional 9 million gallons per day (mgd). Therefore, operational impacts resulting from the small increase in sewage from HNPC are considered insignificant.

Storm Drainage Systems

One element of the proposed project is an updated storm drainage treatment system as described in Section 3.4. Implementation of the proposed system will result in an increase in storm water needed to be managed at the site since percolation into the soil will be limited by the additional pavement at the site. However, there will be an overall improvement in storm drainage control and management, therefore project impacts are expected to be insignificant.

Solid Waste

During construction, additional solid waste is expected to be generated by the project. This waste, such as cardboard, concrete, wood, and other building or packaging material, will be deposited in on-site containers and removed by a contract hauler to an approved disposal site. Cardboard, paper, packaging and other similar wastes generated by normal operation of the facility will be deposited in on-site containers and removed by a contract hauler to an approved disposal site. Paper will be recycled where possible. After the installation of new equipment and facility upgrades are completed, the amount of these solid wastes generated by the operation of the facility will not be significantly changed from the existing operation.

Metal recycling residue from HNPC will increase by 4,100 tons per year to approximately 10,500 tons per year. Auto shredder waste will increase by 29,700 tons per year, from 45,700 to approximately 75,400 tons per year. Soil remediation options described in Section 3.2 Soil and

Groundwater includes off-site disposal of up to 65,000 tons of contaminated soil. Non-ferrous recycling residue will increase by 1,300 tons to 3,300 tons per year. Also, the remediation may result in landfill disposal of as much as 65,000 tons of contaminated soil. In addition to the capacity of local landfill, the Carbon County, Utah landfill has a projected 40-90 life expectancy. There is sufficient landfill capacity to receive the HNPC waste over the life of the proposed project.

Operation of the HNPC facility has an overall positive benefit for landfill operations and capacity by diverting and recycling large volumes of metals which would otherwise be landfilled. No significant adverse impacts related to solid waste are expected from the proposed project.

Telecommunications

Project construction and operations would not require any additional telephone or radio communication services. No impacts on service to other users are expected.

3.11.3 Cumulative Impacts

Related projects in the proposed project vicinity would create additional demands on utility infrastructure. Impacts of the proposed project would not be considered significant because HNPC already has all of the infrastructure in place and operating. The proposed increased capacity of HNPC and related increased demands on utilities is not expected to exceed the capacity of the existing utility systems.

Related projects in the proposed project vicinity would create additional demands on landfill capacity. Construction or expansion of related facilities in the Port of Los Angeles is expected to add incrementally to the solid waste stream which is disposed of in city or county landfills. Use of out-of-county landfills will also increase the landfill capacity available to the region. Although the proposed project would contribute a small increment to the solid waste stream, operation of the HNPC facility has an overall positive benefit for landfill operations and capacity by diverting and recycling large volumes of metals which would otherwise be landfilled. Given the local and out-of-county landfill capacity, the cumulative impact from the project will be insignificant.

3.11.4 Mitigation Measures

3.11.4.1 Recommended Mitigation Measures

None required.

3.11.4.2 Impacts Mitigated to Insignificance

No utility and waste management impacts were considered to be significant.

3.11.4.3 Unavoidable Significant Adverse Impacts

The proposed project would not result in any unavoidable significant adverse impacts to utilities or waste management.

3.11.4.4 Mitigation Monitoring Program

None required.

3.12 RECREATION

3.12.1 Setting

Recreational resources supported within the Port of Los Angeles include recreational boating, fishing, and swimming. Fishing occurs primarily within the outer harbor near the San Pedro and Middle Breakwater, and in San Pedro Bay. The closest breakwater is located, 4 miles south of the project location. A public beach is located at Carbrillo Beach in the outer harbor 4 miles to the southwest of the project location. The primary recreational activity occurring in Los Angeles Harbor is recreational boating. The Port of Los Angeles contains 4,132 slips in 19 marina facilities for boats ranging in length from 17 to 110 feet (personal communication J. Bambridge, 1995). The Cabrillo Marina is the largest such facility with 1,180 slips; it is a public facility in the outer harbor and is operated by LAHD.

For planning purposes, the Port is divided into ten planning areas, each with long-range preferred uses. Berths 210-211 are located within the Terminal Island/Main Channel Planning Area 7. Area 7 is primarily devoted to commercial shipping; liquid, dry bulk, and general cargo handling; heavy industrial uses; and institutional and commercial activities. There are no current or planned recreational uses within Area 7. The long-range preferred uses for Area 7 in the Port Master Plan include commercial shipping, liquid bulk handling, and heavy industrial and commercial activities.

Planning Area 6, which is on the main channel immediately opposite of the HNPC project site, includes Berths 201-205D. Part of Area 6 is devoted to recreational uses such as small craft marinas. This area contains 9 marinas with a total of 1,451 slips. One of these nine marinas faces the HNPC facility and contains 244 slips.

3.12.2 Impacts

3.12.2.1 Significance Criteria

The significance of project impacts on recreational resources is evaluated in terms of availability of recreational amenities and facilities, accessibility to those uses, and compatibility of shoreline and onshore uses with project-related activities.

Project impacts are considered significant if they would result in:

• Substantial loss or diminished quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources

3.12.2.1 Impact Analysis

Operation and maintenance of the proposed facility would not have any direct effect on recreational uses within the Port. The existing facility will remain substantially the same, with no increase in the area occupied by the facility. However, there will be changes in operations which will cause an increase in vessel traffic and the number of vessel loading days per year. As noted in Section 3.6 Traffic and Circulation, it is estimated that the proposed expansion of the HNPC operation would result in 14 additional ship calls per year. When compared to the current overall level of vessel activity at the port (6,107 ship calls in 1992) and activity at HNPC and adjacent berths (328 ship calls in 1992), the additional 14 annual ship calls would be negligible and would not result in any significant impacts to recreational boating use either in the Cerritos Channel or in other areas of the inner or outer harbor.

Recreational users in the project area currently experience high noise levels from the existing HNPC facility. However, most recreational use takes place during daylight hours when the general background noise level in this industrial area is high. The proposed increase in the number of ship loading days will increase the number of days on which maximum noise levels from the project occur. As noted in Section 3.7 Noise, two project features, the barrier wall and damping material on the deflection plate, will reduce existing and future maximum noise levels from the project. These measures will reduce noise at the nearby marinas to levels below the industrial noise limit of 70 dBA (65 dBA for impulsive noises) which is applicable for the project vicinity. Overall, noise impacts to recreational users of the project area are not expected to be significant.

As noted in Section 3.3 Meteorology and Air Quality, emissions of dust (or particulate matter smaller than 10 microns in diameter) from the project is not expected to exceed the significance levels established by the SCAQMD, therefore no significant impacts to recreational users in the nearby marinas are expected.

As noted in Section 3.4 Hydrology, Water Quality and Oceanography, discharges from the facility operation to surface waters have ceased. Project improvements will further preclude unpermitted discharges to surface waters. No significant impacts to recreational users in the nearby marinas are expected.

3.12.3 Cumulative Impacts

While there will be more noisy days with the increased number of days with shiploading at the facility, the overall daily noise levels will be reduced to levels appropriate for industrial zoning by facility improvements. Given that the project site and all surrounding areas are industrial, this would not be a significant cumulative impact. The increased vessel calls would occur as a result of the proposed and other projects, but as indicated in section 3.9, this increase would not significantly affect recreational boaters.

3.12.4 Mitigation Measures

3.12.4.1 Recommended Mitigation Measures

None required.

3.12.4.2 Impacts Mitigated to Insignificance

No significant impacts requiring mitigation were identified.

3.12.4.3 Unavoidable Significant Adverse Impacts

The proposed project will not result in unavoidable significant adverse impacts to recreational use in the area.

3.12.4.4 Mitigation Monitoring Program

None required.

3.13 VISUAL RESOURCES (AESTHETICS/LIGHT & GLARE)

Visual resources consist of the natural and man-made features that give a particular environment its aesthetic qualities. These features may be natural appearing or modified by human activities. Together, they form the overall impression of an area, referred to as its landscape character. Landforms, water surfaces, vegetation, and man-made features are treated as characteristic of an area if they are inherent to the formation, structure, and function of the landscape. Landscape character is evaluated to assess whether a proposed project would be compatible with the existing setting or would contrast noticeably with the setting and appear out of place.

Visual resources also have a social setting; this includes public values, goals, awareness, and concern regarding visual quality. The social setting is addressed as *visual sensitivity*, or the relative degree of public interest in visual resources and concern over adverse changes in the quality of that resource. Visual sensitivity is key in assessing how important an effect on the visual resource would be and whether it represents a significant impact.

3.13.1 **Setting**

3.13.1.1 Port Characteristics

The visual character of the Port of Los Angeles is diverse and includes natural features, such as the open water areas of San Pedro Bay and associated beaches and bluffs, recreational and tourist facilities, and Port industrial facilities. Accordingly, visual sensitivity of these areas varies due to differing public expectations.

Most of the land area in the Port is dedicated to industrial activities. The industrial areas are characterized by angular landfills, oil pumps, storage tanks, pipelines, exhaust stacks, cranes, cargo, bulk yards, structures, berthed ships, tankers, and barges. Sharp, angular lines, dense textures, and contrasting colors create a "busy" or industrial appearance. Bright colors, such as orange, red, and green are commonly used for boxcars, cranes, and containers. Most structures and tanks are painted subdued colors, such as gray or blue. Since many of the cargo handling and other industrial uses at the Port operate on a 24-hour basis, most of these operations have extensive lighting systems for safety and security. Industrial facilities are not normally considered visually sensitive.

Berths 210-211 are located within the Terminal Island/Main Channel Planning Area 7 which is primarily devoted to: commercial shipping; liquid, dry bulk, and general cargo handling; heavy industrial uses; and, institutional and commercial activities. The East Basin of Los Angeles Harbor is immediately to the north of the facility at the confluence of the Consolidated Slip and the Cerritos Channel. The Matson Container Terminal is immediately east of the facility; the Yusen Container Terminal is immediately to the west and New Dock Street immediately south. To the north, immediately across the Main Channel, are several marinas. The marinas are within Planning Area 6, which includes recreational uses (the marinas) and liquid bulk and oil production.

3.13.3.2 Views of the Project Area

There are only two potentially sensitive view corridors in the vicinity of the project site. One of the view corridors is from directly across the channel at the marinas. The existing facility, with its scrap piles ranging from 40 to 50 feet in height, the bulk loader, and cranes are clearly visible from

the marina area. When ships are at Berths 210-211 they block out most of the views of the scrap piles and loading equipment. The ships which dock at Berths 210-211 are not noticeably different from the ships which dock at the many other berths in the area.

The second view corridor is from the Commodore Heim Bridge, from which vehicles crossing the bridge may have brief views of the project site.

3.13.2 Impacts

3.13.2.1 Significance Criteria

Potential visual impacts are evaluated in terms of landscape character, visual sensitivity, and visual dominance. The latter relates to the degree to which a change in the visual setting is subordinate to or dominates views.

An impact is considered significant if one or more of the following apply:

- Construction or facility operational activities resulting in substantial new light and glare affecting visibility and resulting in safety hazards.
- Obstruction of views from officially designated vista points or scenic routes.
- Destruction of any locally recognized desirable, natural aesthetic feature.
- Substantial adverse impacts on the overall aesthetic values on the site.
- Obstructed or degraded views of water/waterfront from public areas such as parks, observation decks, or open spaces.

3.13.2.2 Impact Analysis

Project Construction

Construction activities would include the use of construction barriers, the presence of heavy construction equipment and material, the stockpiling of construction materials, and the creation of temporary waste disposal areas. Equipment used during construction will be similar to equipment used for normal operations at HNPC. Most construction activities are expected to be during daylight hours and no special lighting will be required. Since operations will continue during construction of the proposed facilities, and construction activities would be short-term, these activities would not result significant impacts.

Project Operation

Descriptions of the existing and proposed facilities are provided in Section 1, Description of the Project. The proposed facility modifications would all be constructed within the existing HNPC facility at Berths 210-211. Several existing features of the facility are visually important when viewed from the two sensitive view corridors:

Wharf frontage and ships
Bulk loader
Small cranes and mobile equipment

Scrap metal piles Large crane The wharf frontage, ships, large crane and bulk loader are similar to the industrial facilities and equipment on either side of HNPC at the Yusen and Matson container loading facilities. Both Yusen and Matson have dockside equipment of similar or even larger scale than HNPC. HNPC's dockside equipment is visually distinct because of its older appearance and darker colors which contrasts with the modern and more brightly painted equipment of its neighbors. The scrap metal piles form a background of similar dark tones which reinforce the contrast with the neighboring industrial uses. When a ship is loading at the HNPC facility these visual differences are largely masked by the bulk of the ship. HNPC proposes to load ships approximately 234 days per year. Unlike the dockside equipment and scrap metal piles, the other site facilities such as the office and warehouse buildings, shredder, and weigh station are mostly hidden by the scrap piles and do not contribute to the visual impression of the site when viewed from the two sensitive view corridors.

The proposed facility improvements also include several features which may impact the visual quality of the project site:

Perimeter wall constructed from shipping containers Landscaped 4,000-square-foot single story office building and parking area Additional lighting in storage and loading areas Replacement of a dock-side crane

For the perimeter wall HNPC proposes to utilize empty sea containers, and stack four containers to build a wall up to 32 feet high along portions of the perimeter of the facility to control noise and improve aesthetics as shown in Figure 1.1-4 (refer to Section 1.0 Description of the Project). HNPC expects to purchase sea containers and complete their placement within twelve to eighteen months after a lease extension is granted. Although the perimeter wall is intended to hide the scrap piles and some of the processing equipment, it has the potential for creation of a massive and prominent structure. By using cargo containers, which are commonly stacked in the nearby container handling facilities, and by construction of the tallest parts of the wall only along selected portions of the perimeter, the appearance of mass can be reduced. The equipment will be painted in bright hues already used in the Port, such as white, yellow, red and blue, to avoid the drab appearance of a predominantly brown complex and to provide visual interest. The lighter colored containers will cause the facility to blend more easily with the land uses on either side.

HNPC proposes construction of a 4,000 sq. ft., single story office building in the existing parking lot area as shown in Figure 1.1-4. The building will be flat roofed, approximately 11-13' in height, using prop-up type construction with metal siding. The new office building and parking lot will only be visible from New Dock Street which, in this area, is an entirely industrial setting with no sensitive receptors. The building and parking lot will not have any significant impact on visual resources.

Proposed landscaping near the entrance to HNPC will include the construction of planters along the inbound lane and proposed new office area, as shown in Figure 1.1-4. The landscaping will help to soften the industrial appearance of New Dock Street in the immediate area of the facility entrance.

All lighting would be shielded to the extent feasible and designed to minimize glare to adjacent properties. Existing cargo handling and other industrial uses at HNPC and adjacent areas operate on a 24-hour basis and, consequently, they have extensive lighting systems for safety and security. The minor additional lighting which would be required for the proposed project would, therefore, not cause any significant impact to visual resources of the area.

Several types of dockside cranes are being considered by HNPC, the largest of which is a 685 hp diesel crane with 350 ton capacity. The new crane will likely help to present a more modern appearance to the facility, particularly if the crane is painted in lighter tones, similar the neighboring container handling facilities.

With HNPC's proposed increase in shipping capacity an increased number of large vessels would be visible from the sensitive viewpoints mentioned above. Viewer perceptions of vessel traffic may vary; what is interesting to one person may be considered an annoyance to others. However, since the Port is already frequented by large vessels, the number of vessels is projected to increase even in the absence of the proposed project, and the vessels represent transitory features in the viewshed. As noted above, the presence of a ship at the HNPC wharf provides a partial screening of the scrap piles, hence, increased the number of ships berthing at HNPC will increase the amount of time the facility is screened from viewpoints. Impacts from increased ship call on the aesthetics of the area are considered to be insignificant.

The proposed project would result in increased truck and train trips. Round-trips for heavy trucks will increase from the present average of 193 per day to approximately 303 per day. These trips would occur along established commercial corridors or on freeways. These roadways and freeways already carry considerable amounts of truck traffic (see Section 3.6 Transportation and Circulation), and visual impacts would not be significant. The proposed reintroduction of rail access to the site would add one daily train trip to existing local railways. This is not considered a significant impact to visual resources.

Renewal of HNPC's lease and continued use of the site for scrap metal processing will result in potentially adverse impacts to visual resources from two view corridors within the Port. The project includes a perimeter wall which will help to limit views of the scrap metal piles, however the piles will still be visible, particularly when ships are not present at HNPC's wharf. The planned increase in capacity of the HNPC facility will increase the number of days ships are present at HNPC, thereby reducing the number of days when the scrap piles and dockside loading equipment are visible from the marina. Considering the location of the marina which is dominated by views of Port industrial facilities, ship loading equipment, or oil production facilities, the visual impacts of the project are not considered to be significant.

3.13.3 Cumulative Impacts

Projects considered in the cumulative analysis are identified in Section 2.2, Related Projects. These projects include additional terminals, including terminal facilities and infrastructure such as cargo berths, cargo-handling yards, intermodal transfer facilities, railroad, roadway, and other improvements, as well as an increase in the number of ships arriving in the Port.

Only three of the related projects would be visible from the sensitive view corridors near HNPC. Two of these projects are approved projects for lease renewals and facility improvements at liquid bulk oil handling facilities (Berths 167-170 and Berths 187-193). The proposed facility improvements at these two project locations will not change the visual character of the existing facilities or contribute to the cumulative visual impacts of the area. The third proposed project is the replacement of the Henry Ford (Badger Avenue) Bridge which crosses Cerritos Channel directly east of the marinas and the HNPC site (LAHD and USCG, 1994). The existing double leaf bascule bridge would be replaced with a lift bridge similar to the Commodore Heim Bridge which is immediately east of the Badger Avenue Bridge. The new bridge, if approved, is likely to be larger than the Badger Avenue Bridge it replaces, and similar in scale to the adjacent Heim Bridge. Although the new bridge would be larger than the old bridge, it would not substantially alter the already locally dominant bridge and ramp structures. Cumulative impacts relative to the HNPC lease renewal project are insignificant.

3.13.4 Mitigation Measures

3.13.4.1 Recommended Mitigation Measures

No significant impacts were identified, therefore no additional mitigation is required.

3.13.4.2 Impacts Mitigated to Insignificance

No significant impacts were identified.

3.13.4.3 Unavoidable Significant Adverse Impacts

The proposed project would not result in any unavoidable significant adverse impacts to the visual resources of the project area.

3.13.4.4 Mitigation Monitoring Program

None required.

·	

3.14 POPULATION AND HOUSING

The section describes the remodeling of the existing office building and construction of a new office building at the HNPC facility. The project is not expected to result in any marked change in the population of the region, increase the need for, or affect area housing.

3.14.1 Setting

There is no residential housing at the site, however, several industrial buildings occupy the HNPC site:

- Office building a 12,000 square-foot single story permanent building with attached portable units of approximately 2000 square-feet. The office building is used for administrative purposes such as accounting, sales and marketing, receiving, shipping, and offices for technical and management staff.
- Warehouse a 25,000 square-foot structure used for storage of parts and supplies, and for maintenance of light equipment and machinery.
- Steinert/Maintenance a 38,000 square-foot building housing the metal separation equipment, a large shop area, and offices.
- Change Room a 2400 square-foot single story change room is used by HNPC employees to change clothes and shower.

The 1992 population total for the San Pedro-Wilmington-Harbor City area is 141,776 with 47,657 housing units (City of Los Angeles, 1993).

New construction will include a 4,000 square-foot single story office building and the remodeling of the existing office building into an employee change room, office space, and conference rooms. The existing 2400 square-foot change room will be demolished.

3.14.2 Impacts

3.14.2.1 Significance Criteria

Impacts on housing would be significant if the project resulted in:

• Relocation of 1% or more of the existing population due to project construction impacts on residential, commercial or industrial facilities.

3.14.2.2 Impact Analysis

The facility is located in an area zoned for heavy industry (M3) with no residential housing at the facility or in the vicinity of the facility. The new construction at the facility, the remodeling of the old office building, and demolition of the old change room will be carried-out be HNPC personnel or contractor personnel. No workers from outside the southern California area will be required for the construction at the facility. The project will not change the housing patterns of the area.

3.14.3 Cumulative Impacts

The proposed project would not contribute to cumulative impacts to population and housing.

3.14.4 Mitigation Measures

3.14.4.1 Recommended Mitigation Measures

None required

3.14.4.2 Impacts Mitigated to Insignificance

There were no impacts to housing that were significant.

3.14.4.3 Unavoidable Significant Adverse Impacts

The proposed project would not result in any unavoidable significant adverse impacts on population and housing.

3.14.4.4 Mitigation Monitoring Program

None required.

SECTION 4 ALTERNATIVES TO THE PROPOSED PROJECT

This chapter describes and analyzes alternatives to the proposed action of renewing the lease for continued use of Berths 210-211 by HNPC. A variety of alternatives were considered. Those carried forward for analysis in this EIR include the proposed project and the No Project alternative. Alternatives not carried forward for analysis include relocation of the existing facility from Berths 210 and 211 to another location within the Port.

Each of the alternatives identified above were evaluated as to whether they would attain the basic objectives of the proposed project, whether they would be technically feasible, and whether they could possibly offer environmental advantages over the proposed project.

4.1 No Project Alternative

Under the No Project alternative, the lease renewal would not be approved; the project objectives identified in Section 1.3 of this EIR would not be met; HNPC would vacate the site, and the shipment of scrap metals through this site would be eliminated. The Port would not be able to efficiently meet existing and projected increases in scrap metal cargo demand due to limitations in available unused land and limitations in existing facilities and infrastructure.

Remediation of the soil and groundwater contamination at the site would begin immediately. Environmental impacts associated with the proposed project, particularly those impacts identified as unavoidable, would be eliminated. Natural resources would not be committed to the project. However, the beneficial impacts related to employment and revenues generated by the scrap metal handling and cargo throughput would also not be realized.

The land uses around Berths 210-211 are generally industrial in nature. If the proposed project does not proceed, some other port-related water-dependent use ultimately would be developed on the Berths 210-211 site. Water-dependent use is required to be consistent with the California Coastal Act, California Tidelands Trust Act, and 404 permit requirements.

Although the No Project alternative would not meet the proposed project objectives, it is carried forward into the environmental analyses with the proposed action in Chapter 3.0 in accordance with CEQA requirements.

4.1.1 Geology

The No Project alternative requires vacating and decommissioning the site at Berths 210-211. Facilities would be removed and, therefore, no longer be exposed to geologic/seismic impacts associated with the proposed project.

Under the No Project alternative, there would be no impacts from construction or operation of a facility at Berths 210-211. Existing facilities and activities within the port area would still be subjected to the potential geohazards described in Section 3.1 Geology. Given the limited supply of land available on which to build, new proposals for development of Berths 210-211 would be anticipated, and these would have requirements that could have either greater or lesser impacts.

4.1.2 Soil and Groundwater

The No Project alternative would accelerate site remediation plans; however, no changes to facility groundwater or soil remediation requirements are associated with the No Project alternative, since complete site remediation would be a lease requirement. The soil remediation, and groundwater remediation program would improve existing soil and groundwater conditions and therefore result in beneficial impacts. The same beneficial impacts would be realized under the proposed project, however, they would be achieved over a longer time frame.

No changes to groundwater or soil remediation requirements are associated with the No Project alternative, since complete site remediation would still be required.

4.1.3 Meteorology and Air Quality

Air emissions associated with facility operations would be eliminated under the No Project alternative; therefore, impacts to air quality would be less than those of the proposed project. Short-term air emissions would result from facility decommissioning and soil and groundwater remediation activities. Air emissions associated with decommissioning and remediation activities are anticipated to have an insignificant impact on air quality. After completing site restoration activities, the Berths 210-211 area would likely be developed for another port-related water-dependent use. Depending on the ultimate use of the site, air emissions and impacts to air quality could be associated with the site.

4.1.4 Hydrology, Water Quality and Oceanography

The No Project alternate would eliminate the processing and transfer of scrap metal at the facility. Therefore, the No Project alternative would eliminate the potential water quality impacts associated with runoff from these operations.

Water quality and oceanographic impacts associated with remediation activities are anticipated to be short-term and to have an insignificant impact, as discussed in Section 3.4.

4.1.5 Biota and Habitats

The No Project alternative would eliminate the processing and transfer of scrap metal at the facility. Therefore, the No Project alternative would eliminate the potential impacts to biota and habitats associated with contaminated surface runoff.

4.1.6 Transportation and Circulation

Under the No Project alternative, traffic associated with decommissioning and site remediation would be similar to that of the proposed project, which were determined to be insignificant, as discussed in Section 3.6. The No Project alternative would eliminate traffic associated with transporting scrap metal to and from the facility by truck and marine vessels, employee vehicles, and contractor vehicles for site modifications. However, the scrap would move to other export facilities or landfill, generating traffic elsewhere in the region. After completing site restoration activities, the Berths 210-211 area would likely be developed for another port-related water-dependent use. Depending on the ultimate use of the site, a wide range of vehicular and/or marine traffic could be associated with the site.

4.1.7 Noise

The No Project alternative would eliminate the noise impacts associated with scrap metal receiving, process, and loading. Noise impacts under the No Project alternative for remediation activities would be comparable to those under the proposed project, since both the No Project alternative and the proposed project would involve the same remediation activities. Noise impacts associated with decommissioning and remediation activities are anticipated to be short-term and insignificant. After completing site restoration activities, the Berths 210-211 area would likely be developed for another port-related water-dependent use. Depending on the ultimate use of the site, generation of noise could be associated with the site.

4.1.8 Public Health and Safety

The No Project alternative would eliminate the presence of hazardous materials, the potential for fire and explosion hazard, accidental releases of hazardous materials, and toxic emissions associated with project operations. Decommissioning and remediation activities are anticipated to be short-term and will have insignificant impacts on public health.

4.1.9 Public Services

The No Project alternative would not cause any significant adverse impacts to public service requirements. Fire protection and other public service requirements would continue during decommissioning and remediation phases, but no public services would be required following complete site restoration.

4.1.10 Energy

Under the No Project alternative, energy use would be lower than the proposed project since no operations are associated with the No Project alternative. Energy use during decommissioning and site remediation activities would be similar to that of the proposed project.

4.1.11 Utilities and Waste Management

Since the No Project alternative involves immediate decommissioning of the facility, no utility services would be required following site closure. Electrical power and water demands during the decommissioning and remediation activities would be short-term and similar to project requirements. The need for utilities and waste management services would be eliminated upon completion of site remediation activities.

Site remediation activities are the same as for the proposed project and are expected to result in insignificant waste management impacts due to disposal of excavated soils as discussed in Section 3.11.

4.1.12. Recreation

Under the No Project alternative, the site would be vacated by HNPC and would likely be developed for another use, such as a dry bulk or containerized cargo facility. It would be speculative to determine the potential impacts on recreation resulting from redevelopment activities. However, future use of the site would be consistent with industrial uses for Terminal Island and the vicinity, and impacts to recreation would likely be insignificant and similar to the proposed project as described in Section 3.12.

4.1.13. Visual Resources

Under the No Project alternative the existing facilities would be removed and the scrap handling activities would be discontinued. This alternative would eliminate the visual and aesthetic impacts associated with scrap metal receiving, processing, and loading. However, future use of the site would be consistent with industrial uses for Terminal Island and the vicinity, and impacts to visual resources would likely be insignificant.

4.1.14 Population and Housing

Under the No Project alternative the existing facilities would be removed and the scrap handling activities would be discontinued. This alternative would eliminate the employee positions associated with scrap metal receiving, processing, and loading. However, future use of the site would be consistent with industrial uses for Terminal Island and the vicinity, and future use of the wharf frontage site for some type of shipping activity could be expected to employ a similar number of personnel. Impacts to population and housing would likely be insignificant.

4.2 No Facility or Operation Modifications

Under the No Facility Modifications alternative, HNPC's lease would be renewed for Berths 210-211 and the facility would operate in a manner similar to previous operations. The scrap metal processing operations would be similar to those previously conducted and the overall facility throughout would not increase above previous levels. Implementation of the soil and groundwater remediation would proceed in the same manner as for the proposed project.

This alternative would not allow project objectives to be met. Project improvements such as reintroduction of rail access, improved scrap handling, and sound barriers would not be constructed.

4.2.1 Geology

No new facilities would be constructed at the HNPC site with the No Facility Modifications alternative, therefore no additional geologic impacts are anticipated with this alternative.

4.2.2 Soil and Groundwater

No changes to facility groundwater or soil remediation requirements are associated with the No Facility Modifications alternative. Complete site remediation would be required with this alternative, similar to the proposed project and No Project alternative. The remediation schedule and implementation of the source control program would proceed along the same time frame as that presented for the proposed project. The soil remediation and groundwater remediation program would improve existing soil and groundwater conditions and therefore result in beneficial impacts. The same beneficial impacts would be realized under the proposed project.

4.2.3 Meteorology and Air Quality

Under the No Facility Modifications alternative, air emissions associated with facility operation would not increase above those previously experienced at the HNPC facility. Emissions from trucks, marine vessels, and the processing of scrap metal would continue at existing levels. Total air emissions from the No Facility Modifications alternative would be less than the emissions associated with the proposed project.

Complete site remediation would be required under the No Facility Modifications alternative. Air emissions associated with remediation are anticipated to have an insignificant impact on air quality, as discussed in Section 3.3.

Under the No Facility Modifications alternative, HNPC would not implement proposed site improvements, such as the railway access to the site, which would improve scrap handling efficiency and reduce vehicle emissions.

4.2.4 Hydrology, Water Quality and Oceanography

The proposed project includes construction and implementation of a storm water control and treatment system. Under the No Facility Modifications alternative this system would still be implemented under HNPC's Notice of Intent to operate under the conditions of the statewide General Industrial Activities Storm Water Discharge Permit. Impacts under the No Facility Modifications alternative would therefore be the same as for the existing operations. Impacts are anticipated to be insignificant for the No Facility Modifications alternative, as well as for the proposed project, as discussed in Section 3.4.

Water quality and oceanographic impacts associated with remediation activities which would be conducted with any of the alternatives are anticipated to have insignificant impacts, as discussed in Section 3.4.

4.2.5 Biota and Habitats

Impacts of the No Facility Modifications alternative to biota and habitats would continue to be the same as those from the existing operations. Impacts associated with remediation activities which would be carried out under this alternative are anticipated to have insignificant impacts to biota and habitats.

4.2.6 Transportation and Circulation

The No Facility Modifications alternative would not result in an increase in vehicular and marine vessel traffic above previous levels. Transportation impacts are anticipated to be insignificant for the No Facility Modifications alternative, as well as for the proposed project, as discussed in Section 3.6. Under this alternative, the rail access would not be constructed and associated impacts discussed in Section 3.6 would not occur.

4.2.7 Noise

Noise impacts are expected to be greater under the No Facility Modifications alternative than for the proposed project, since the proposed project includes construction of noise barriers and a perimeter wall.

4.2.8 Public Health and Safety

Previous operations have involved products that do not generate significant quantities of toxic air contaminants. The Air Toxics Inventory Report submitted to the South Coast Air Quality Management District indicated minor emissions from past and current operations. Toxic emissions associated with this alternative would be less than those associated with the proposed project, which were determined to be insignificant as discussed in Section 3.8.

Under the No Facility Modifications alternative, the potential for fire and explosion and release of hazardous materials would be the same as for current operations, but the potential impacts would still be considered insignificant, as discussed in Section 3.8.

Remediation activities would be the same as those discussed for both the proposed project and the No Project Alternative. Remediation activities are anticipated to have an insignificant impact on public health and safety, as discussed in Section 3.8.

4.2.9 Public Services

The No Facility Modifications alternative would not cause an increase in public service requirements, because there would not be any change from previous operations. Fire protection and other public service requirements would be similar to those of the proposed project, which was determined to have an insignificant impact on Public Services, as discussed in Section 3.9.

4.2.10. Energy

Under the No Facility Modifications alternative, HNPC would continue to consume energy as it has in the past. Therefore, no significant impacts on energy use would occur due to normal operations of the facility. The energy use (mostly due to additional motor vehicles) would increase as a result of site remediation activities, but energy use during these activities would be the same as the No Project alternative and the proposed project. Impacts on energy use due to these activities would be insignificant, as discussed in Section 3.10.

4.2.11. Utilities and Waste Management

The No Facility Modifications alternative does not involve change from current operations. Waste generation and utility utilization would be less than the proposed project waste generation and utility use rate, which was determined to have an insignificant impact as discussed in Section 3.11.

4.2.12. Recreation

The recreational use in the vicinity would remain the same as for the proposed project and existing conditions. No changes in industrial use of the property are forecasted. Therefore, no significant impacts on recreational use in the area would occur under the No Facilities Modification alternative.

4.2.13. Visual Resources

Under the No Facility Modifications alternative, visual and aesthetic impacts would be the same as for the current operations at HNPC. The proposed project, in comparison, would have reduced impacts to visual and aesthetic resources since the proposed project includes construction of a perimeter wall and landscaping.

4.2.14 Population and Housing

Under the No Facility Modifications alternative the existing facilities would continue to have the same number of employee positions now associated with scrap metal receiving, processing, and loading. With this alternative there would be no impacts to population and housing.

4.3 Alternatives Found Infeasible

Relocating the existing scrap metal handling and shipping facility to another location was considered. Under the relocation alternative, existing or similar equipment would be installed at another location within the Port. Environmental controls would be similar to those currently provided or proposed for the existing facility.

There are very few sites suitable for water-dependent operations such as those now available at Berths 210-211. The California Coastal Act (Chapter 8) designates certain areas for harbor uses, of which the Port of Los Angeles is one.

Within the Port, a scrap metal facility can only be located in five of the ten Port planning areas. Two of the planning areas are in the West Basin region (Areas 4 and 5A) of the Port. In these two areas, a scrap metal operation would require a Conditional Use Permit from the Los Angeles City Planning Commission. In addition, the Harbor Department has already allocated these areas for container terminal development, and there is no available space for a scrap metal operation. A third planning area (Area 5B), Mormon Island in the Wilmington District of the Port, has all available land occupied by marine oil terminals holding long term leases and there is no available space for a scrap metal operation. Available land in a fourth planning area (Area 9 on Terminal Island) is currently being developed as coal and container terminals, and there is no available land for a scrap metal operation. Additional land is being created in Area 9 by dredging of the harbor bottom; however, the new landfill will not be available for development for several years. HNPC is currently located in Area 7 on Terminal Island. In addition to HNPC, this planning area contains primarily container terminals, and there is no vacant land available for relocation of the HNPC operation. In the future, HNPC could request to be relocated to this or other available land which may become available in planning areas allowed to support scrap metal operation. At this time, however, no such locations exist.

In considering alternative locations outside the Port of Los Angeles, the opportunities for siting the facility are limited. The California Coastal Act (Section 30701(b)) calls for ports to "... be encouraged to modernize and construct necessary facilities within their boundaries in order to minimize or eliminate the necessity for future dredging and filling to create new ports in new areas of the state." Therefore, the facility would need to be located within an existing port. Location of the facility in a port outside the Los Angeles Basin would remove the facility from its major suppliers, increasing the difficulty and environmental impact of transportation of scrap to the facility. There are vacant areas within the Port of Long Beach, including the former Naval Station; however, any alternative site would require more extensive construction to develop the site as a scrap metal facility and have similar operational impacts. Therefore, relocation to the Port of Long Beach would have environmental impacts similar to or greater than the proposed action at Berths 210-211. There are no sites outside the Port of Los Angeles which would result in fewer or less sever environmental impacts and that would meet the project objectives.

Regardless of the site chosen for the proposed facility, the existing Berths 210-211 project site will still be developed for some sort of water related use. Available waterfront like Berths 210-211 is scarce and its continued use as a scrap metal terminal is in keeping with the Port's responsibility for "modernizing and construction [of] necessary facilities to accommodate deep-draft vessels and to accommodate the demands of foreign and domestic waterborne commerce . . . " (Port of Los Angeles Master Plan 1979, as amended).

In conclusion, there are currently no sites within or outside the Port area which would meet the project objectives with fewer or less severe environmental impacts.

•

SECTION 5 LONG-TERM IMPLICATIONS OF THE PROJECT

The project site on terminal Island was used for ship dismantling following World War II and for scrap processing and shipping since the early 1960's. The proposed project would extend the current use of the site for 27 years and includes improvements to the existing facilities which would allow an increase in scrap handling and shipping capacity.

5.1 Significant Irreversible Environmental Changes Which Would Be Involved if the Proposed Action Should Be Implemented

The proposed project is to improve an existing scrap metal handling and shipping facility, and is not expected to result in significant irreversibly adverse environmental changes. Furthermore, continued operation of the HNPC facility by renewal of the lease and the facility modifications and environmental improvements resulting therefrom would reduce existing groundwater and soil contamination at the site.

Non-recoverable materials and energy will be used during both the construction and ongoing operational phases of the project, but the amounts needed are easily accommodated by existing supplies. Although this increase in the amount of materials and energy used would be insignificant, they would nevertheless be unavailable for other uses.

5.2 The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

Many of the proposed facility improvements would enhance the site's ability to process and ship scrap metal and would improve both present and future environmental conditions at the site. Implementing the improvement program at this time would address existing on-site contamination and would reduce the potential for future contamination.

Continued operation of this facility is consistent with and justified by the mandate of the Los Angeles Harbor Department to accommodate present and future cargo handling needs. The project would provide income and fiscal benefits and revenues to local governments.

5.3 Growth-Inducing Impacts of the Proposed Action

The proposed project would improve an existing scrap metal handling facility, and is not expected to foster economic or population growth. Only about 14 additional operational personnel will be required for the proposed project, therefore, the requirement for additional housing and community service facilities is not expected to occur. Although improvements will take place over many years, the individual activities are predicted to be short-term and intermittent in nature. It is not foreseen that additional housing and community service facilities will be needed by construction workers.

	ž.					
		-				

ļ

SECTION 6 REFERENCES

EIR USE, RELATED PROJECTS, AND RELATIONSHIP TO PLANS

State Water Resources Control Board. 1991. California Enclosed Bays and Estuaries Plan.

City of Los Angeles. 1992. City of Los Angeles General Plan- Air Quality Element.

GEOLOGY

Allen, D.R. 1973. Subsidence, Rebound and Surface Strain Associated with Oil Producing Operations, Long Beach, California, in Geology, Seismicity, and Environmental Impact, Association of Engineering Geologist Special Publication.

Bauer, W.E., Cohn, Jr., A.A., LeConte, J., Pickett, E.S., and Truex, J.N. 1966. Coastal Oil Fields of the Los Angeles Basin in and Adjacent to San Pedro Bay, California, *in* Pacific Section, American Association of Petroleum Geologists-Society of Economic Paleontologists & Mineralogists-Society of Exploration Geophysicists 1966 Annual Field Trip, scale 1:36,000.

California Division of Mines and Geology. 1988. Planning scenario for a major earthquake on the Newport-Inglewood fault zone. CDMG Special Publication 99.

California Division of Mines and Geology. 1975. Recommended guidelines for determining the maximum credible and the maximum probable earthquakes. CDMG Note 43.

Clarke, S.H., Greene, H.G., Kennedy, M.P., and Vedder, J.G.. 1987. California Continental Margin Geologic Map Series. California Division of Mines and Geology, Maps 1A, 1B, 1C, 1D.

Clarke, D.D., and Henderson, C.P., 1987. The Coastal Oil Fields of the Los Angeles Basin in and Adjacent to the City of Long Beach, California, in Clarke, D.D., and Henderson, C.P., (eds), Geologic Field Guide to the Long Beach Area. Pacific Section, American Association of Petroleum Geologists Guidebook, v.58, scale 1:60,000.

Crook, R., and Allen, C.R., Kamb, B., Payne, C.M., and Procter, R.J. 1987. Quaternary Geology and Seismic Hazard of the Sierra Madre and Associated Faults, Western San Gabriel Mountains. United States Geological Survey Professional Paper 1339.

Dames and Moore. 1977. Final Report, Geoseismic Investigation of the Palos Verdes Fault Zone. Prepared for Shell Oil Company April 1st.

Dames and Moore. 1975. Offshore Soils Investigation, Los Angeles Harbor, LNG Ship Terminal, September 30, 1975.

Davis, T.L., and Namson, J. 1989. A Cross Section of the Los Angeles Area. Seismically Active Fold and Thrust Belt, The 1987 Whittier Narrows Earthquake, and Earthquake Hazard. Journal of Geophysical Research, v.94 (B7), p.9644-9664.

Davis, J.F., Bennett, J.H., Borchardt, G.A., Kahlek, J.E., Rice, S.J., and Silva, M.A. 1982. Earthquake Planning Scenario for a Magnitude 8.3 Earthquake on the San Andreas Fault in Southern California, California Department of Conservation, Division of Mines and Geology, Special Publication 60, 128 p.

Environmental Audit, Inc. 1991. Environmental Assessment for Hugo Neu-Proler Company Lease Extension. Submitted to Port of Los Angeles March, 1991.

Envirosphere, Inc. 1989. Site Characterization Report, National Metals and Steel Site, Terminal Island, California.

Fischer, P.J., Patterson, R.H., Darrow, A.C., Rudat, J.H., and Simila, G. 1987. The Palos Verdes Fault Zone: Onshore to Offshore, in Geology of the Palos Verdes Peninsula and San Pedro Bay. Published by Society of Economic Paleontologists and Mineralogists, Pacific Section, and American Association of Petroleum Geologists, Guidebook 55, p.91-134.

Fischer, P.J., and Mills, G.I. 1991. The offshore Newport-Inglewood - Rose Canyon fault zone, California: Structure, segmentation and tectonics, in, Abbott, P.L., and Elliott, W.J. (eds), Environmental Perils, San Diego Region. Geological Society of America Annual Meeting, October 20, 1991, p.17-36.

Greene, H.G., and Kennedy, M.P. 1986. Geology of the outer-southern California continental margin. CDMG California Continental Margin Geologic Map Series, Area 2, 4 maps, scale 1: 250,000

Greene, H.G., Clark, S.H., Field, M.E., Linker, F.I., and Wagner, H.C. 1975. Preliminary report on the environmental geology of selected areas of the southern California borderland. United States Geological Survey Open File Report 75-596, 70p, 16 plates.

Harding Lawson Associates. 1989. Geotechnical Investigation, Berths 212-215 Backland Improvements, Port of Los Angeles, Terminal Island, California. HLA job number 13134,017.11, December 14, 1989.

Hart, E.W. 1992. Fault Rupture Hazard Zones in California. California Division of Mines and Geology Special Publication 42.

Hauksson, E. 1987. Seismotectonics of the Newport-Inglewood Fault Zone in the Los Angeles Basin, Southern California. Bulletin of the Seismological Society of America, v.77 (2), p.539-561.

Hauksson, E. 1990. Earthquakes, Faulting and Stress in the Los Angeles Basin. Journal of Geophysical Research, v.95(B10), p.15365-15394.

Hauksson, E. 1992. Seismicity, Faults, and Earthquake Potential in Los Angeles, Southern California, in, Pipkin, B.W., and Proctor, R.J., (eds), Engineering Geology Practice in Southern California. Association of Engineering Geologists Special Publication No. 4, p.167-179.

Henry, M.J. 1987. Los Angeles Basin - An Overview, in, Clarke, D.D., and Henderson, C.P., (eds), Geologic Field Guide to the Long Beach Area. Pacific Section, American Association of Petroleum Geologists Guidebook, v.58, p. 1-29.

Houston, J.R., and Garcia, A.W. 1974. Type 16 Flood Insurance Study: Tsunami Predictions for Pacific Coastal Communities. United States Army Corps of Engineers Waterways Experiment Station Technical Report H74-3, 10p.

Jennings, C.W. 1992. Preliminary Fault Activity Map of California. California Department of Conservation, Division of Mines and Geology Open-File Report 92-03.

Junger, A., and Wagner, H.E. 1977. Geology of the Santa Monica and San Pedro Basins, California Continental Borderland, <u>In</u>, United States Geological Survey Miscellaneous Field Studies Map, MF-820, 1:250,000.

Long Beach City Planning Department. 1975. Long Beach General Plan Program-Seismic Safety Element Draft. Long Beach City Planning Department, Long Beach, California, 167p.

Los Angeles Harbor Department (LAHD). 1992. Engineering Design Guidelines, Los Angeles Harbor Department. Prepared for the Los Angeles Harbor Department by J.A.K. Networks Unlimited, December 1992.

MAA Engineering Consultants, Inc. 1993. Geotechnical Report (Revised) Badger Avenue Bridge Rehabilitation Project. Prepared for Howard Needles Tammen and Bergendoff, MAA project number 0042-004.

Morton, D.M., and Yerkes, R.F. 1987. Recent Reverse Faulting in the Transverse Ranges, California, Introduction. United States Geological Survey Professional Paper 1339, p.1-5.

Mualchin, L., and Jones., A.L. 1992. Peak Acceleration from Maximum Credible Earthquakes in California (Rock and Stiff Soil Sites), California Division of Mines and Geology, Open File Report 92-1.

Nardin, T.R., and Henyey, T.L. 1978. Pliocene-Pleistocene Diastrophism of Santa Monica and San Pedro Shelves, California Continental Borderland. American Association of Petroleum Geologists Bulletin, v.62(2), p.247-272.

Pinault, C.T., and Rockwell, T.K. 1984. Rates and sense of Holocene faulting on the southern Elsinore fault: Further constraints on the distribution of dextral shear between the Pacific and north American plates. Geological Society of America Abstracts With Programs, v. 16, p.624.

Pyke, R.M., Knupple and Lee. 1978. Liquefaction Potential of Hydraulic Fills, Los Angeles and Long Beach Harbors, California.

Randell, D.H., Reardon, J.B., Hileman, J.A., Matuschka, T., Liang, G.C., Khan, A.I., and LaViolette, J. 1983. Geology of the City of Long Beach, California, United States of America. Association of Engineering Geologists Bulletin, v.20(1).

Rockwell, T.K., Lamar, D.L., McElwain, R.S., and Millman, D.E. 1985. Late Holocene recurrent faulting on the Glen Ivy north strand of the Elsinore fault, southern California. Geological Society of America Abstracts With Programs, v.17, p.404.

Rzonca, G.F., Spellman, H.A., Fall, E.W., and Shlemon, R.J. 1991. Holocene displacement of the Malibu Coast fault zone, Winter Mesa, Malibu, California:Engineering geologic implications. Association of Engineering Geologists, v. 28(2), p. 147-158.

Sharp, R.V. 1981. Variable rates of late Quaternary strike-slip on the San Jacinto fault zone, southern California. Journal of Geophysical Research, v.86, p.1754-1762.

Sieh, K., Stuiver, M., and Brillinger, D. 1989. A more precise chronology of earthquakes produced by the San Andreas fault in southern California. Journal of Geophysical Research, v.94, n.B1, p.603-623.

Tinsley, J.C., and Fumal, T.E. 1985. Mapping Quaternary Sedimentary Deposits for Areal Variations in Shaking Response, in Ziony, J.I., Evaluating Earthquake Hazards in the Los Angeles Region-An Earth Science Perspective. United States Geological Survey Professional Paper 1360, p.101-125.

United States Army Corps of Engineers (USACOE). 1985. Programmatic Environmental Impact Report/Environmental Impact Statement for Landfill Development and Channel Improvements, Volume I - Master Plan, November, 1985.

United States National Research Council, Committee on Earthquake Engineering. 1985. Liquefaction of Soils During Earthquakes.

Wallace, R.E., ed. 1990. The San Andreas fault system, California. USGS Professional Paper 1515, 283pp.

Ward, S.N., and Valensise, G. 1994. The Palos Verdes Terraces, California: Bathtub Rings From a Buried Reverse Fault. Journal of Geophysical Research, v. 99 (B3), p.4485-4494.

Wesnousky, S.G. 1991. An offset Holocene stream channel and the rate of slip along the northern reach of the San Jacinto fault zone, San Bernardino Valley, California. Geological Society of America Bulletin, v. 103, p. 700-709.

Wesnousky, S.G. 1986. Earthquakes, Quaternary Faults and Seismic Hazard in California. Journal of Geophysical Research, v.91(B12), p.12587-12631.

Woodward-Clyde Consultants. 1986. Evaluation of liquefaction opportunity and liquefaction potential in the San Diego, California, Urban Area. Final Technical Report submitted to the United States Geological Survey under Contract No. 14-08-0001-20607.

Woodward-Clyde Consultants. 1979. Report of the evaluation of maximum earthquake and site ground motion parameters associated with the offshore zone of faulting, San Onofre Nuclear Generating Station. Unpublished report for Southern California Edison Company, 241 p.

WGCEP (Working Group on California Earthquake Probabilities). 1988. Probabilities of large earthquakes occurring in California on the San Andreas fault. United States Geological Survey Open-file Report 88-398.

Wright, T.L., 1991, Structural Geology and Tectonic Evolution of the Los Angeles Basin, California, in, Biddle, K.T., (ed), Active Basin Margins. American Association of Petroleum Geologists Memoir 52, p.35-134.

Yeats, R.S. 1988. Late Quaternary Slip Rate on the Oak Ridge Fault, Transverse Ranges, California: Implications for Seismic Risk. Journal of Geophysical Research, v.93(B10), p.12137-12149.

Yerkes, R.F. 1985. Geologic and Seismologic Setting, in Ziony, J.I., (ed), Evaluating Earthquake Hazards in the Los Angeles Region - An Earth-Science Perspective. United States Geological Survey Professional Paper 1360, p.25-41.

Ziony, J.I., and Yerkes, R.F. 1985. Evaluating Earthquake and Surface Faulting Potential, in Ziony, J.I., Evaluating Earthquake Hazards in the Los Angeles Region-An Earth Science Perspective. United States Geological Survey Professional Paper 1360, p.43-91.

Ziony, J.I., and Jones, L.M. 1989. Map showing Late Quaternary Faults and 1978-84 Seismicity of the Los Angeles Region, California, United States Geological Survey Miscellaneous Field Studies Map MF-1964, scale 1:250,000.

SOIL AND GROUNDWATER

California Department of Water Resources (Southern District), State of California. 1961. Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County," Bulletin 104, Appendix A, Groundwater Geology.

California Regional Water Quality Control Board. 1989. The designated level methodology for waste classification and cleanup level determination.

McLaren/Hart. 1994. Baseline risk assessment of the Hugo Neu-Proler Terminal Island Facility, Port of Los Angeles, California.

Mittelhauser Corp. 1993. Supplemental site assessment. Prepared for Hugo Neu-Proler Company.

Mittelhauser Corp. 1994a. Feasibility Study. Prepared for Hugo Neu-Proler Company.

Mittelhauser Corp. 1994b. Site characterization report and remedial action plan. Prepared for Hugo Neu-Proler Company.

Simon Hydro-Search. 1993. Interim progress report free phase hydrocarbon assessment and groundwater remediation, 901 new Dock Street, Terminal Island, California. Prepared for Hugo Neu-Proler Company.

METEOROLOGY AND AIR QUALITY

Mittelhauser Corp. 1994a. Feasibility Study. Prepared for Hugo Neu-Proler Company.

National Oceanographic and Atmospheric Administration (NOAA). 1987. Comparative Climatic data for the United States.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. April, 1993.

U.S. Environmental Protection Agency (EPA). 1985. Compilation of air pollution Emission factors. Publication AP-42.

HYDROLOGY, WATER QUALITY, AND OCEANOGRAPHY

California Regional Water Quality Control Board (CRWQCB), 1990. Congener-Specific Characterization and Source Identification of PCB Input to Los Angeles Harbor. Final Report. Prepared by R. Eganhouse, R. Gossett, and GP. Hershelman (SCCWRP).

Engineering-Science. 1985. Draft EIR/EIS for the Proposed Pacific Texas Pipeline Project.

Los Angeles Harbor Department (LAHD). 1988. Wharf and Backland Improvements at Berths 212 to 215 of Los Angeles Harbor. Draft Environmental Report.

Los Angeles Harbor Department (LAHD). 1993a. Draft Environmental Impact Report Pier 300 Dry Bulk Terminal. Prepared by Los Angeles Harbor Department, Environmental Management Division, with assistance from SAIC. January.

Los Angeles Harbor Department (LAHD). 1993b. Draft Environmental Impact Report for Mobil Oil Corporation, West Coast Pipe Lines, Terminal Island Facility Lease Renewal, Berths 237-240. Assisted by Harding Lawson Associates. April.

Los Angeles Harbor Department (LAHD) and U.S. Bureau of Land Management (BLM). 1985. Final Programmatic Environmental Impact Report/Environmental Impact Statement for Landfill Development and Channel Improvements. Vol. I-Master Plan. State Clearinghouse No. 82120209/82120210. 345 pp.

McAnally, W.H. 1975. Los Angeles and Long Beach Harbors Model Study, Report 5, Tidal Verification and Base Circulation Tests. U.S. Army Waterways Experiment Station.

McLaren/Hart. 1992. Stormwater Pollution Prevention Plan for Hugo Neu-Proler Company, Terminal Island, California. Prepared for Hugo Neu-Proler Company.

Port of Los Angeles (POLA). 1987. Historical Summary of Water Quality Data for Los Angeles Harbor Monitoring Stations form 1976 through 1986.

Port of Los Angeles (POLA). 1988. Biological Baseline and Ecological Evaluation of Existing Habitats in Los Angeles Harbor and Adjacent Waters. Prepared by MEC Analytical Systems, Inc.

Port of Los Angeles (POLA). 1991. Environmental Assessment for Hugo Neu-Proler Company Lease Extension. Report prepared by Environmental Audit, Inc.

Smith, E.R. 1989. Los Angeles and Long Beach Harbors Model Enhancement Program: Current, Tide and Wind Data Summary for 1983. U.S. Army Waterways Experiment Station.

Soule, D.F. and M. Oguri. 1976. Marine Studies of San Pedro Bay, California. Part 11. Potential effects of dredging on the biota of Outer Los Angeles Harbor. Toxicity, bioassay, and recolonization studies. Allan Hancock Foundation and Office of Sea Grant Programs. Univ. Southern California. 153 pp.

Tekmarine. 1987. Water Quality Data Collection Program, San Pedro Bay, California. Draft Report. Prepared for the U.S. Army Corps of Engineers.

- U.S. Army Corps of Engineers (USACOE). 1984a. Appendices for Los Angeles-Long Beach Harbors Channel Improvements and Landfill Development, Vol. I.
- U.S. Army Corps of Engineers (USACOE). 1984b. Environmental Impact Statement/Environmental Impact Report for Channel Improvements. Los Angeles-Long Beach Harbors, California.
- U.S. Army Corps of Engineers (USACOE) and Los Angeles Harbor Department (LAHD). 1980. Los Angeles Harbor Deepening Project. Final EIR/EIS.
- U.S. Army Corps of Engineers (USACOE) and Los Angeles Harbor Department (LAHD). 1992. Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California. Final EIS/EIR.

BIOTA AND HABITATS

Anderson, D.W., J.R. Jehl, Jr., R.W. Risebrough, L.A. Woods, Jr., L.R. Deweese, and W.G. Edgecomb. 1975. Brown pelicans: Improved reproduction off the Southern California coast. Science 190: 806-808.

Atwood, J.L. and P.R. Kelly. 1984. Fish dropped on breeding colonies as indicators of Least Tern food habits. Wilson Bull. 96:34-47.

Cimberg, R.L. and C. Dock. 1987. Least tern foraging studies at fixed stations in Los Angeles, 1986-1987. Appendix A.1.3 in POLA, 1988.

Engineering-Science. 1985. Draft EIR/EIS for the Proposed Pacific Texas Pipeline Project.

Gress, F. and D.W. Anderson. 1983. A Recovery Plan for the California Brown Pelican. U.S. Fish and Wildlife Service. Portland, Oregon.

Gress, F., D.B. Lewis, W.T. Everette, and D.W. Anderson. 1990. Reproductive Success and Status of Brown Pelicans in the Southern California Bight, 1988-1989. State of California Resources Agency, Department of Fish and Game, Wildlife Management Division.

Harbor Environmental Projects (HEP). 1976. Environmental Investigations and Analysis for Los Angeles-Long Beach Harbors, Los Angeles, California, Final Report to the U.S. Army Corps of Engineers, Los Angeles District, Allan Hancock Foundation.

Horn, M.H. and L.G. Allen. 1981. A Review and Synthesis of Ichthyofaunal Studies in the Vicinity of Los Angeles and Long Beach Harbors, Los Angeles County, California. A report prepared for the U.S. Fish and Wildlife Service, Laguna Niguel. 96 pp.

Keane, K. 1986. Breeding Biology of the California Least Tern at Terminal Island. Report to the Los Angeles Harbor Department.

Keane, K. 1987. Breeding Biology of the California Least Tern at Terminal Island. Report to the Los Angeles Harbor Department.

Los Angeles Harbor Department (LAHD). 1980. Final Supplemental Environmental Impact Statement/Report for the Los Angeles Harbor Deepening Project. Prepared Jointly by the U.S. Army Corps of Engineers and the Los Angeles Harbor Department.

Los Angeles Harbor Department (LAHD). 1993a. Draft Environmental Impact Report Pier 300 Dry Bulk Terminal. Prepared by Los Angeles Harbor Department, Environmental Management Division, with assistance from SAIC. January.

Los Angeles Harbor Department (LAHD). 1993b. Draft Environmental Impact Report for Mobil Oil Corporation, West Coast Pipe Lines, Terminal Island Facility Lease Renewal, Berths 237-240. Assisted by Harding Lawson Associates. April.

Los Angeles Harbor Department (LAHD) and U.S. Bureau of Land Management (BLM). 1985. Final Programmatic Environmental Impact Report/Environmental Impact Statement for Landfill Development and Channel Improvements. Vol. I-Master Plan. State Clearinghouse No. 82120209/82120210. 345 pp.

Los Angeles Harbor Department (LAHD) and Long Beach Harbor Department (LBHD). 1984. Draft Programmatic Environmental Impact Report/Statement. Los Angeles/Long Beach Harbors Landfill Development and The U.S. Army Corps of Engineers, Los Angeles District.

Los Angeles Harbor Department (LAHD) and Long Beach Harbor Department (LBHD). 1990. Draft Environmental Impact Report/Statement: Phase I 2020 Plan and Feasibility Study (Channel Improvements and Landfill Development). Los Angeles/Long Beach Harbor Departments and the U.S. Army Corps of Engineers, Los Angeles District. Permit Application Numbers 88-111 and 88-195, State Clearinghouse No. 87101408.

Massey, B.W. 1974. Breeding biology of the California Least Tern. Proc. Linn. Soc. New York 72:1-24.

Massey, B.W. and J.L. Atwood. 1981. Application of Ecological Information to Habitat Management for the California Least Tern. Progress Report No. 3. October 1981. U.S. Fish and Wildlife Service.

Massey, B.W. and J.L. Atwood. 1984. Application of Ecological Information to Habitat Management for the California Least Tern. Progress Report No. 6. October 1984. U.S. Fish and Wildlife Service.

Massey, B.W. and J.L. Atwood. 1985. Application of Ecological Information to Habitat Management for the California Least Tern. Progress Report No. 7. October 1985. U.S. Fish and Wildlife Service.

Port of Long Beach (POLB). 1984. Outer Long Beach Harbor-Queensway Bay Biological Baseline Survey. Prepared for Port of Long Beach, Division of Port Planning. Prepared by MBC, Applied Environmental Sciences.

Port of Los Angeles (POLA). 1988. Biological Baseline and Ecological Evaluation of Existing Habitats in Los Angeles Harbor and Adjacent Waters. Prepared by MEC Analytical Systems, Inc.

Reish, D.J. 1959. An ecological study of pollution in Los Angeles-Long Beach Harbors, California. Allan Hancock Foundation Public. Occasional Paper 22:1-119.

Schreiber, R.W. 1980. The Brown Pelican: An Endangered Species? Bioscience 30:742-747.

U.S. Army Corps of Engineers (USACOE). 1984b. Environmental Impact Statement/Environmental Impact Report for Channel Improvements. Los Angeles-Long Beach Harbors, California.

U.S. Army Corps of Engineers (USACOE) and Los Angeles Harbor Department (LAHD). 1992. Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California. Final EIS/EIR.

TRANSPORTATION AND CIRCULATION

Institute of Transportation Engineers. 1991. Trip Generation Manual. 5th Edition, 1991

Los Angeles Department of Transportation. (undated). General Plan Streets and Highways Designation Map.

Los Angeles Department of Transportation. 1991. Traffic Impact Analysis Guidelines. July, 1991.

Los Angeles Department of Transportation. (undated). Traffic Volume Files.

Los Angeles Harbor Department. 1992. B Street Realignment Traffic Impact Analysis Draft Report. December 1992.

Los Angeles Harbor Department. 1992. Draft EIR Pier 300 Container Terminal. December, 1992.

Los Angeles Harbor Department. 1992. Terminal Island Intermodal Container Transfer Facility Draft EIR. May, 1992.

Los Angeles Harbor Department. 1993c. Traffic Analysis for the Banning's Landing Waterfront Access and Office Development Project. Draft Report, October 1993.

Los Angeles Harbor Department. 1993d. Wickland Marine Terminal Lease Renewal Draft EIR. 1993.

Port of Long Beach. 1990. Berths 95-97 Marine Terminal Development Draft EIR. April 1990.

Port of Long Beach. 1987. Pier J Landfill Project and Anaheim Bay Mitigation - Final Subsequent EIR. November 1987.

State of California Department of Transportation (Caltrans). 1993. 1992 Traffic Volumes on California State Highways. July 1993.

NOISE

Alameda Corridor Transportation Authority (ACTA). 1992. Draft Environmental Impact Report for the Alameda Corridor. Prepared by Myra L. Frank & Associates, Inc.

J.J. Van Houten and Associates, Inc. (Houten). 1993. Ship Steel Loading Activity Noise Study, November 3, 1993.

Los Angeles Harbor Department. 1993. Environmental Impact Report- Pier 300 Dry Bulk Terminal.

Port of Long Beach and Port of Los Angeles. 1988 Long Beach International Coal Terminal Draft Environmental Impact Report.

Port of Los Angeles, Port of Long Beach, et al. 1992. Agreement between Port of Los Angeles, Port of Long Beach, City of Long Beach, and Union Pacific Railroad Company concerning railroad improvements within the City of Long Beach area, November, 1992.

U. S. Corps of Engineers and Los Angeles Harbor Department. 1992. Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California. Final EIS/EIR.

PUBLIC HEALTH AND SAFETY

CAPCOA, 1992. Air Toxics "Hot Spots" Program Risk Assessment Guidelines. Air Toxics Unit. Office of Environmental Health Hazard Assessment. Sacramento, CA..

Environmental Audit, Inc. 1991. Environmental Assessment for Hugo Neu-Proler Company Lease Extension.

Los Angeles County Fire Department, Hazardous Materials Division (LACoFD). 1991. Risk Management and Prevention Program Guidelines. October.

McLaren/Hart. 1994. Baseline Risk Assessment for the Hugo Neu-Proler Facility.

Mittelhauser Corp. 1994a. Feasibility Study. Prepared for Hugo Neu-Proler Company.

SCAQMD. 1989. Report of Micrometerological and Ambient Air Quality Monitoring in the Vicinity of Hugo Neu-Proler, Incorporated. November, 1989.

PUBLIC SERVICES

Los Angeles Department of Water and Power (LADWP). 1993. Request for Water Information for an Environmental Impact Report for Hugo Neu-Proler Company -- Lease Renewal. Letter to Los Angeles Harbor Department dated August 27, 1993.

ENERGY

Los Angeles Harbor Department. 1993a. Environmental Impact Report- Pier 300 Dry Bulk Terminal.

Los Angeles Harbor Department. 1993b. Wickland Marine Terminal Lease Renewal Draft EIR. 1993.

U.S. Army Corps of Engineers (USACOE) and Los Angeles Harbor Department (LAHD). 1992. Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California. Final EIS/EIR.

UTILITIES AND WASTE MANAGEMENT

Los Angeles County Department of Public Works (L.A.Co.P.W.). 1994. Solid Waste Disposal Capacity in Los Angeles County, Letter to County Board of Supervisors dated May 12, 1994.

U.S. Army Corps of Engineers (USACOE) and Los Angeles Harbor Department (LAHD). 1992. Deep Draft Navigation Improvements, Los Angeles and Long Beach Harbors, San Pedro Bay, California. Final EIS/EIR.

RECREATION

LOG Newspapers, Inc. 1992. Where the Slips Are 1992.

VISUAL RESOURCES

Los Angeles Harbor Department and U. S. Coast Guard Eleventh District. 1994. Supplemental EIR/EIS/4(f) Evaluation for the Henry Ford (Badger Avenue) Bridge Replacement Project. July 1994.

POPULATION AND HOUSING

City of Los Angeles. Department of City Planning. Population Estimate and Housing Inventory for the City of Los Angeles as of October 1, 1992.

ALTERNATIVES

Los Angeles Harbor Department. 1990. Shell Oil Company Mormon Island Lease Renewal, Environmental Improvements, and Transfer Facility Modifications. Draft EIR.

.

SECTION 7 PERSONS AND AGENCIES CONSULTED

Name	Affiliation
John Adams	Boat Maintenance Shop, Newmark's Marina
Glen Ard	Applied P & C Laboratory
Chuck Arquett	Newmark's Marina
P. Arzadon	City of Los Angeles Sanitation Bureau
Lowell Asbaugh	California Air Resources Board
JoAnn Bambridge	Property Management, Los Angeles Harbor Department
Shirly Birosik	Regional Water Quality Control Board
Jumi Butler	Yusen Terminals
R. Chan	Los Angeles County Sanitation District
Aspet Chater	Environmental Manager, Hugo Neu-Proler Company
Richard Davidson	Engineering, Los Angeles Harbor Department
Dennis Delaney	South Coast Air Quality Management District
Bruce Donaldson	Boat Owner, "Cherokee", Newmark's Marina
Maria Durand	California Department of Toxic Substance Control
Robert Freeman	Air Toxics Ltd
Tony Gioiello	Engineering, Los Angeles Harbor Department
Chris Hendricks	California Department of Toxic Substance Control
Yi-Hui Huang	South Coast Air Quality Management District
David Jones	Captain, Los Angeles Fire Department Fire Station No. 49
Kathy Keane	P&D Technologies
Neil Kerney	Hugo Neu-Proler Company
Bernie Kolk	Applied P & C Laboratory

Name	Affiliation
Humphrey Laurent	Envilab
Dr. Chung S. Liu	South Coast Air Quality Management District
Roland Lorenzo	Engineering, Los Angeles Harbor Department
Rich McCorkle	Boat owner, Yacht Haven Marina
Dick McKenna	Marine Exchange
Alexis Meredith	Air Toxics Ltd
Dennis Mikel	Aerovironment
John Prudent	General Manager, Hugo Neu-Proler Company
Charles Real	Director, Seismic Hazards Mapping Act Program California Division of Mines & Geology, Sacramento
Earl Roberts	Roberts Environmental Services
Kathie Shaw	South Coast Air Quality Management District
Bob Stearns	Calscience Environmental Laboratories
Solomon Teferra	South Coast Air Quality Management District
Tom Thorne	ECDC Environmental
Carlos Urrunaga	Regional Water Quality Control Board
John J. van Houten	John J. van Houten & Associates, Acoustical Consultant
Mort Weinberg	Matson Terminals

SECTION 8.0 PREPARERS OF EIR

EIR PROJECT MANAGERS

Environmental Scientist, Los Angeles Harbor Department Dennis Hagner

B.A., Biology, California State University, Fullerton, 1979 M.A., Biology, California State University, Fullerton, 1985

Years of Experience: 8

Consulting Scientist, Foster Wheeler Environmental Corporation Dwight R. Mudry, Ph.D.

B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

Years of Experience: 22

TECHNICAL ADVISORS

Director of Environmental Management, Los Angeles Harbor Donald W. Rice

Department

B.A., Biology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1972

Years of Experience: 22

Manager of CEQA Projects, Los Angeles Harbor Department Paul Johansen

B.S., Marine Biology, California State University, Long Beach,

1980

Years of Experience: 15

GEOLOGY

Environmental Scientist, LAHD T.L. Garrett

B.A., Aquatic Biology, University of California, Santa Barbara,

1978

Years of Experience: 5

Project Geologist, MAA Engineering Consultants Gareth Mills

B.S., Geology, University of Aston, Birmingham, Great Britain,

1986

M.S., Geology, California State University, Northridge, 1990

Years of Experience: 4

SOIL AND GROUNDWATER

Consulting Scientist, Foster Wheeler Environmental Corporation Dwight R. Mudry, Ph.D.

B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

METEOROLOGY AND AIR QUALITY

Barb Dykman Environmental Scientist, Los Angeles Harbor Department

B.S., Ecology, University of Arizona, 1983

Years of Experience: 4

Michelle Long Senior Environmental Engineer,

Foster Wheeler Environmental Corporation

B.T., Environmental Engineering, University of Dayton, Dayton,

Ohio, 1983

Years of Experience: 10

HYDROLOGY, WATER QUALITY AND OCEANOGRAPHY

Larry Smith Environmental Scientist, LAHD

B.S., Biology, Ohio State University, 1977

M.S., Biology, California State University, Long Beach, 1986

Years of Experience: 9

S. Cynthia Fuller, Ph.D. Scientist, MEC Analytical Systems, Inc.

B.A., Biology, University of California, Santa Cruz, 1979

Ph.D., Zoology, Rutgers University, 1986

Years of Experience: 8

Dwight R. Mudry, Ph.D. Consulting Scientist, Foster Wheeler Environmental Corporation

B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

Years of Experience: 22

BIOTA AND HABITATS

T.L. Garrett Environmental Scientist, LAHD

B.A., Aquatic Biology, University of California, Santa Barbara,

1978

Years of Experience: 5

S. Cynthia Fuller, Ph.D. Scien

Scientist, MEC Analytical Systems, Inc.

B.A., Biology, University of California, Santa Cruz, 1979

Ph.D., Zoology, Rutgers University, 1986

TRANSPORTATION AND CIRCULATION

Valentine P. Amezquita Environmental Scientist, LAHD

B.S., Biological Sciences, University of Southern California, 1984

Years of Experience: 3

Richard Garland P.E. Traffic Engineer, Stevens-Garland Associates, Inc.

B.S., Civil Engineering, Vanderbilt University, 1976

M.S., Civil Engineering, University of California, Berkeley, 1979

Years of Experience: 15

NOISE

Valentine P. Amezquita Environmental Scientist, LAHD

B.S., Biological Sciences, University of Southern California, 1984

Years of Experience: 3

Thomas S. Adams Principal Noise Analyst, Foster Wheeler Environmental Corporation

B.S., Physics, Valdosta State College, 1971 M.S., Physics, Valdosta State College, 1973

Institute of Noise Control Engineering (INCE), Board Certified

Years of Experience: 21

PUBLIC HEALTH AND SAFETY

Michelle Long

Senior Environmental Engineer,

Foster Wheeler Environmental Corporation

B.T., Environmental Engineering, University of Dayton, Dayton,

Ohio, 1983

Years of Experience: 10

Dwight R. Mudry, Ph.D.

Consulting Scientist, Foster Wheeler Environmental Corporation

B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

PUBLIC SERVICES, ENERGY, UTILITIES AND WASTE MANAGEMENT, RECREATION

Ronald Kepford Associate Resource Planner, Foster Wheeler Environmental

Corporation

B.S., Journalism, University of Texas at Austin, 1979

M.S., Community & Regional Planning, University of Texas at

Austin, 1990 Years of Experience: 4

Dwight R. Mudry, Ph.D.

Consulting Scientist, Foster Wheeler Environmental Corporation B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

Years of Experience: 22

VISUAL RESOURCES

Dwight R. Mudry, Ph.D. Cor

Consulting Scientist, Foster Wheeler Environmental Corporation B.S., Zoology, California State University, Long Beach, 1967 M.A., Biology, California State University, Long Beach, 1969

Ph.D., Biology, University of Calgary, Alberta, 1972

Years of Experience: 22

MITIGATION MONITORING

Delaine L. Winkler

Principal, Winkler Environmental Consultants

B.S., Biology, University of Southern California, 1975 M.S., Biology, University of Southern California, 1979

Appendix ANotice of Preparation

٠ •

OFFICE OF THE CITY CLERK ROOM 395, CITY HALL

LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

NOTICE OF PREPARATION

(Article VI, Section 2 — City CEQA Guidelines)

0:	RESPONSIBLE OR TRUSTEE AGE	NCY	FROM:		larbor Department	
	ADDDESS (SA	mod City 7m)			ESS (Street, City, Zip)	
	ADDRESS (Str	төет, Спу, Дир)		ŧ.	•	
					os Verdes Street	
				P.O. Box 151	A 00722 04E1	
				San Pedro, Ca	A 90/33-0151	
>	SUBJECT: Notice of Pr	reparation of	a Draft Environm	ental Impact Rep	ort	
	CT TITLE Neu-Proier Company - Lease	Renewal			CASE 900607-599	
ROJE	CT APPLICANT, IF					
lugo	Neu-Proler Company	sinal laland	CA 90731	Prudent, John	(310)831-028	11
א נט	lew Dock Street Term	ninal Island	CA 30/31	Fidderk, John	(4,7,5,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	
	The project description, locati A copy of the Initial Study A copy of the Initial Study	is attached.		cts are contained in t	he attached materials.	
	🛛 A copy of the Initial Study	y is attached. y is not attached ed by state law,	d.			later
	A copy of the Initial Study A copy of the Initial Study Due to the time limits mandat than 45 days after receipt of the study of the Initial Study	y is attached. y is not attached ed by state law, this notice.	d. your response must	be sent at the earlies Director of E	t possible date but not l	ment
	A copy of the Initial Study A copy of the Initial Stud Due to the time limits mandat	y is attached. y is not attached ed by state law, this notice.	d. your response must	be sent at the earlies Director of E	t possible date but not l	nent
	A copy of the Initial Study A copy of the Initial Study Due to the time limits mandat than 45 days after receipt of the Please send your response to at the address of the lead City Note: If the Responsible or Clearinghouse in the	y is attached. y is not attached ed by state law, this notice. Donald W. Rik y Agency as sho trustee agency i Office of Planni number will be i regarding the pre	d. your response must be bown above. We will not a state agency, a cong and Research, 14 sound by the Clearing	Director of E eed the name of a co opy of this form must though and should be	t possible date but not Environmental Manager ntact person in your ag	ment ency.
	A copy of the Initial Study A copy of the Initial Study Due to the time limits mandat than 45 days after receipt of the lease send your response to at the address of the lead City Note: If the Responsible or the lead City A state identification that all correspondences in the correspondences.	y is not attached. Donald W. Rickly Agency as shown as shown as shown attracted agency if the property is number will be it regarding the property.	d. your response must be bown above. We will not a state agency, a cong and Research, 14 sound by the Clearing	Director of E eed the name of a co opy of this form must though and should be	et possible date but not in invironmental Manager intact person in your agree be sent to the State cramento, California 95 in thereafter referenced	ment ency.

		••				

!

CITY OF LOS ANGELES

OFFICE OF THE CITY CLERK ROOM 395, CITY HALL

LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY AND CHECKLIST

(Article IV — City CEOA Guidelines)

		(Article IV — City CEQA Guider		
LEAD CITY AGENCY Los Angeles Harbor Department		COUNCIL DIS	STRICT	7/13/93
PROJECT TITLE/NO. Hugo Neu-Proler Company - Lease Renewal			CASE NO. 900607-599	
PREVIOUS ACTIONS CASE NO. DOES have significant changes fro DOES NOT have significant change				ions.
	DOES	NOT have significant changes	3 HOM Provided de	
PROJECT DESCRIPTION: See Attachment A				
PROJECT LOCATION Berths 210-211				
PLANNING DISTRICT			STATUS: PREUM PROPO ADOPT	SED date
EXISTING ZONING		MAX. DENSITY ZONING	PROJECT DE	NSITY
PLANNED LAND USE & ZONE		MAX. DENSITY ZONING	DOES CO	ONFORM TO PLAN OT CONFORM TO PLAN
EXISTING ZONING		MAX. DENSITY ZONING	□ NO PLAN	
		eted by Lead City Agency		
On the basis of the atta	ched initial st	tudy checklist and evalua	tion:	
NEGATIVE DECLARATION	☐ I find the	e proposed project COULD NO EGATIVE DECLARATION will	T have a significa	nt effect on the environment
CONDITIONAL NEGATIVE DECLARATION I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measurement. A CONDITIONAL described on an attached sheet have been added to the project. A CONDITIONAL NEGATIVE DECLARATION WILL BE PREPARED. (See attached condition(s))			project. A CONDITIONAL	
ENVIRONMENTAL IMPACT REPORT	I find the	e proposed project MAY have ONMENTAL IMPACT REPOR	a significant effect T is required.	on the environment, and an
Donald W. Rice	ald W	die	Director of Envi	ironmental Management
	SIGNATURE			111 tota

NITIAL STUDY CHECKLIST (To be completed by Lead City Agency)			
► BACKGROUND			
ROPONENT NAME	P	HONE	
lugo Neu-Proier Company	(3	110)831-0281	
POPONENT ADDRESS			
01 New Dock Street			
erminal Island,CA 90731			
GENCY REQUIRING CHECKLIST		ATE SUBMITTED	
os Angeles Harbor Department POPOSAL NAME (if applicable)	17/	/13/93	
ease Renewal			
ENVIRONMENTAL IMPACTS (explanations of all "yes" and "maybe" answers are required to be attached on separate sheets.)			
1. EARTH. Will the proposal result in:	YES	MAYBE	NO
a. Unstable earth conditions or in changes in geologic substructures?			<u> </u>
b. Disruptions, displacements, compaction or overcovering of the soil?		<u> </u>	
c. Change in topography or ground surface relief features?			X
d. The destruction, covering or modification of any unique geologic or			v
physical features?			<u>X</u>
e. Any increase in wind or water erosion of soils, either on or off the		•	X
site?			<u> </u>
siltation, deposition or erosion which may modify the channel of a river			
or stream or the bed of the ocean of any bay, inlet or lake?		X	
g. Exposure of people or property to geologic hazards such as			
earthquakes, landslides, mudslides, ground failure, or similar hazards?		<u> </u>	
2. AIR. Will the proposal result in:			
a. Air emissions or deterioration of ambient air quality?	<u> </u>		
b. The creation of objectionable odors?		<u>x</u>	
c. Alteration of air movement, moisture or temperature, or any change in			•
climate, either locally or regionally?			<u> </u>
d. Expose the project residents to severe air pollution conditions?			
3. WATER. Will the proposal result in:			
a. Changes in currents, or the course or direction of water movements,			X
in either marine or fresh waters?			<u> </u>
b. Changes in absorption rates, drainage patterns, or the rate and	Y		
amounts of surface water runoff?		X -	
d. Change in the amount of surface water in any water body?	***************************************		X
e. Discharge into surface waters, or in any alteration of surface water			
quality, including but not limited to temperature, dissolved oxygen or			
turbidity?		<u> </u>	
f. Alteration of the direction or rate of flow of ground waters?		<u> </u>	
g. Change in the quantity of ground waters, either through direct ad-			
ditions or withdrawals, or through interception of an aquifer by cuts or		v	
excavations?		<u> </u>	
h. Reduction in the amount of water otherwise available for public water	•	x	
supplies?			
i. Exposure of people or property to water related hazards such a		X	
flooding or tidal waves?			
surface thermal springs?	<u></u>		<u>x</u>
4. PLANT LIFE. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants			
(including trees, shrubs, grass, crops and aquatic plants)?		<u> </u>	
b. Reduction of the numbers of any unique, rare or endangered species			
of plants?			<u> </u>
c. Introduction of new species of plants into an area, or is a barrier to			
the normal replenishment of existing species?			<u>X</u>
d. Reduction in acreage of any agricultural crop?			X

Form Gen. 15				NO
5.	ANIMAL LIFE. Will the proposal result in:	YES	MAYBE	NO
	a. Change in the diversity of species, or numbers of any species of			
	animals (birds, land animals including reptiles, fish and shellfish,			
	benthic organisms or insects)?		<u> </u>	
	b. Reduction of the numbers of any unique, rare or endangered			
				<u> </u>
	species of animals?			
	c. Introduction of new species of animals into an area, or result in a			X
	barrier to the migration or movement of animals?		<u> </u>	
	d. Deterioration to existing fish or wildlife habitat?			
6.	NOISE. Will the proposal result in:		•	
	a. Significant increases in existing noise levels?		$\frac{x}{x}$	
	b. Exposure of people to severe noise levels?		<u> </u>	
-				
7.	LIGHT AND GLARE. Will the proposal	X		
	a. Produce new light or glare from street lights or other sources?			
	b. Reduce access to sunlight of adjacent properties due to shade and			X
	shadow?			
8	LAND USE. Will the proposal result in an alteration of			X
_	the present or planned land use of an area?			
٥	NATURAL RESOURCES. Will the proposal result in:			v
•	a. Increase in the rate of use of any natural resources?			<u>X</u>
	b. Depletion of any non-renewable natural resource?			X
	D. Depletion of any norregiowable managed involve?			
10.	RISK OF UPSET. Will the proposal involve?			
	a. A risk of an explosion or the release of hazardous substances (in-			
	cluding, but not limited to, oil, pesticides, chemicals or radiation) in the	¥		
	event of an accident or unset conditions?			
	b. Possible interference with an emergency response plan or an emer-		x	
	gency evacuation plan?		. <u> </u>	
44	POPULATION: Will the proposal result in:			
11	POPULATION: Will the proposal result in.			
	a. The relocation of any persons because of the effects upon housing,			<u> </u>
	commercial or industrial facilities?			,
	b. Significantly change in the distribution, density or growth rate of the			X
	human population of an area?			
12	HOUSING Will the proposal:			¥
12	a Affect existing housing or create a demand for additional nousing?			
	b. Have a significant impact on the available rental housing in the			
	community?			<u> </u>
	community?			
	c. Result in significant demolition, relocation or remodeling of		X	
	residential, commercial, or industrial buildings or other facilities?			
13	PICHT OF WAY. Will the proposal result in:			X
	a Reduced front/side lot area?			Ÿ
	h Daduce access?			
	c. Reduced off-street parking?			<u>_</u>
	d. Creation of abrupt grade differential between public and private			
	d. Creation of abrupt grade differential between public and product			<u> </u>
	property?			
14	I. Transportation/Circulation. Will the proposal result in:		x	
• •	- Conomics of cignificant additional vehicular reported in the contract of cignificant additional vehicular reported in the cignificant reported in the cignifi			
	b Significant effects on existing parking facilities, or demand for new		v	
			_ <u>X</u>	
	c. Impact upon existing transportation systems?		_ <u> </u>	
	C. Impact upon existing transportation by stone or movement of people			
	d. Alterations to present patters of circulation or movement of people		<u>X</u>	
	and/or goods?		X	
	Augustiana ta watarbarna rail Af Sir Ifanic?	<u> </u>		
	4 Cignificant increase in traffic hazards to motor vehicles, Dicyclists of		x	
	5. PUBLIC SERVICES. Will the proposal have a significant			
1:	effect upon, or result in a need for new or altered governmental			
	effect upon, or result in a fleed for fleet or altered governments.			
	services in any of the following areas:			<u> X</u>
	a Eira protection?			X
	h Dalica protection?			<u> </u>
	Dahada	***************************************		<u> </u>
				$\frac{x}{x}$
	e. Maintenance of public facilities, including roads?		_	
	e. Maintenance of public facilities, including roads:			<u> X</u>
	Cher governmental services?			

16. ENERGY. Will the proposal result in:	YES	MAIDE	m
a. Use of exceptional amounts of fuel or energy?			<u> </u>
b. Significant increase in demand upon existing sources of energy, or			•
require the development of new sources of energy?			<u> </u>
17. UTILITIES. Will the proposal result in a need for new			
systems or atterations to the following utilities:			
a. Power or natural gas?		<u> </u>	
b. Communications systems?		<u> </u>	
c. Water?		<u> </u>	
d. Sewer or septic tanks?		<u> </u>	
e. Storm water drainage?	<u> </u>		
f. Solid waste and disposal?		<u> </u>	
18. HUMAN HEALTH. Will the proposal result in:			
a. Creation of any health hazard or potential health hazard (excluding			
mental health?)		<u> </u>	
b. Expose of people to potential health hazards?		X	
19. AESTHETICS. Will the proposed project result in:			
a. The obstruction of any scenic vista or view open to the public?	-		<u> </u>
b. The creation of an aesthetically offensive site open to public view?		X	
c. The destruction of a stand of trees, a rock outcopping or other locally			
recognized desirable aesthetic natural feature?	200 695453		<u> </u>
d. Any negative aesthetic effect?		X	
20. RECREATION. Will the proposal result in an impact upon			
the quality or quantity of existing recreational opportunities?		<u> </u>	
21. CULTURAL RESOURCES:			
a. Will the proposal result in the alteration of or the destruction of a			
prehistoric or historic archaeological site?	•		<u> </u>
b. Will the proposal result in adverse physical or aesthetic effects to a			
prehistoric or historic building, structure, or object?			<u> </u>
c. Does the proposal have the potential to cause a physical change			
which would affect unique ethnic cultural values?			<u> </u>
d. Will the proposal restrict existing religious or sacred uses within the			
potential impact area?			<u> </u>
22. MANDATORY FINDINGS OF SIGNIFICANCE.			
a. Does the project have the potential to degrade the quality of the en-			
vironment, substantially reduce the habitat of a fish or wildlife species,			
cause a fish or wildlife population to drop below self sustaining levels,			
threaten to eliminate a plant or animal community, reduce the number			
or restrict the range of a rare or endangered plant or animal or elimi-			
nate important examples of the major periods of California history or			
prehistory?		<u>X</u>	
b. Does the project have the potential to achieve short-term, to the dis-			
advantage of long-term, environmental goals?		X	
c. Does the project have impacts which are individually limited, but			
cumulatively considerable?*		X	
d. Does the project have environmental effects which cause substantial			
adverse effects on human beings, either directly or indirectly?		X	
* "Cumulatively considerable" means that the incremental effects of an individual project are			
considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.			
DISCUSSION OF ENVIRONMENTAL EVALUATION			

See Attachment B

PREPARED BY	TITLE	PHONE	DATE
	Environmental Scientist	(310) 519-3675	7/13/93
Dennis Hagner Lennis Hagner		<u> </u>	

PROJECT DESCRIPTION

Hugo Neu-Proler Company leases 26 acres of land and water from the City of Los Angeles on Terminal Island for purposes of a scrap metal receiving, processing, and export operation. The current lease to Hugo Neu-Proler for the property at Berths 210-211 expires on August 31, 1994. The project under consideration is a 27-year lease renewal to Hugo Neu-Proler, with continued operation of an improved scrap metal facility at the location.

Hugo Neu-Proler receives ferrous and non-ferrous metals, including autos, turnings, household appliances, plate and structural steel, motor blocks, and other items by truck from throughout the Southern California region, as far north as Fresno, and as far east as Las Vegas and western Arizona. Once received, the ferrous and non-ferrous materials are separated for storage and processing to await shipment to the Far East, Pacific Rim, and Latin America. Some of the metals are processed (shredded or sheared) prior to receipt, while others are large pieces of metals, appliances, crushed vehicle bodies, engine blocks, and similar items are process onsite. Onsite processing includes crushing, shredding, shearing, non-ferrous recovery, cutting, sorting, and storage. The scrap is loaded onto ship via a bulkloading conveyor system for export.

Over the past three years, the yearly ship calls have been variable (27 calls in 1990, 39 calls in 1991, and 27 calls in 1992). The shipping schedule is irregular and driven primarily by market conditions; thus frequency of ship calls and interval between calls for any year can not be predicted. The facility has typically handled between 733,000,000 and 888,000,000 tons of metals yearly over the last three years. This figure is expected to grow over the span of the 27-year lease, with general population growth of the region, the reintroduction of rail service, and other improvements to the facility.

In addition to the renewal of the lease and continuation of current operations, Hugo Neu-Proler is remediating the soil and groundwater contamination at the site, upgrading or replacing current facilities and equipment, and proposes to add new facilities and equipment to the operation. Hugo Neu-Proler will remediate soil and groundwater contamination pursuant to a Remedial Action Plan which will be approved by the Regional Water Quality Control Board -- Los Angeles Region, the California Department of Toxic Substances Control Division, and the Los Angeles City Harbor Department.

The new facilities and equipment includes:

- 1. Rail trackage and associated structures to allow reintroduction of rail service to the facility.
- 2. Landscaped 4,000-square-foot single story office building and parking area at the south end of the facility.
- 3. Fully cover the operational area with asphalt or concrete.
- 4. Additional lighting in storage and loading areas.
- 5. Storm water runoff control and treatment system.
- 6. Bailing equipment to package scrap for shipment.
- 7. Noise barriers at strategic locations, as required.
- 8. Perimeter wall around the facility to improve aesthetics of facility.
- 9. Bin walls located around scrap handling area to help control scrap piles.

The upgrades or replacements being contemplated include:

- 1. Upgrade the bulk shiploading structure, used to load scrap into ships, to increase its loading rate.
- 2. Upgrade the screening system, feed system, air separation system, and stacking conveyor of the shredder.
- 3. Water recirculation system and feed system improvements to the non-ferrous metal recovery equipment.
- 4. Improvement to the ferrous and non-ferrous metals storage and handling equipment. 5. Replace the existing diesel fuel storage tank and provide new dispensing equipment.
- 6. Replace the existing underground gasoline storage tanks with new aboveground gasoline storage tank and provide new dispensing equipment.
- 7. Upgrade the feed system for the metal "turnings" crusher.
- 8. Addition of a new scale to the existing scale system to accommodate rail service.
- 9. Conversion of existing office building into a wash room and conference rooms.

The purpose of these improvements to the facility are to: remediate existing soil and groundwater contamination at the site, reduce the opportunity for future occurrences of soil and groundwater contamination, improve the aesthetics of the facility by landscaping and/or other measures, control noise, reduce dust emissions, manage storm water runoff at the facility, and improve the efficiency, capacity, reliability and general environmental compatibility of the operation.

PROJECT LOCATION

The Hugo Neu-Proler facility is located at Berths 210-211 on Terminal Island in Master Plan Area 7 of the Port of Los Angeles. The East Basin of Los Angeles Harboz is semediately to the north of the facility at the confluence of the Consolidated Slip and the Cerritos Channel. The Master Container Terminal is immediately east of the facility; with the Yusan Container Terminal immediately to the seest and New Dock Street immediately south. Figures 1 and 2 present regional and vicinity maps for Hugo Neu-Froler Company facility.

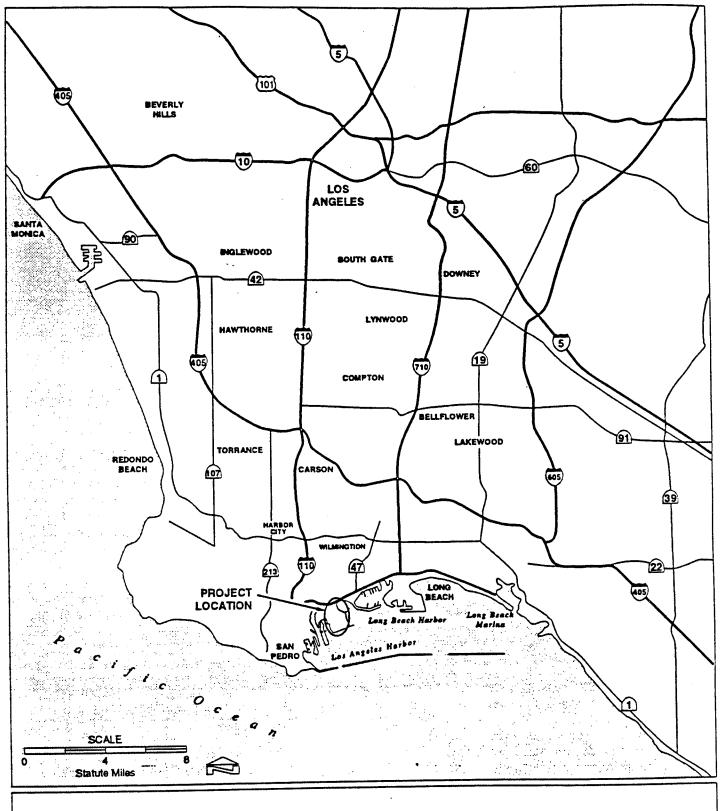
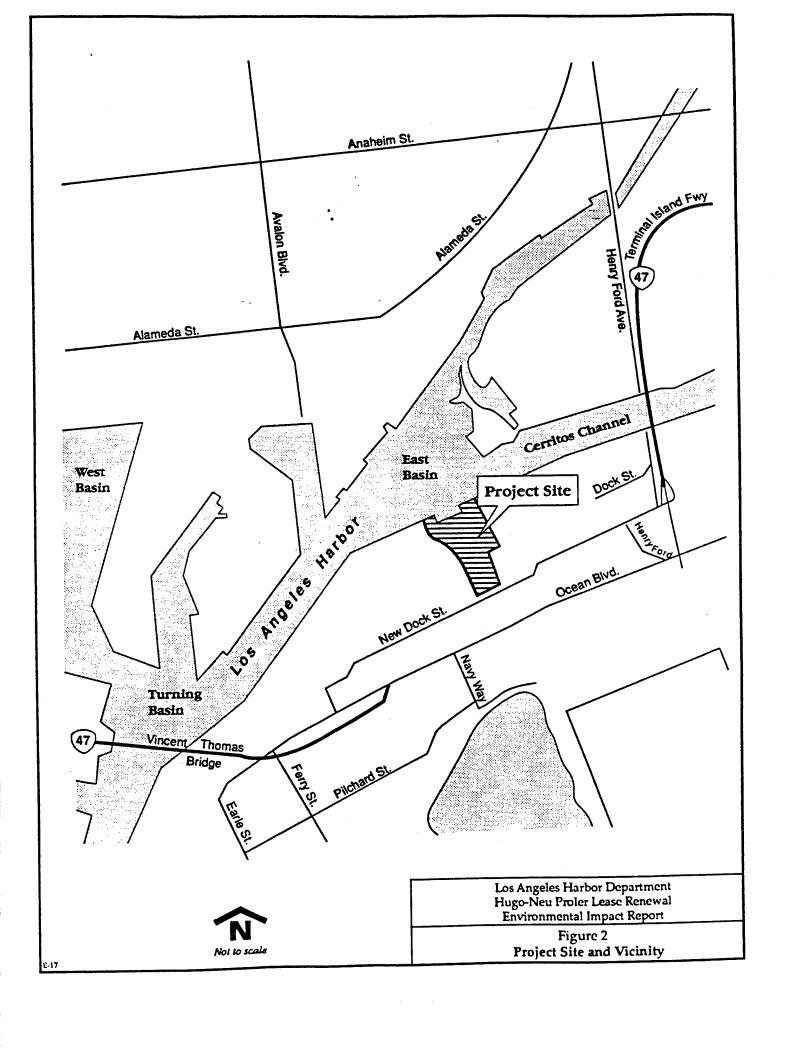


Figure 1
PROJECT LOCATION



٠.

Environmental Issues

An Environmental Impact Report (EIR) will be prepared for the Hugo Neu-Proler Company Lease Renewal. The Los Angeles Harbor Department will be the lead agency under the California Environmental Quality Act (CEQA). The EIR will be prepared in accordance with CEQA requirements. All CEQA mandated sections will be completed in accordance with Los Angeles Harbor Department EIR Standards and Practices and the CEQA Guidelines. The issue areas to be discussed are listed below.

Geology, Soils, and Seismicity. This section will review and summarize available published data on geology, soils, soil contamination, and seismicity related to the project site. Potential impacts of geologic, contamination, and seismic hazards on improvements to, and operation of, the facility will be identified. If necessary, feasible mitigation measures to reduce the potential for any project impacts associated with site conditions, along with an appropriate monitoring program will be discussed.

Air Quality. Land uses and population in the project area that are sensitive to air quality will be identified. Using project emission estimates, an evaluation will be made of the potential short-term and long-term impacts that could result from new construction and facility operation. Project conformity with the 1991 Air Quality Management Plan will be discussed. Additionally, cumulative air quality impacts in the development area will be analyzed. If necessary, mitigation measures to mitigate any identified significant adverse impacts resulting during construction or operation of the proposed project will be recommended along with a monitoring program.

Hydrology and Water Quality. An overview of the existing water quality environment of the site and vicinity will be presented. Available water quality reports and other published data on surface and ground water hydrology, including contamination, and harbor water quality will also be presented. Additional water usage at the site will be estimated. Impact of installation of storm drain system will be discussed. If necessary, mitigation measures and a monitoring program will be presented to mitigate any identified significant impacts.

Biology. The existing biological resources within the proposed project area will be identified. Impacts to the benthic, pelagic, and wharf-piling environments resulting from improvements to, and operation of, the facility will be identified. If necessary, mitigation measures and a monitoring program will be devised to mitigate identified significant impacts.

Noise. Limited onsite ambient noise and existing data and information will be used to develop a baseline noise characterization. Nearby sensitive receptors will be identified. Potential changes in the noise environment after project development will be quantitatively assessed. In addition, conformance requirement of the project with the City of Los Angeles' General Plan Noise Elements noise/land use compatibility guidelines and local and state regulations will be discussed. If necessary, noise impact mitigation measures will be discussed along with recommendations for an appropriate monitoring program.

Light and Glare. This section will examine the existing lighting at the facility. The additional facility lighting will be identified and its impact discussed. If necessary, mitigation measures and a monitoring program will be devised to mitigate identified significant impacts.

7/13/93

Risk of Upset. The potential consequences of an upset involving hazardous materials used in the operation or received with incoming scrap will be discussed in the EIR. The planned railway improvements and other development at the site which may alter emergency access routes into the project area will also be examined. If necessary, feasible mitigation measures to mitigate any identified significant impacts associated with site risk of upset conditions along with an appropriate monitoring program will be included in this section.

Traffic and Circulation. This section will inventory the existing circulation network. Changes in rail traffic patterns will be documented and any vehicular traffic impacts at at-grade crossings will be identified. Diversion options will be reviewed to determine alternative routes and amount and types of traffic diverted. Vessel traffic in the project vicinity will be characterized and analyzed for potential impacts. Increased traffic from increased throughput at the facility will be examined. If necessary mitigation measures will be proposed to mitigate any identified significant impacts associated with the site transportation and circulation, along with an appropriate monitoring program.

Utilities. The existing utilities serving the facility will be identified. The additional demand from the planned additions to the facility will be discussed. If necessary, mitigation measures and a monitoring program will be devised to mitigate identified significant impacts.

Human Health. Air sampling for toxic air emissions, and existing data and information will be used to develop a baseline air emission profile. Nearby sensitive receptors will be identified. Impact from ongoing operation of the facility will be quantitatively assessed. In addition, conformance of the project with local, state, and federal regulations will be discussed. If necessary, mitigation measures will be proposed to mitigate any identified significant impacts associated with toxic air emissions along with an appropriate monitoring program.

Aesthetics. The existing aesthetics of the area will be described. The impact of the ongoing operation of the facility as well as the new construction at the site will be described. If necessary, mitigation measures and a monitoring program will be devised to mitigate identified significant impacts.

Recreation. The recreational opportunities in the vicinity of Hugo Neu-Proler will be assessed. The impact of dust and noise from the operation on those opportunities will be described. If necessary, mitigation measures and a monitoring program will be devised to mitigate identified significant impacts.

Environmental Impacts

1a. EARTH. Will the proposal result in unstable earth conditions or in changes in geologic substructures?

No - Although there may be shallow excavations, building foundations and remediation of the site, and shallow groundwater monitoring wells installed at the site, no project element will affect deep geologic features. Any construction at the site will be carried-out in compliance with building codes and project activities are not expected to result in unstable earth conditions. This item will not be discussed in the EIR.

7/13/93 - 2 -

- 1b. EARTH. Will the proposal result in disruptions, displacements, compaction or overcovering of the soil?
 - Maybe The project may require that contaminated soil at the site be excavated for treatment and/or disposal. Also, construction at the site may require excavation and disruption of the soil for utilities, building foundations, surface paving and other improvements. This item will be discussed in the EIR.
- 1c. EARTH. Will the proposal result in change in topography or ground surface relief features?
 - No The site is generally flat and there will be only minor changes to the topography and ground surface relief features at the site associated with site preparations for the new building and other improvements at the site. This item will not be discussed in the EIR.
- 1d. EARTH. Will the proposal result in the destruction, covering or modification of any unique geologic or physical features?
 - No There are no unique geologic or physical features at the site. This item will not be discussed in the EIR.
- 1e. EARTH. Will the proposal result in any increase in wind or water erosion of soils, either on or off the site?
 - No There are no activities contemplated which could induce erosion at the site. Once improvements have been made and the site is covered with concrete, there will be no potential for erosion at the site. This item will not be discussed in the EIR.
- 1f. EARTH. Will the proposal result in changes in deposition or erosion of beach sands, or changes in situation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean of any bay, inlet or lake?
 - Maybe During the loading of ships, scrap metal has been observed falling into the water at the berth. This could modify the depth of the East Basin at Berths 210-211. This item will be discussed in the EIR.
- 1g. EARTH. Will the proposal result in the exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?
 - Maybe The Los Angels Harbor lies within the Palos Verdes Hills Fault Zone. The San Pedro Bay extension of this fault zone is considered active. Several associated faults within the zone are believed to straddle the project site. There is the potential for a destructive earthquake occurring during the project life. Extreme seismic activity could potentially cause liquefaction of soils, resulting in damage to facilities. This item will be discussed in the EIR.
- 2a. AIR. Will the proposal result in air emissions or deterioration of ambient air quality?
 - Yes In addition to the ongoing emissions from the facility, there will be temporary increases in air emissions during construction activities at the site. Improvements to the

- 3 -

- facility may change emission amounts. Addition of railroad access to the site may increase emissions from the operation of the facility. Also, increased throughput may increased truck, and ship emissions. This item will be discussed in the EIR.
- 2b. AIR. Will the proposal result in the creation of objectionable odors?
 - Maybe There have been numerous complaints of dust and other emissions from Hugo Neu-Proler. This item will be discussed in the EIR.
- 2c. AIR. Will the proposal result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?
 - No The project will not alter the climate. This item will not be addressed in the EIR.
- 2d. AIR. Will the proposal result in exposing the project residents to severe air pollution conditions?
 - Maybe There have been numerous complaints of dust and other emissions from Hugo Neu-Proler. The Regional Water Quality Control Board has issued a Cleanup and Abatement Order directing Hugo Neu-Proler to cease the release of airborne shredded automobile waste from their operation which has been contaminating the waters of Los Angeles Harbor. This item will be discussed in the EIR.
- 3a. WATER. Will the proposal result in changes in currents, or the course of direction of water movements, in either marine or fresh waters?
 - No The project will not modify the existing portion of the wharf which extends into the harbor waters or create new fill at the site. There will be no alterations of the direction of water movements in the East Basin. This item will not be discussed in the EIR.
- 3b. WATER. Will the proposal result in changes in absorption rates, drainage patterns, or the rate and amounts of surface water runoff?
 - Yes Installation of a concrete cover and storm drain system at the site will alter absorption rates, drainage patterns and surface runoff at the site. This item will be discussed in the EIR.
- 3c. WATER. Will the proposal result in alterations to the course of flow of flood waters?
 - Maybe The installation of a storm drain system at the site and changes in the surface drainage may alter the flow of flood water. This item will be discussed in the EIR.
- 3d. WATER. Will the proposal result in change in the amount of surface water in any water body?
 - No There are no plans to extend the existing wharf or create new landfill at the berths. The project will not alter the amount of surface water in the East Basin. This item will not be discussed in the EIR.

- 4 -

- 3e. WATER. Will the proposal result in discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?
 - Maybe Instillation of a concrete cover and storm drain system at the site may lead to alteration of surface water quality in the East Basin Channel. Also, there exists a potential for discharge of shredded automobile waste via either dust or surface water runoff which may impact the surface water quality. This item will be discussed in the EIR.
- 3f. WATER. Will the proposal result in alteration of the direction or rate of flow of ground waters?
 - Maybe Groundwater is contaminated in some areas of the site and may need to be withdrawn as part of a remediation plan. This action may effect the flow of groundwater at the site. This item will be discussed in the EIR.
- 3g. WATER. Will the proposal result in change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?
 - Maybe Groundwater is contaminated in some areas of the site and may need to be withdrawn as part of a remediation plan This removal may effect the quantity of groundwater at the site. This item will be addressed in the EIR.
- 3h. WATER. Will the proposal result in reduction in the amount of water otherwise available for public water supplies?
 - Maybe Additional use of water for dust control may result in the use of water otherwise available for public use. This item will be discussed in the EIR.
- 3i. WATER. Will the proposal result in exposure of people or property to water related hazards such a flooding or tidal waves?
 - Maybe Continued operation of this facility at the present location will continue to expose personnel to threat of tidal waves. This item will be discussed in the EIR.
- 3j. WATER. Will the proposal result in significant changes in the temperature, flow, or chemical content of surface thermal springs?
 - No There are no surface thermal springs in the project area. Therefore, this item will not be discussed in the EIR.
- 4a. PLANT LIFE. Will the proposal result in change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?
 - Maybe The project may impact benthic, pelagic, and wharf piling biological environments resulting from operating activities and/or from contaminated runoff. This issue will be discussed in the EIR.

- 5 -

- 4b. PLANT LIFE. Will the proposal result in reduction of the numbers of any unique, rare or endangered species of plants?
 - No Resident vegetation typical of disturbed industrial areas, primarily weed, are the only plants found in the project area. There are no unique, rare, or endangered plant species reported in the project area. This item will not be addressed in the EIR.
- 4c. PLANT LIFE. Will the proposal result in introduction of new species of plants into an area, or is a barrier to the normal replenishment of existing species?
 - No No new plant species will be introduced into the area. All landscape plants will be typical for Southern California. No significant impacts to plant communities are expected and this item will not be addressed in the EIR.
- 4d. PLANT LIFE. Will the proposal result in reduction in acreage of any agricultural crop?
 - No The project site is zoned industrial and no agricultural crops are grown on Terminal Island. There will be no reduction in acreage of any agricultural crop. This item will not be discussed in the EIR.
- 5a. ANIMAL LIFE. Will the proposal result in change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?
 - Maybe The project may impact benthic, pelagic, and wharf piling biological environments resulting from operating activities and/or from contaminated runoff. This item will be discussed in the EIR.
- 5b. ANIMAL LIFE. Will the proposal result in reduction of the numbers of any unique, rare or endangered species of animals.
 - No There are no unique, rare, or endangered species of animals present at the project site. The California Least Tern nest area is one mile away on the south shore of Terminal Island. While the project may have an effect on marine habitat, it will not specifically impact any unique, rare, or endangered specie of animal. This item will not be addressed in the EIR.
- 5c. ANIMAL LIFE. Will the proposal result in introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?
 - No The project would not introduce any new animal species into the area. This item will not be examined in the EIR.
- 5d. ANIMAL LIFE. Will the proposal result in deterioration to existing fish or wildlife habitat?
 - Maybe There are elevated PCB levels in the sediments, waster, and mussel body tissue collected adjacent to the Hugo Neu-Proler wharf. The Regional Water Quality Control Board suspects that these PCBs may have come from the Hugo Neu-Proler operation. PCBs in the

7/13/93 - 6 -

environment can have an impact on marine life. This item will be discussed in the EIR.

- 6a. NOISE. Will the proposal result in significant increases in existing noise levels?
 - Maybe There exists a high ambient noise level associated with the Hugo Neu-Proler operation. Increased intensity of operation with increased through-put over time and the addition of rail service to Hugo Neu-Proler could increase the amount of noise generated at the site. This item will be discussed in the EIR.
- 6b. NOISE. Will the proposal result in exposure of people to severe noise levels?
 - Maybe There exists a high ambient noise level associated with the Hugo Neu-Proler operation. Increased intensity of operation with increased through-put over time and the addition of rail service to Hugo Neu-Proler could increase the amount of noise generated at the site. This item will be discussed in the EIR.
- 7a. LIGHT AND GLARE. Will the proposal produce new light or glare from street lights or other sources?
 - Yes Hugo Neu-Proler maintains lighting at the facility for operational, safety, and security reasons, and plans to install new lighting at the site. This item will be examined in the EIR.
- 7b. LIGHT AND GLARE. Will the proposal reduce access to sunlight of adjacent properties due to shade and shadow?
 - No The project would not reduce access to sunlight on adjacent properties due to shade and shadow, therefore, this item will not be examined in the EIR.
- 8a. LAND USE. Will the proposal result in an alteration of the present or planned land uses of an area?
 - No The project is not expected to result in any alterations to the present or planned land use in the area. This issue will not be analyzed in the EIR.
- 9a. NATURAL RESOURCES. Will the proposal result in an increase in the rate of use of any natural resources?
 - No The project is not expected to significantly increase the rate of use of natural resources, but will have a beneficial impact by helping conserve natural ore deposits by the recycling of metals. This item will not be addressed in the EIR.
- 9b. NATURAL RESOURCES: Will the proposal result in a depletion of any non-renewable natural resources?
 - No The project relies on the use of fossil fuels during construction and for transportation via ship, trains, and trucks. The impact of this use is expected to be insignificant and will not be addressed in the EIR.

- 7 -

- 10a. RISK OF UPSET. Will the proposal involve a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?
 - Yes The project has the potential for the release of hazardous substances from either the incoming scrap or ongoing operation of the facility. This issue will be analyzed in the EIR.
- 10b. RISK OF UPSET. Will the proposal involve possible interference with an emergency response plan or an emergency evacuation plan?
 - Maybe Planned railway improvements may alter traffic patterns and emergency access routes in the project area. This issue will be analyzed in the EIR.
- 11a. POPULATION. Will the proposal result in the relocation of any persons because of the effects upon housing, commercial or industrial facilities?
 - No The project is located in an industrial area and will not result in the relocation of any persons. This subject will not be discussed in the EIR.
- 11b. POPULATION. Will the proposal result in significantly change in the distribution, density or growth rate of the human population of an area?
 - No The project will not result in any changes in the distribution, density or growth rate of human populations. This subject will not be discussed in the EIR.
- 12a. HOUSING. Will the proposal affect existing housing, or create a demand for additional housing?
 - No The project site is located in an industrial area and will not impact existing housing. Also, the project is not expected to increase employment in the area to levels where additional housing will be required. This subject will not be discussed in the EIR.
- 12b. HOUSING. Will the proposal have a significant impact on the available rental housing in the community?
 - No The project site is located in an industrial area and will not impact existing housing. Also, the project is not expected to increase employment in the region to levels where additional rental housing would be needed. This project will not result in any changes or impacts to rental housing. This subject will not be discussed in the EIR.
- 12c. HOUSING. Will the proposal result in significant demolition, relocation or remodeling of residential, commercial, or industrial buildings or other facilities?
 - Maybe The project may involve the remodeling of the existing single story office buildings into a wash room and conference rooms. This will only take place if the new office building is constructed. This issue will be analyzed in the EIR.

- 8 -

- 13a. RIGHT OF WAY. Will the proposal result in reduced front/side lot area?
 - No Operation and construction at the facility will not involve a reduction in front/side lot area. The subject will not be discussed in the EIR.
- 13b. RIGHT OF WAY. Will the proposal result in reduced access?
 - No The project area is in an industrial area where access is controlled. Operation and construction of the facility will not reduce access to the area. The subject will not be discussed in the EIR.
- 13c. RIGHT OF WAY. Will the proposal result in reduced off-street parking?
 - No Operation and construction of the facility will not involve a reduction in off-street parking. The subject will not be discussed in the EIR.
- 13d. RIGHT OF WAY. Will the proposal result in creation of abrupt grade differential between public and private property?
 - No Operation and construction of the facility will not create grade differentials between public and private properties. The subject will not be discussed in the EIR.
- 14a. TRANSPORTATION/CIRCULATION. Will the proposal result in generation of significant additional vehicular movement?
 - Maybe Hugo Neu-Proler will continue to receive scrap via truck for processing and export. However, the throughput of scrap at Hugo Neu-Proler will increase over time. This may lead to significant increases in traffic. Planned railway improvements may alter traffic patterns and emergency access routes in the project area. This issue will be analyzed in the EIR.
- 14b. TRANSPORTATION/CIRCULATION. Will the proposal result in significant effects on existing parking facilities, or demand for new parking?
 - Maybe Construction of a new office building to house Hugo Neu-Proler administrative functions may lead to a significant effect on existing parking facilities. This item will be discussed in the EIR.
- 14c. TRANSPORTATION/CIRCULATION. Will the proposal result in impact upon existing transportation systems?
 - Maybe Increased throughput, increased ship calls, and rail access to the facility will impact existing transportation systems. This item will be discussed in the EIR.
- 14d. TRANSPORTATION/CIRCULATION. Will the proposal result in alterations to present patterns of circulation or movement of people and/or goods?
 - Maybe Planned railway improvements may alter traffic patterns and access routes in the

- 9 -

- project area. This issue will be analyzed in the EIR.
- 14e. TRANSPORTATION/CIRCULATION. Will the proposal result in alterations to waterborne, rail or air traffic?
 - Maybe Increased throughput, increased ship calls, and rail access to the facility may alter waterborne and rail traffic. This item will be discussed in the EIR.
- 14f. TRANSPORTATION/CIRCULATION. Will the proposal result in significant increase in traffic hazards to motor vehicles, bicyclists or pedestrians?
 - Maybe Planned railway improvements may require uncontrolled or at-grade crossings which could increase traffic hazards for vehicles. This issue will be analyzed in the EIR.
- 15a. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for fire protection?
 - No The project will not have a significant effect on fire protection services. This issue will not be addressed in the EIR.
- 15b. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for police protection?
 - No The project will not have a significant effect on police protection services. This issue will not be addressed in the EIR.
- 15c. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for schools?
 - No The project will not have a significant effect on schools. This issue will not be addressed in the EIR.
- 15d. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for parks or other recreational facilities?
 - No The project will not have a significant effect on parks or other recreational facilities. This issue will not be addressed in the EIR.
- 15e. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for maintenance of public facilities, including roads?
 - No The project will not have a significant effect on maintenance of public facilities. This issue will not be addressed in the EIR.
- 15f. PUBLIC SERVICES. Will the proposal have a significant effect upon, or result in a need for other governmental services?
 - No The project will not have a significant effect on other government services. This issue

7/13/93 - 10 -

- will not be addressed in the EIR.
- 16a. ENERGY. Will the proposal result in use of exceptional amounts of fuel or energy?
 - No The construction and operation of the project is not anticipated to use exceptional amounts of fuel or energy. This issue will not be addressed in the EIR.
- 16b. ENERGY. Will the proposal result in significant increase in demand upon existing sources of energy, or require the development of new sources of energy?
 - No The construction and operation of the project is not anticipated to increase demand of fuel or energy, or require the development of new sources of energy. This issue will not be addressed in the EIR.
- 17a. UTILITIES. Will the proposal result in a need for new systems or alterations to power or natural gas?
 - Maybe The new office building will require electrical power service and other improvements at the site may require additional power. This issue will be addressed in the EIR.
- 17b. UTILITIES. Will the proposal result in a need for new systems or alterations to communications systems?
 - Maybe The new office building will require installation of a communication system. This item will be discussed in the EIR.
- 17c. UTILITIES. Will the proposal result in a need for new systems or alterations to water?
 - Maybe Construction of office building will require connection to the public water system. This item will be discussed in the EIR.
- 17d. UTILITIES. Will the proposal result in a need for new systems or alterations to the sewer or septic tanks?
 - Maybe Construction of office building will require connection to the existing sewer system in the area. This item will be discussed in the EIR.
- 17e. UTILITIES. Will the proposal result in a need for new systems or alterations to the storm water drainage?
 - Yes A storm drainage system will be installed at the site. This issue will be addressed in the EIR.
- 17f. UTILITIES. Will the proposal result in a need for new systems or alterations to the solid waste and disposal?
 - Maybe Remediation of soils at the site may require additional solid waste disposal. This

- 11 -

- issue will be addressed in the EIR.
- 18a. HUMAN HEALTH. Will the proposal result in creation of any health or potential health hazard (excluding mental health?)
 - Maybe Release of dust and other compounds into the air and water from Hugo Neu-Proler may represent an potential health hazard. This item will be discussed in the EIR.
- 18b. HUMAN HEALTH. Will the proposal result in exposure of people to potential health hazards?
 - Maybe Release of dust and other compounds into the air and water from Hugo Neu-Proler may represent an potential health hazard. This item will be discussed in the EIR.
- 19a. AESTHETICS. Will the proposal result in the obstruction of any scenic vista or view open to the public?
 - No The proposed project will not result in the obstruction of any scenic vista or view open to the public. This issue will not be addressed in the EIR.
- 19b. AESTHETICS. Will the proposal result in the creation of an aesthetically offensive site open to public view?
 - Maybe Operation of the project may cause the creation of aesthetically offensive conditions. This issue will be addressed in the EIR.
- 19c. AESTHETICS. Will the proposal result in the destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural feature?
 - No The proposed project will not result in the destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural feature. This issue will not be addressed in the EIR.
- 19d. AESTHETICS. Will the proposal result in any negative aesthetic effect?
 - Maybe Continued operation and planned new facilities may cause negative aesthetic impacts. This issue will be discussed in the EIR.
- 20a. RECREATION. Will the proposal result in an impact upon the quality and quantity of existing recreational opportunities?
 - Maybe Release of dust and other compounds in the the air and noise during operation may affect nearby recreational activities. This issue will be discussed in the EIR.
- 21a. CULTURAL RESOURCES. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?
 - No The project will not effect any prehistoric or historic archaeological site. This issue will

- 12 -

- not be addressed in the EIR.
- 21b. CULTURAL RESOURCES. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?
 - No The project will area not effect any prehistoric or historic archaeological site. This issue will not be addressed in the EIR.
- 21c. CULTURAL RESOURCES. Does the proposal have the potential to cause a physical change which should affect unique ethnic cultural values?
 - No The project would not effect any unique ethnic cultural values. This issue will not be addressed in the EIR.
- 21d. CULTURAL RESOURCES. Will the proposal restrict existing religious or sacred uses within the potential impact area?
 - No There are no known existing religious or sacred uses within the project impact area. This issue will not be addressed in the EIR.
- 22a. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
 - Maybe The project has the potential to degrade the quality of the environment as a result of air impacts; degradation of harbor water quality; impacts to vehicular, boat, and train traffic; noise impacts; aesthetic impacts; and risks to safety and health. These issues will be addressed in the EIR.
- 22b. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?
 - Maybe There are maybe short-term advantages gained at the expense of long-term environmental goals. This issue will be addressed in the EIR.
- 22c. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project have impacts which are individually limited, but cumulatively considerable?
 - Maybe The project has the potential for cumulative impacts including the potential air impacts; degradation of harbor water quality; impacts to vehicular, boat, and train traffic; and noise impacts. The potential for cumulative impacts will be addressed in the EIR.
- 22d. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?

- 13 -

Maybe - The project has the potential for impacts to humans including the potential air impacts; degradation of hasbor water quality; impacts to valicular, boat, and train traffic; and noise impacts. The potential for these impacts will be addressed in the EIR

- 14 -

SECTION 3

CHANGES AND CORRECTIONS TO THE DEIR

This section of the FEIR presents all of the changes and modifications that have been made to the DEIR. These changes have been made for the purpose of correcting and clarifying information contained within the DEIR.

All changes noted in this section are referenced to the DEIR Section, page number, paragraph number, and line number. Minor table and figure changes, and errata have been included in this section.

CHANGES AND CORRECTIONS

DEIR Page Number

2-3	Under the heading California Regional Water Quality Control Board, Los Angeles Regions, the following should be added to the end of the first sentence, " and for reuse of treated soil onsite or disposal offsite in California."
2-10	Table 2.2-1, Item 18, Status should be "Approved Project".
3.1.17	Section 3.1.2.2., first paragraph should read, "In addition to a 30-year lease renewal"
3.1.18	Section 3.1.4., Delete the line that reads "There are no mitigation measures available beyond those required by federal, state, and local building codes."
3.1.18	Section 3.1.4.1., should read, "None"
3.1.18	Section 3.1.4.2., should read, "None, impact significant."
3.2-13	Section 3.2.2.2.1, first paragraph, second sentence should read, "Construction activities would occur during the first few years of the 30 year lease term."
3.2-13	Section 3.2.2.2.2, first paragraph, six sentence should read, " petroleum hydrocarbons, and organic chemicals into the soil and groundwater at the site."
3.2-14	Section 3.2.2.2.3, second paragraph, last sentence should read, "RAP to be approved by the RWQCB and would be performed whether or not the lease is renewed for continued use of the site by HNPC."
3.3-18	Section 3.3.2.2.2, under Air Toxics, last second sentence should read, " and is discussed in Section 3.8 Public Health and Safety ."
3.3-18	Section 3.3.2.2.2, under AQMP Consistency the second sentence should read. " is consistent with the 1994 AQMP"

- 3.3-20 Section 3.3.4.1, third bullet item should read "Encourage use of low-NOx engines, innovative technologies, alternative fuels, and electrification of equipment when feasible and use these technologies as selection criteria for purchase of new equipment."
- 3.4-9 Section 3.4.2.2., fifth paragraph has been modified to add the following after the four sentence, "In addition, HNPC will be required to obtain a General Construction Activity Stormwater Permit for construction activities."
- 3.7-6 Section 3.7.2.1, first bullet item should read, " ... (see Table 3.7-1),"
- 3.8-4 Section 3.8.1, first paragraph, last sentence should read, "...RAP approved by the RWQCB and LAHD would be performed whether or not the lease is renewed for continued use of the site by HNPC."
- 5-1 Section 5, first paragraph, second sentence should read " ... use of the site for 30 years ...

Table 3.3-4 Summary of Existing HNPC Fugitive Emissions

Emissions (lb/day) **ROG** PM10 Source Wind Erosion from Storage Piles 6.0 Material Movement w/Heavy Duty Equipment (Dozers) 43.5 3.7 Material Dumping into Piles 0.3 Bulkloader Truck and Mobile Equipment Dust 52.0 Fuel Storage Tanks 0.4 0.4 Total 105.5

Table 3.3-6 Summary of Existing HNPC Mobile Source Exhaust Emission

Source					
	ROG	<u>CO</u>	\underline{NO}_X	\underline{SO}_{X}	<u>PM10</u>
On-site Mobile Equipment	156	667	1534	142	94
Ship Emissions	77	264	703	1058	129
Trucks (Delivery)	36	382	106	9	13
Trucks (Shipping)	6	68	19	2	2
Employee Vehicles	14	151	11	1	1_
TOTAL	289	1532	2373	1212	239

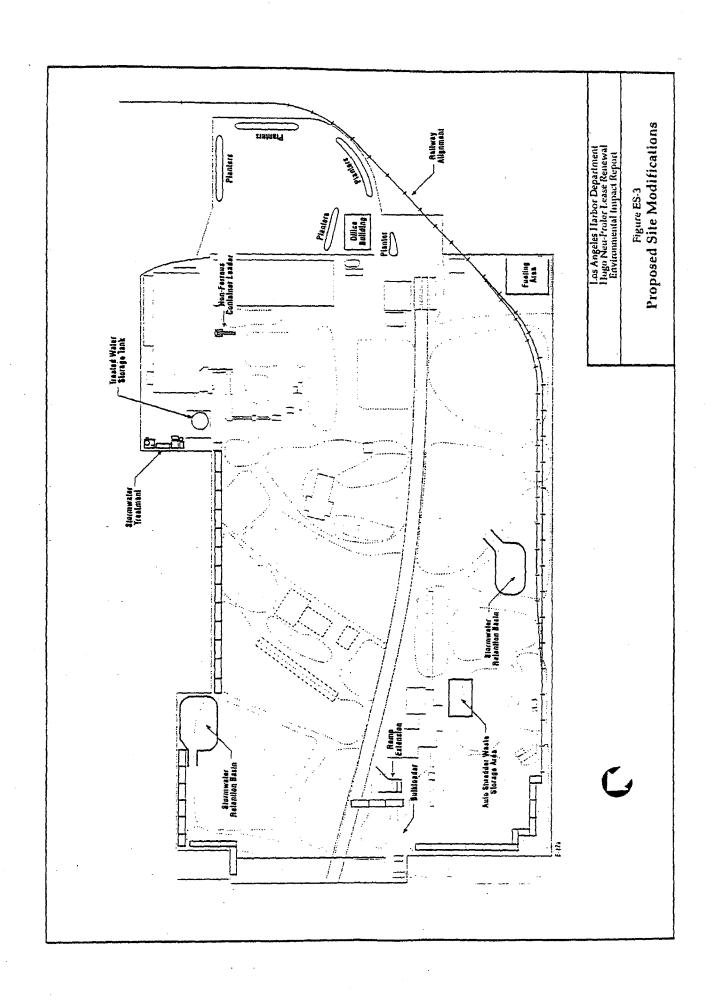
 Table 3.3-7
 Summary of Emissions from Existing Operations

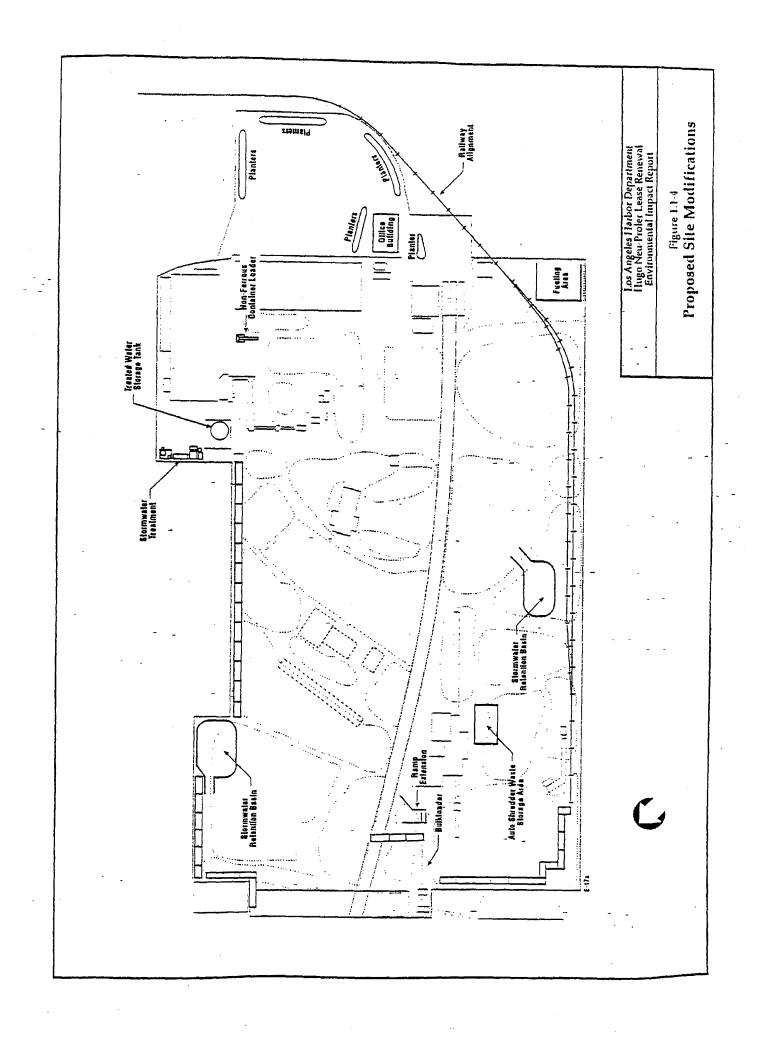
Source	Emissions (lb/day)				
	<u>ROG</u>	<u>CO</u>	\underline{NO}_{X}	\underline{SO}_{X}	<u>PM10</u>
Fugitive Emissions	0.4				105.5
Point Source Emissions	292	0.9	5.1	0.5	2.8
Mobile Source Exhaust Emissions	289	1532	2373	1212	239
TOTAL	581	1533	2378	1213	347

TABLE 3.6-6
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE

V/C Ratio & Level of Service								
Intersection	Existing	2000	2000	2000	Project			
	Conditions	Ambient	Without	With	Impact			
			Project*	Project*				
New Dock St./Site Access								
AM Peak Hour	0.177 A	0.189 A	0.204 A	0.210 A	0.006			
PM Peak Hour	0.143 A	0.153 A	0.169 A	0.176 A	0.007			
New Dock St./H. Ford Ave.								
AM Peak Hour	0.213 A	0.228 A	0.269 A	0.281 A	0.012			
PM Peak Hour	0.317 A	0.339 A	0.373 A	0.384 A	0.011			
New Dock St./ H. Ford								
Bridge								
AM Peak Hour	0.145 A	0.155 A	0.179 A	0.183 A	0.004			
PM Peak Hour	0.147 A	0.157 A	0.203 A	0.206 A	0.003			
Seaside Ave./Toll Plaza		•						
AM Peak Hour	0.673 B	0.720 B	0.735 C	0.737 C	0.002			
PM Peak Hour	0.567 A	0.607 A	0.621 B	0.622 B	0.001			
Ocean Blvd./H. Ford Ave.								
AM Peak Hour	0.500 A	0.535 A	0.619 B	0.626 B	0.007			
PM Peak Hour	0.523 A	0.560 A	0.625 B	0.631 B	0.006			
Ocean Blvd./T.I. Fwy.								
AM Peak Hour	0.667 B	0.714 B	0.922 E	0.923 E	0.001			
PM Peak Hour	0.772 C	0.826 D	0.903 E	0.904 E	0.001			
Ocean Blvd./Gate 3								
AM Peak Hour	0.744 C	0.796 C	0.813 D	0.814 D	0.001			
PM Peak Hour	0.632 B	0.676 B	0.707 C	0.708 C	0.001			

^{*} Includes ambient growth and the cumulative impact of other proposed development.





•