
**FINAL
ENVIRONMENTAL IMPACT REPORT
RESPONSES TO COMMENTS**

HAN-LI INTERNATIONAL MARINE TERMINAL

C.U.P. Application No. U-88-36

CITY OF PITTSBURG, CALIFORNIA

STATE CLEARINGHOUSE #89082209



DUNCAN & JONES
Urban & Environmental Planning Consultants

FINAL
ENVIRONMENTAL IMPACT REPORT
RESPONSES TO COMMENTS

Han-Li International Marine Terminal
C.U.P. Application No. U-88-36

City of Pittsburg, California

STATE CLEARINGHOUSE #89082209

August 28, 1990

Prepared by

DUNCAN & JONES
Urban & Environmental Planning Consultants
2161 Shattuck Avenue, Suite 210
Berkeley, Calif. 94704-1344
(415) 841-1101

in affiliation with

Abrams Associates
Traffic and Transportation Consultants

Questa Engineering Corporation
Civil/Environmental/Agricultural Engineers

Charles M. Salter Associates, Inc.
Consultants in Acoustics

Donald Ballanti
Certified Consulting Meteorologist

Environmental Collaborative
Biotic Resource Consultants

This environmental impact report was prepared by Duncan & Jones, Berkeley, California, and its affiliate consultants, to conform to the California Environmental Quality Act of 1970, as amended, and to the State Guidelines adopted for its implementation. The Consultants have devoted their best efforts to preparing a comprehensive information document that identifies and evaluates the possible environmental impacts of the proposed Project and the Project alternatives, and the possible measures which could be taken to mitigate adverse impacts.

This report is intended to be a full disclosure document and is provided solely to assist in the evaluation of the proposed Project. The Consultant shall not be liable for costs or damages of any client or third parties caused by use of this document for any other purposes, for such costs or damages of any client or third parties caused by delay or termination of any project due to judicial or administrative action, whether or not such action is based on the form or content of this report or any portion thereof prepared by the Consultants.

CONTENTS

	<u>Page</u>
Introduction	1
Errata	2
Compilation of Comments Received on Draft EIR	3
Index to Responses: By Comment Author and By Number	6
Letters of Comment	11
Responses to Comments:	61
Executive Summary	61
I. Introduction	69
II. Description of the Project	71
III. Planning and Policy Context	83
IV. Traffic and Circulation	87
V. Water Quality	105
VI. Air Quality	117
VII. Noise Considerations	129
VIII. Visual and Other Considerations	137
IX. Biotic Resources	139
X. Overview of Evaluation	141
XI. Alternatives to the Project	145
XII. Participants and References	153
Appendices	155
APPENDICES	
1. Organizations and Persons Contacted (Supplements Draft EIR, Chapter XII)	1-1
2. Additional Correspondence	2-1
3. Material Safety Data Sheet (MSDS) for Molten Sulphur	3-1

(This page has been purposely left blank.)

INTRODUCTION

This document provides responses to comments submitted by public agencies and citizens on the Draft Environmental Impact Report (DEIR) on the application submitted by the Han-Li International Group to the City of Pittsburg for a Conditional Use Permit to construct and operate a marine/truck/rail dry-bulk storage and transfer facility on approximately 15 acres of land situated between New York Slough and East Third Street. This document, together with the Draft EIR and its Appendices, constitutes the Final Environmental Impact Report for the proposed Project. The comments received by the City of Pittsburg during the public review period through June 6, 1990, are presented in the first half of this document, beginning with the yellow divider sheet.

The responses in this report are presented in the same sequence followed in the DEIR, and are arranged under the same Chapter headings. Each response is numbered in sequence within Chapters (e.g. in Chapter IV, responses are numbered 4-1, 4-2, etc.), and each is keyed to the particular comment submitted. Each response includes reference to the commentator and comment number, and to the page or pages of the DEIR to which the comment refers.

Each written comment is identified by an abbreviated name (e.g. CALTRANS, BAAQMD, etc.), and the letters of comment are arranged in sequence by the name of the agency or individual submitting the comment, as shown in the listing titled "Compilation of Comments Received on Draft EIR", on page 6. Comments requiring specific responses are numbered (e.g. -1, -2, -3) in each case (indicated by circled numbers in the right-hand margin of the letters of comment), and are referred to by the combined commentator and number coding in the response section (e.g. CALTRANS-4, BAAQMD-2, etc.).

This document also serves as a means of supplementing or correcting the Draft EIR where this has appeared to be necessary. An Errata sheet is included immediately following this Introduction to correct typographic or other errors which have been identified.

It may be desirable to reemphasize the role of an EIR, and of the preparers of such a document. An EIR is intended to provide factual information and informed judgments on the various categories of impacts a specific project or planning proposal can be expected to produce. As such, it is intended to provide a basis for greater public awareness of these implications and for more effective decision-making by public officials. The EIR does not indicate whether a project should be approved or not, or select or make recommendations on the modifications or mitigations which might improve the project. The EIR is expected to maintain complete objectivity, and is not to be construed as either supporting or opposing a project.

ERRATA

DEIR Page

- S-5 (Last "Mitigation Measure" paragraph, first sentence), replace "improving" with "maintaining".
- S-6 (Third "Impacts" paragraph, third item), insert "an" before "enclosed conveyor system."
- 8 (In full paragraph, fourth from last sentence), change "carbon monoxide" to "carbon dioxide."
- 57 (Figure 21, above "WSA" logo), correct Reference source to "54".
- 60 (In full paragraph, third sentence), replace "higher density employment" with "labor-intensive".
- 67 (First paragraph, first sentence), insert "site" after "marine terminal".
- 67 (First paragraph, last sentence), capitalize "project".
- 68 (Figure 23, Legend), revise "Primary Truck Route" to "Primary City Truck Routes".
- 77 (Subsection 4, second paragraph, last sentence), correct typo to read "Project would require reconstruction."
- 83 (First non-bulleted paragraph, second to last paragraph), change "This planning" to "The planning".
- 84 (First paragraph, first sentence), make "trip" plural, as "the trips to the terminal."
- 106 (Fourth complete paragraph, last two lines), change "these sources" to "handling sources", and add ", and 85 percent efficient from storage sources."
- 142 (Fourth complete paragraph, line 1), change "which may effect" to "which may affect".
- D-6 (Figure D-2 notations), add "units are parts per million (ppm) unless otherwise stated."
- E-6 (Fourth paragraph, below formula key, first sentence), correct Reference to "6".

COMPILATION OF COMMENTS RECEIVED ON DRAFT EIR

The comments submitted on the Draft Environmental Impact Report (DEIR) are presented in this section. They have been listed in alphabetical order according to the name of the public agency or individual submitting the comments. The comments are indexed below, together with the abbreviated codings they have been assigned (e.g. CALTRANS, EBRPD, etc.), and the page numbers where they can be found in this section of the Responses to Comments document.

Within each letter of comment received, each specific comment that required a response has been numbered (e.g. -1, -2, -3, etc.). In cases where one reviewer wrote more than one letter of comment, the comments are numbered starting with the earliest dated letter. These references, (e.g. CALTRANS-3, EBRPD-2, etc.), are used as a key to link the comments to responses found in the subsequent chapters which correspond to the structure of the DEIR document.

A second index is provided on page 6 indicating, for each numbered comment, the corresponding numbered response and the page on which it can be found in this document. The index also shows the page(s) in the DEIR to which the comment and responses make reference.

	<u>Page</u>
<u>State Clearinghouse</u>	
OPR Office of Planning Research (David C. Nunenkamp, Deputy Director, Permit Assistance), with Notice of Completion, June 11, 1990.	11
<u>California State Agencies</u>	
CALTRANS California Department of Transportation (Preston Kelly, District Director, by [Alice M. Jackson for] Wade Greene, District CEQA Coordinator) June 7, 1990.	13
SLC California State Lands Commission (Dwight E. Sanders, Chief, Division of Research and Planning), June 7, 1990.	17

COMPILATION OF COMMENTS
RECEIVED ON DRAFT EIR

Page

City and County Agencies

ANTIOCH	City of Antioch (Don Hendrycks, Senior Planner) June 6, 1990.	19
CCCCDD	Contra Costa County Community Development Department (James W. Cutler, Chief of Comprehensive Planning) June 8, 1990.	22
LAFCO	Local Agency Formation Commission of Contra Costa County (James W. Cutler, LAFCO Planning Advisor) June 6, 1990.	23

Other Public Agencies

BAAQMD	Bay Area Air Quality Management District (Milton Feldstein, Air Pollution Control Officer), June 11, 1990.	24
CCCFC&WCD	Contra Costa County Flood Control & Water Conservation District. (Robert D. Agnew, Senior Civil Engineer, Flood Control Engineering), May 21, 1990.	26
CCWD	Contra Costa Water District (Ed Seegmiller, General Manager), May 31, 1990.	27
DDSD	Delta Diablo Sanitation District (County Sanitation District No. 7-A). (Ricardo P. Cruz, Director, Laboratory and Industrial Monitoring), May 21, 1990.	29
EBRPD	East Bay Regional Park District (T.H. Lindenmeyer, Environmental Specialist), June 4, 1990.	30
MTC	Metropolitan Transportation Commission, (Keith Mattson, Environmental Review Officer), June 6, 1990.	32

COMPILATION OF COMMENTS
RECEIVED ON DRAFT EIR

Page

Private Organizations and Individuals

BHPHA	Bay Harbor Park Homeowners Association (Ross G. DeBoie, President; letterhead: Homeowners Business Management, Inc., Condominium Accounting and Managment), June 7, 1990.	34
CONC	Concerned Citizen (signature illegible), June 7, 1990.	36
DOMTAR	Domtar Gypsum (Jim deVos, Manager, West- ern Engineering Group), June 6, 1990.	38
PCOP	Pittsburg Community Organizing Project (approximately 130 signatories), June 1, 1990. Clarification letter (Mark Smith), June 13, 1990, attached.	40

INDEX TO RESPONSES: BY COMMENT AUTHOR AND BY NUMBER

NOTE: References to page numbers in Columns 2 and 5 are to materials presented in this Response-to-Comments document.

<u>COMMENTS</u>		<u>RESPONSES</u>		
<u>Comment Author and Number</u>	<u>Page Number This Document</u>	<u>Reference to DEIR Page Number</u>	<u>Response Number</u>	<u>Page Number This Document</u>
CALTRANS-1	13	76	4-4	89
-2	14	81	4-17	96
-3	14	82	4-23	99
-4	14	84	4-27	101
-5	14	84	4-28	101
-6	15	84	4-29	101
-7	15	84	4-30	102
-8	15	72	4-2	87
-9	15	24-8	2-12	75
-10	15	77	4-8	91
-11	15	76	4-5	90
-12	15	82-4	4-26	100
-13	16	81-4	4-22	98
SLC-1	17	140-1	9-2	139
ANTIOCH-1	19	S-3	ES-1	61
-2	19	151	11-2	145
-3	19	S-4-5	ES-2	61
-4	19	S-6	ES-4	62
-5	19	S-7	ES-6	64
-6	20	S-7	ES-7	65
-7	20	S-8	ES-9	66
-8	20	S-10	ES-11	68
-9	20	24-8	2-13	76
-10	20	24-8	2-14	76
-11	20	26	2-16	77
-12	21	60	3-4	84
CCCCDD-1	22	27	2-23	79
-2	22	158-62	11-3	146
-3	22	16	2-3	72
BAAQMD-1	24	100	6-12	122
-2	24	S-7	ES-8	66
-3	24	S-8	ES-10	68
-4	25	105	6-19	126
-5	25	104	6-17	125
-6	25	163	11-4	147

INDEX TO RESPONSES

COMMENTS		RESPONSES		
<u>Comment Author and Number</u>	<u>Page Number This Document</u>	<u>Reference to DEIR Page Number</u>	<u>Response Number</u>	<u>Page Number This Document</u>
CCWD-1	27	S-6	ES-5	63
-2	27	86,90	5-1	105
-3	28	87-90	5-2	105
-4	28	93 (142)	5-22	115
-5	28	93	5-16	113
-6	28	92-3	5-15	112
DDSD-1	29	93	5-17	113
-2	29	93	5-18	114
-3	29	91-3	5-8	109
EBRPD-1	30	8	2-1	71
-2	30	91,99	5-4, 6-3	107, 118
-3	31	92	5-10	111
-4	31	91-3	5-9	109
-5	31	133-142	9-1	139
MTC-1	32	S-5	ES-3	62
-2	32	82	4-24	99
-3	32	82-3	4-25	99
BHPHA-1	34	30	2-27	80
-2	34	105-107	6-20	126
-3	34	105-107	6-21	126
-4	35	123-25	7-12	135
-5	35	146-7	10-5	143
CONC-1	36	25	2-15	76
DOMTAR-1	38	171	11-11	150
-2	38	170-1	11-10	150
-3	38	171	11-12	151
-4	38	170	11-9	149
-5	39	171	11-13	151
PCOP-1	40	18	2-5	72
-2	40	13	2-2	71
-3	40	84	4-31	103
-4	40	70	4-1	87
-5	41	76	4-6	90
-6	41	76	4-7	90
-7	41	77	4-9	91
-8	41	77	4-10	92
-9	41	77	4-11	92

INDEX TO RESPONSES

<u>COMMENTS</u>		<u>RESPONSES</u>		
<u>Comment Author and Number</u>	<u>Page Number This Document</u>	<u>Reference to DEIR Page Number</u>	<u>Response Number</u>	<u>Page Number This Document</u>
PCOP-10	41	77	4-12	92
-11	41	79	4-14	93
-12	41	81	4-18	97
-13	41	81	4-19	97
-14	41	81	4-20	97
-15	41	79	4-15	94
-16	41	84	4-32	103
-17	41	1-5	1-3	70
-18	41	77	4-13	93
-19	41	75	4-3	89
-20	42	26-8	2-19	78
-21	42	31-3	3-1	83
-22	42	31-3	3-2	83
-23	42	29	2-26	80
-24	42	22	2-6	73
-25	42	22	2-7	73
-26	42	22	2-8	73
-27	42	100 (E1-11)	6-13	123
-28	42	28	2-25	80
-29	42	106	6-22	127
-30	42	26	2-17	77
-31	42	60-63	3-6	84
-32	42	107	6-23	127
-33	42	98 (E1-11)	6-1	117
-34	42	26-8	2-20	78
-35	42	16, 21, 23	2-4	72
-36	42	89	5-3	106
-37	42	91	5-5	108
-38	42	91	5-6	108
-39	43	91	5-7	108
-40	43	92	5-11	111
-41	43	93	5-19	114
-42	43	93	5-20	114
-43	43	93	5-21	114
-44	43	99	6-4	119
-45	43	99	6-5	120
-46	43	99	6-6	120
-47	43	26-8	2-21	78
-48	43	98-103	6-2	117
-49	43	103	6-15	124
-50	43	E-1	E-1	158
-51	43	E-1	E-2	158
-52	43	100(E1-9)	6-14	123
-53	43	E-2	E-3	158

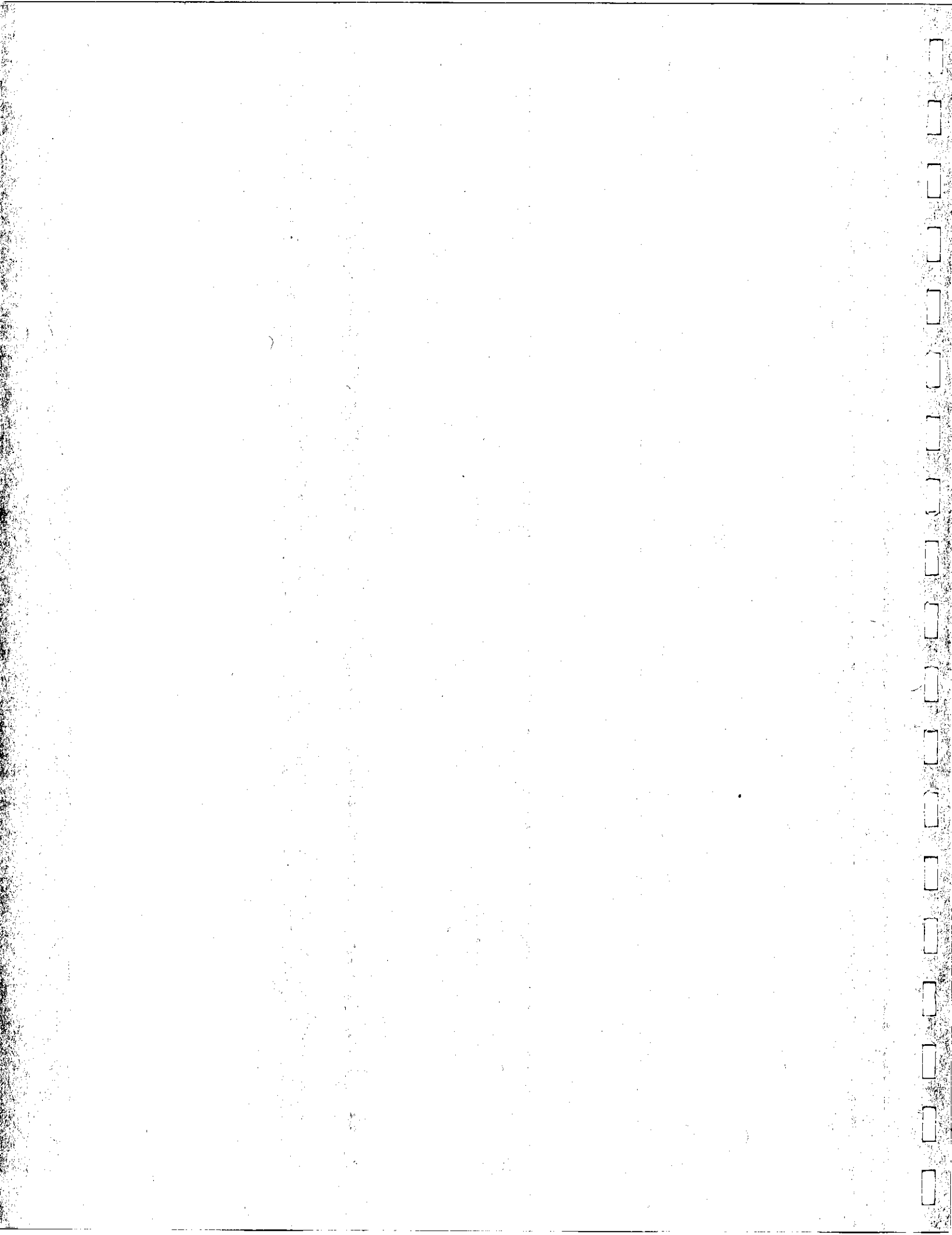
INDEX TO RESPONSES

<u>COMMENTS</u>		<u>RESPONSES</u>		
<u>Comment Author and Number</u>	<u>Page Number This Document</u>	<u>Reference to DEIR Page Number</u>	<u>Response Number</u>	<u>Page Number This Document</u>
PCOP-54	43	E-6	E-5	159
-55	44	E-5	E-4	159
-56	44	E-6	E-6	159
-57	44	E-10	E-8	160
-58	44	E-10	E-9	160
-59	44	104	6-18	125
-60	44	109	7-1	129
-61	44	118	7-5	131
-62	44	119 (F-5)	7-6	132
-63	44	117	7-3	130
-64	44	120	7-7	132
-65	45	115-23	7-2	129
-66	45	120	7-8	133
-67	45	120	7-9	133
-68	45	122	7-10	134
-69	45	123	7-11	134
-70	45	E-7	E-7	160
-71	45	143	10-1	141
-72	45	144	10-2	142
-73	45	B-4	B-1	156
-74	46	99	6-7	121
-75	46	99	6-8	121
-76	46	22	2-9	74
-77	46	99	6-9	121
-78	46	99	6-10	122
-79	46	92	5-12	111
-80	46	92	5-13	112
-81	46	92	5-14	112
-82	46	146	10-3	142
-83	46	103-5	6-16	124
-84	46	146	10-4	143
-85	46	60	3-5	84
-86	46	52,105-7	3-3	83
-87	47	22	2-10	74
-88	47	26-8	2-22	79
-89	47	117-19	7-4	130
-90	47	149	11-1	145
-91	47	81	4-21	98
-92	47	163-4	11-5	148
-93	47	163-4	11-6	148
-94	47	163-4	11-7	148
-95	47	79	4-16	96
-96	47	1-2	1-1	69
-97	48	22	2-11	75
-98	48	26	2-18	77

INDEX TO RESPONSES

<u>COMMENTS</u>		<u>RESPONSES</u>		
<u>Comment Author and Number</u>	<u>Page Number This Document</u>	<u>Reference to DEIR Page Number</u>	<u>Response Number</u>	<u>Page Number This Document</u>
PCOP-99	48	27	2-24	80
-100	48	99	6-11	122
-101	48	128-9	8-1	137
-102	48	163-4	11-8	149
-103	48	1-2,4-5	1-2	69

LETTERS OF COMMENT



OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

June 11, 1990

Randy Jerome
City of Pittsburg
54 Civic Avenue
Pittsburg, CA 94565Subject: Han-Li International Marine Terminal
SCH# 89082209

Dear Mr. Jerome:

The State Clearinghouse has submitted the above named draft Environmental Impact Report (EIR) to selected state agencies for review. The review period is now closed and the comments from the responding agency(ies) is(are) enclosed. On the enclosed Notice of Completion form you will note that the Clearinghouse has checked the agencies that have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the comment package is not in order, please notify the State Clearinghouse immediately. Remember to refer to the project's eight-digit State Clearinghouse number so that we may respond promptly.

Please note that Section 21104 of the California Public Resources Code required that:

'a responsible agency or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency.'

Commenting agencies are also required by this section to support their comments with specific documentation. These comments are forwarded for your use in preparing your final EIR. Should you need more information or clarification, we recommend that you contact the commenting agency(ies).

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact Nancy Mitchell at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "David G. Muzenkamp".

David G. Muzenkamp
Deputy Director, Permit Assistance

Enclosures

11

cc: Resources Agency

Notice of Completion

Appendix F

SEE NOTE below

State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916-445-4613

SCH # 80082200

Project Title: Han-Li International Marine Terminal

Local Agency: City of Pittsburg

Contact Person: Randy Jerome

Project Address: 55 Civic Avenue

Phone: (916) 439-1920

City: PITTSBURG

Zip: 94565

County: Contra Costa

Project Location

County: Contra Costa

City/Nearest Community: Pittsburg

Cross Street: East Third Street

Assessor's Parcel No. 073-020-017 073-030-007

Total Acres: 15

Within 1 Miles: State Hwy # 4

Waterways: New York Slough

Range: Base:

Supports:

Railways: A.T. & S.F.R.R.

Schools: Marina, Pitts. High School

Document Type

- CEQA: NOP Supplement/Subsequent NEPA: NOI Other: Joint Document
 Early Cons EIR (Prior SCH No.) EA Final Document
 Neg Dec Other Draft EIS Other
 Draft EIR

Local Action Type

- General Plan Update Specific Plan Rezona Joint Document
 General Plan Amendment Master Plan Prezone Final Document
 General Plan Element Planned Unit Development Use Permit Draft EIS Other
 Community Plan Site Plan Land Division (Subdivision, Parcel Map, Tract Map, etc.) FONSI Other

Development Type

- Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD
 Office: Sq. ft. _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq. ft. _____ Acres _____ Employees _____ Mining: Minerals _____
 Industrial: Sq. ft. 1500 Acres 15 Employees 20 Power: Type _____ Wats
 Educational Waste Treatment Type _____
 Recreational Hazardous Waste: Type _____
 Other Storage & Distribution: Bulk materials

Project Issues Discussed in Document

- Aesthetics/Visual Flood Plain/Flooding Schools/Universities Water Quality
 Agriculture/Land Forest Land/Fire Hazard Sewer Systems Water Supply/Groundwater
 Air Quality Geology/Seismic Septic Systems Wetlands/Riparian
 Archaeology/Historical Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Landuse
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Fiscal Recreation/Parks Vegetation Other Planning: poli

Present Land Use/Zoning/General Plan Use

Present land use: vacant Zoning: IG (General Industry) General Plan: General Industry

Project Description: Han-Li Int'l Group is requesting a use permit to operate a marine terminal for the transfer and storage of sand, gravel, bauxite, gypsum, lumber, limestone, grain, sulphur, cement, and scrap metal. Total annual tonnage of these products will be approximately 660,000 tons. The marine terminal will also be used for storage and handling of agricultural products and cementitious materials. Materials will arrive and depart from the site by barge, ship and rail.

7645-0613
 MARY MITCHELL CMT SNT

DATE: 4-27-90

DEPT REV TO AGENCY: 6-4

AGENCY REV TO SCH: 6-9

SCH COMPLIANCE: 6-11

PLEASE RETURN NOC WITH ALL COMMENTS

AQHD/APCD: 5 (Resources: 4, 128)

Resources Agency

Boating

Fish & Game

DWR

Caltrans 4

Health

State Lands Comm

ARB

SVRCS:--Delts

Reg. WQCS 2

State of California

Business, Transportation and Planning Agency

RECEIVED

JUN 8 1990

Memorandum

PLANNING DIVISION

To: Loreen McMahon
State Clearinghouse
1400 10th Street, Room 121
Sacramento, CA 95814

Date: June 7, 1990

File No.: CC-4-23.05
SCH#89082209
CC004203

From: DEPARTMENT OF TRANSPORTATION
Transportation Planning Branch-District 4

Subject: DEIR HAN-LI INTERNATIONAL MARINE TERMINAL (DRY
BULK MARINE/TRUCK/RAIL TRANSFER AND STORAGE
FACILITY. CONDITIONAL USE PERMIT NUMBER U-88-36).

Thank you for including the California Department of Transportation (Caltrans) in the review process for this DEIR. We have reviewed the above referenced document and have the following comments:

CALTRANS

This proposal includes the construction and operation of a marine/rail/truck dry bulk storage and transfer facility on a 15.58 acre site. The operation would provide for the transfer and storage of materials such as cement, bauxite, limestone, gypsum, aggregate, grain, sulphur, lumber and scrap metal. These materials will arrive or depart the terminal by trucks and trains. Approximately 56,400 truck trips and 511 trains will be required in order to transfer the above-mentioned material to and from the terminal on an annual basis.

The DEIR estimates that this project will generate 542 truck trips and 275 employee/visitor vehicle trips. A project of this magnitude will have a significant negative impact and will worsen the already poor conditions of State Route 4 and the Railroad Avenue, California Street, and Loveridge/Route 4 Interchanges.

Although the DEIR has recognized the negative impact of the increased truck traffic on Route 4 and freeway ramps, the document neglects to include appropriate mitigation measures to lessen the adverse effects caused by this increased traffic on Route 4.

1

CALTRANS

Page 81 of the document states that significant traffic impacts will occur on Highway 4 and at the freeway ramp intersections. The DEIR, however, states that with the implementation of a truck route bypass from Third Street to Highway 4, most of the traffic impacts of this project can be mitigated. The truck bypass will not, in any way, mitigate the impact of truck traffic on Highway 4. It would only alleviate the impacts of traffic on surrounding residential neighborhoods. Route 4 would still be negatively affected by the large number of truck trips generated by this operation.

2

Page 82 of the DEIR lists three mitigation measures to be implemented prior to the construction of the proposed bypass. These interim mitigations need to consider the following:

- 1) The spreading out of the truck traffic among several routes will lessen the impact on the city's roads and on the residential neighborhoods; however, this measure will not mitigate the impacts to State Route 4 or the affected highway ramps.
- 2) The scheduling of truck traffic to avoid weekday commute hours is considered the most effective mitigation measure. Route 4 is experiencing periods of intense congestion, therefore, no truck trips should take place during the AM and PM peak hours. Caltrans is in support of scheduling of trucks during the evening and early morning hours. This type of scheduling, however, should remain in place even after the proposed truck bypass has been constructed.
- 3) The mitigation measure which recommends limiting the number of truck trips generated by the terminal would lessen the impacts on both the residential neighborhoods and on Highway 4. The document states that a figure for the maximum number of trips should be agreed upon. Caltrans is interested in providing assistance in calculating an agreeable figure. We believe that this mitigation measure should also remain in place after the truck bypass has been built.

3

4

5

Page 84 of the environmental document states that limiting the number of truck trips leaving the terminal between 6:30 to 8:30 AM and between 4:00 to 6:00 PM would be sufficient to mitigate the impact on Highway 4 to a less than significant impact. This statement would only be true if the number of trucks traveling during those times is limited to zero, and if there is sufficient capacity in the off peak hours.

6

The mitigation measures discussed on page 84 also mention that impacts to Highway 4 would also be mitigated, to some extent, by the implementation of highway projects that will widen Route 4. Please be advised that previously approved highway projects are not to be used as mitigation for this or other proposed developments. Projects such as the widening of Highway 4 and the lowering of the Willow Pass Grade are intended to relieve existing congestion, not to mitigate this specific project's impact on the state transportation system. The Lead Agency is responsible for mitigating impacts to State highway facilities.

7

The trip distribution and assignment and its methodology should be clearly stated. The DEIR should explain the origins and destinations of the truck and train trips arriving and leaving the facility.

8

9

The Pavement Deterioration Impacts section of page 77 should include a thorough analysis of Traffic Indexes for Route 4 and the highway ramps in the project vicinity. The DEIR discussion on this subject is very limited and should be expanded.

10

The Average Daily Traffic figures shown in figure 27, on page 76 for the State Route 4/Railroad Avenue Interchange, have included a low estimate. Accurate figures can be found in the publication titled Ramp Volumes On California State Highways.

11

The rail transportation element of this project has not been properly discussed. Because railroads can transport large quantities of bulk material in a single trip, Caltrans believes that increased rail use should be explored and considered as mitigation in order to minimize the number of trucks needed to transport materials to and from the terminal.

12

CC004203
June 7, 1990
Page 4

CALTRANS

In addition to alleviating the impacts to the State Highway system, the increase of rail use would also lessen the air quality impacts caused by this project. The feasibility of increased railroad use should be analyzed with consideration of the possible cost of mitigation to State highway facilities.

The environmental document should include a discussion of the financing, scheduling, implementation responsibilities and monitoring of all mitigation proposed for this development. This information was requested in our response to the Notice of Preparation in our letter dated September 13, 1989 and included in pages A-22 and A-23 of the DEIR. 13

Caltrans would like to work with the City of Pittsburg in order to improve this environmental document, assure the impacts are mitigated and address cumulative traffic impacts to the State highway system. We would like to meet with the City of Pittsburg to discuss the information included in the DEIR for this project.

We appreciate the opportunity to work with you on this project. We will be calling within the next couple weeks to discuss the scheduling of the meeting. Should you have any questions regarding these comments, please contact Pablo Stefan Galvez of my staff at (415) 557-9224.

Sincerely yours,

PRESTON KELLY
District Director

By *Alice M. Jackson*
for WADE GREENE
District CEQA Coordinator

cc: Gary Adams, District ATSD Coordinator
Susan Pultz, MTC
Sally Germain, ABAG

STATE LANDS COMMISSION

LEO T. McCARTHY, *Lieutenant Governor*
 GRAY DAVIS, *Controller*
 JESSE R. HUFF, *Director of Finance*

EXECUTIVE OFFICE
 1807 - 13th Street
 Sacramento, CA 95814
 CHARLES WARREN
 Executive Officer

File Ref: SCH. No. 89082209

June 5, 1990

Dr. Gordon F. Snow
 State Projects Coordinator
 The Resources Agency
 1415 Ninth Street
 Sacramento, CA 95814

SLC

Dear Dr. Snow:

Staff of the State Lands Commission (SLC) has reviewed the City of Pittsburg's Draft Environmental Impact Report (DEIR) for the Han-Li International Marine Terminal. Based on this review, we offer the following comments.

As stated in our November 27, 1989 letter, portions of the project will be located on State lands under the SLC's jurisdiction and is therefore subject to the permitting requirements of the SLC. The applicant should contact Ms. Linda Martinez at (916) 322-6375 regarding the dredging permit which is required from the Commission before the proposed project may proceed. A prompt response will be appreciated.

In Section IX, Biotic Resources, the document describes potential impacts to wetland and aquatic resources; however, mitigation measures are not provided for all of these impacts. Instead, the required mitigation is deferred to be determined by future agreements with the Corps and the California Department of Fish and Game. Under the California Environmental Quality Act (CEQA), the EIR must specify and evaluate the effectiveness of appropriate mitigation measures. It is not adequate to merely rely on future compliance with regulatory programs of other agencies. (See Citizens for Quality Growth v. City of Mount Shasta, 198 Cal App. 3d 443).

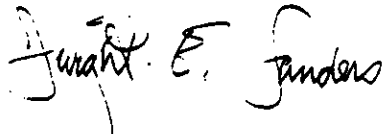
1

DR. GORDON F. SNOW
June 5, 1990
Page 2

SLC

Thank you for the opportunity to comment. If you have any questions regarding the content of the EIR, please contact Dr. Diana Jacobs at (916) 445-5034.

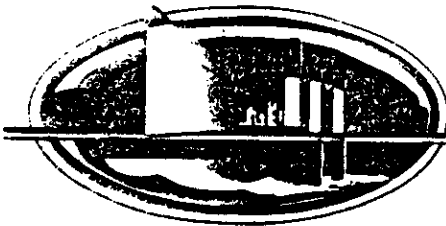
Sincerely,



DWIGHT E. SANDERS, Chief
Division of Research
and Planning

DES:maa

cc: Robert C. Hight, Chief Counsel
Diana Jacobs
Linda Martinez



June 6, 1990

RECEIVED

6-8-90

City of Pittsburg
ATTN: Randy Jerome, Senior Planner
65 Civic Avenue
Pittsburg, California 94565

RE: Draft EIR, Comments
Han-Li International Marine Terminal
U-88-36
State Clearinghouse #89082209

Dear Mr. Jerome:

ANTIOCH

Thank you for the opportunity to review and comment on the Draft EIR for the Han-Li International Marine Terminal. Due to our receipt on May 31, 1990 and the last date for comments due June 6, 1990, comments are abbreviated.

Page S-3: General Plan inconsistency with increases in truck traffic through residential area should be resolved prior to Use Permit issuance. 1

Non-Labor Intensive Activity--18 employees on 15 acres should be studied to show effect on local employment if the site were developed with a more labor intensive use. 2

Page S-4 to S-5: Traffic impact on SR-4 and alternative route improvements will result in congestion and deterioration of roadways. City or applicant should establish a road maintenance district or fund for repair of streets used by area trucks. Study should be part of EIR. 3

Page S-6: No discussion of probable impact of mixing of items stored on-site including grain, bauxite gypsum or sulfur. Mechanical breakdown of conveyor or pneumatic systems may discharge products into the environment. Sulfur mixed with water would be unacceptable. 4

Page S-7: Comment on no sensitive land uses downwind of the site to the east. The Antioch City limits are less than one (1) mile to the east of the site and is planned for labor intensive water-oriented uses, similar to those called out for in the Pittsburg General Plan. Should 5

ANTIOCH

the GWF power plant emissions combine with emissions from the subject site during winter fog conditions, potential toxic conditions could result. In addition, the contribution of nuclei for condensation may produce a micro-climatic change for the area extending impacts to the east.

Page S-7: All areas used for storage should be paved with an impervious material. Chemical stabilizers may break down, leaving large areas subject to dust and ground water contamination. 6

Page S-8: Use of water sprays to control particulates is not practical if clean water is necessary. Drought conditions make water supply of 15,000 gallons per day questionable. Use of Delta water may not be appropriate and is not analyzed. Recommend other dust control measures rather than water sprays. 7

Page S-10: Deleted from Biotic Consideration are impacts on the New York Slough cumulatively analyzed in the food chain after bottom disruption. We recommend a mitigation monitoring program after dredging to analyze the impact including possible impacts on aquatic ecology through both chemical monitoring and biological monitoring. Other industries utilizing New York Slough could contribute to the monitoring program. 8

Other Items:

1. Lacking are exhibits showing railroad lines and current train movements and projected increases in train movements. Impacts at grade road crossings and residential neighborhoods are glossed over but not specifically identified. 9
2. Where do items handled at the facility come from and where are they destined? Are there existing facilities in the area, including the Ports of Stockton, Sacramento, and Oakland that currently handle similar materials so that this facility will duplicate a service already being provided elsewhere? 10
3. What impact will ship turning have on the turning basin located off Antioch? Will channel modifications be necessary due to movements? 11

4. An Economic Feasibility Analysis should be requested by the City of Pittsburg and reviewed by City Staff to determine the cost and benefit to the City prior to approval. It appears the return to the City will be minimal whereas a use employing more people and making a product, not a shipping and storage facility, would be consistent with the City General Plan and provide a better economic return. 12
5. Attached is a copy of a letter from the Contra Costa Water District regarding water quality at the Mallard Slough intake. Please note our previous comments on New York Slough regarding biotic and chemical monitoring. We recommend expanding that program to include Mallard Slough if appropriate based on the Contra Costa Water District letter.

Should you have any further questions, please contact me at (415) 778-3491.

Respectfully,



Dan Hendrycks
Senior Planner

DH/pf

Attachments

cc: Planning Commission
City Council
Lee Walton, City Manager
Raymond Vignola, Assistant City Manager/Director
William Galstan, City Attorney

Community
Development
Department

County Administration Building
651 Pine Street
4th Floor, North Wing
Martinez, California 94553-0095

Phone: 646-2035

Contra
Costa
County



Harvey E. Bragdon
Director of Community Development

RECEIVED

JUN 8 1990

June 8, 1990

Mr. Randy Jerome
City of Pittsburg
Planning Department
65 Civic Avenue
Pittsburg, CA 94565

Dear Randy,

CCCCDD

Thank you for the opportunity to review the Han-Li International Marine Terminal Draft Environmental Impact Report. The document covers most issues of concern to the County.

A major area which hasn't been addressed is the issue of marine safety. This project will bring additional cargo ships into the Bay and into New York Slough. What is the estimated draft of the ships involved? Will additional dredging of waterways be required beyond the bank protection dredging shown on Figure 11? The Final EIR needs to address if any marine safety issues are involved with this project. 1

Chapter IV, dealing with Traffic and Circulation points out the anticipated substantial increase in truck traffic which would occur due to this proposal. On pages 158-162, a revised access concept is discussed as an alternative to the project proposal which would allow the shifting of traffic to the east away from residential areas. The Final EIR should consider a mitigation measure for this as a project requirement or requiring the property owner to agree to participate in an assessment district to finance these improvements. A time line for completion of such improvements should be considered. The Final EIR should discuss the impacts of such a new alignment so that additional CEQA review wouldn't be required to allow the completion of the roadway. 2

Figure 5 indicates that several structures in the area will be 90 feet in elevation. While this area is well removed from Buchanan Field airport, recreational flyers are known to fly along the Delta area. A mitigation measure could be proposed to coordinate with the County's Airport Manager's Office to determine if visual aids, e.g. night lights, should be installed. 3

Sincerely yours,

James W. Cutler
James W. Cutler
Chief of Comprehensive Planning

JWC/jb
cjc8/jerome.ltr

LAFCO

LOCAL AGENCY FORMATION COMMISSION
OF CONTRA COSTA COUNTY

McBrien Administration Building, Eighth Floor
651 Pine Street, Martinez, CA 94553
Telephone (415) 646-4090

June 6, 1990

3

DEWEY E. MANSFIELD
EXECUTIVE OFFICER

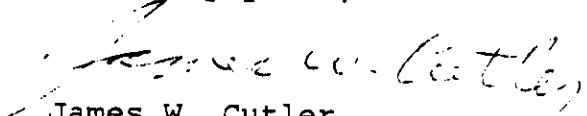
Randy Jerome, Planning Department
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565

Dear Randy:

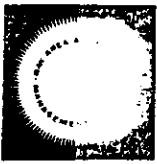
LAFCO

Thank you for the opportunity to review the Draft Environmental Impact Report on the Han-Li International Marine Terminal. Since the site is within the City and the EIR does not indicate that any LAFCO entitlements are required, I have no comments to make on the document.

Sincerely yours,


James W. Cutler
LAFCO Planning Advisor

JWC:th



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RECEIVED
JUN 11 1990

June 11, 1990

- ALAMEDA COUNTY
Edward R. Campbell
Ernie J. Campbell
Chairperson
Chuck Corica
Frank H. Osawa
- CONTRA COSTA COUNTY
Paul L. Cooper
Secretary
Lorne Wright McPeak
Tom Powers
- MARIN COUNTY
Al Aramouri
- SOLANO COUNTY
Bob White
- SAN FRANCISCO COUNTY
Henry H. Britt
Tom Gonzalez
- SAN MATEO COUNTY
Eugene Nicolopoulos
Lana Esnoo
- SANTA CLARA COUNTY
Martha Cleveland
Rod Diridon
Roberta H. Huggan
Susanne Wilson
- SOLANO COUNTY
Coby Davis
Vice Chairperson
- SONOMA COUNTY
Jim Harberson
Patricia Hilligoss

City of Pittsburg
Community Development Department
Planning Division
Civic Center, P.O. Box 1518
Pittsburg, California, 94565

Attention: Dean Parsons

Dear Mr. Parsons:

BAAQMD

We have reviewed the Draft Environmental Impact Report for the Han-Li International Marine Terminal, a bulk storage and transfer facility. The facility would occupy approximately 15 acres along the banks of the San Joaquin River, just east of Pittsburg's downtown. The facility is projected to handle the transfer and storage of up to 2.235 million tons per year of materials, including cement, bauxite, limestone, gypsum, aggregate, grain, granular sulphur, lumber and scrap metal. The materials will be transported to and from the facility by means of ship, barge, train, and truck. We have the following comments on the report.

The project proponent has applied to the District for an Authority to Construct permit. As part of the review of the permit application, the proponent has submitted to the District estimates of particulate emissions based upon control technology that is more stringent than the controls discussed in the DEIR. The FEIR should be updated to reflect these new emissions estimates. In particular, Figure 31 on page 100 of the DEIR should be revised to reflect the newer estimates.

1

The summary of proposed emissions control measures on page S-7 of the DEIR should be in the "Mitigation Measures" column and not the "Impacts" column. It should also be stated in the FEIR that BACT mitigation measures for particulate emissions from this project will be determined by the District. Please note that mitigation measures stipulated by the District may be more stringent than those provided in the DEIR.

2

The air quality analysis presented in the DEIR estimates that emissions of hydrocarbons (HC) and oxides of nitrogen (NO_x) from transportation sources would be approximately 210 and 1960 pounds per day, respectively. The pollutants HC and NO_x are involved in the formation of Ozone. Because the Bay Area is a non-attainment area for Ozone, the District considers projects that would generate emissions at the levels estimated for the Han-Li Terminal to be highly significant; therefore mitigation would be required. Page S-8 of the DEIR

3

BAAQMD

indicates that there are no mitigation measures available or practical for the reduction of transportation-related emissions from the project. However, we note that there are some suitable controls for diesel engines, such as the retardation of fuel injection timing for NO_x control. We strongly recommend that the FEIR contain a discussion on potential mitigation measures for the emissions of HC and NO_x.

On a related matter, page 105 of the DEIR indicates that emissions of HC and NO_x would contribute to the formation of ozone in areas east of the project site, possibly even as far as Sacramento. Because the cargo ships traveling to and from the project site would be using the shipping channels of San Pablo Bay and the Golden Gate, the FEIR should note that project emissions would also contribute to ozone formation in areas as far south as the Santa Clara Valley. 4

The FEIR should include estimates of emissions of sulfur dioxide (SO₂) in Figure 33 on page 104 of the DEIR. The significance and potential impacts of the SO₂ emissions should be discussed in the text. 5

We note that a proposed mitigation for impacts from truck traffic would be the construction of a by-pass route that would divert truck traffic from local residential areas. The DEIR also proposes, as an additional means of reducing impacts, that the number of truck trips per day be limited until the by-pass road could be constructed. The by-pass road is, however, only a proposal and there is the possibility that it would not be constructed. We recommend that the FEIR discuss what impacts would result if the by-pass road is not constructed. If the bypass road is not approved, will the project make heavier use of trains for the shipping of materials? If so, the FEIR should discuss the potential impacts from an increase in train trips. 6

If you have any questions, please contact Mr. Michael Murphy, Planner, at 415 771-6000, extension 133.

Sincerely,



Milton Feldstein
Air Pollution Control Officer

MF:MM:ey

cc: BAAQMD Director Paul L. Cooper
BAAQMD Director Sunne Wright McPeak
BAAQMD Director Tom Powers
Mr. Mark Smith



Contra Costa County
FLOOD CONTROL
& Water Conservation District

J. Michael Walford
ex officio Chief Engineer

Milton F. Kubicek, Deputy Director
255 Glacier Drive, Martinez, CA 94553-4897
Telephone: (415) 646-4470
FAX: (415) 646-1147

May 21, 1990

Randy Jerome
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565

File: 97-100

Dear Mr. Jerome:

CCCCFC & WCD

We have reviewed the Draft Environmental Impact Report for the Han-Li International Marine Terminal, which was received by our office on May 1, 1990 and submit the following comments.

The development does not involve a major channel or secondary channel, nor does it lie within a Drainage Area or other entity under the jurisdiction of the District. There is no need for you to send us copies of the improvement plans or final map. We have not reviewed the plans for minor in-tract drainage.

We appreciate the opportunity to review plans which involve drainage matters and welcome continued coordination.

If you have any questions, please call Jeff Bickley at (415) 646-4470, extension 278.

Very truly yours,

Robert D. Agnew
Senior Civil Engineer
Flood Control Engineering

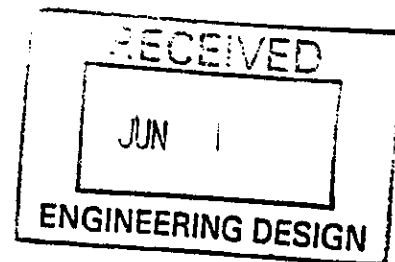
RDA:JBB:dmw
Jer97100.15
PT114/1120



**CONTRA COSTA
WATER DISTRICT**

1731 Concord Avenue
P.O. Box 820
Concord, CA 94514
Tel: (415) 800-8111 Fax: (415) 674-8122

18119-91697 Freeform
Contra Costa County



May 31, 1990

Directors
Bene Branton
President

Ronald E. Butler
Vice President

Donald P. Freitas
Daniel P. Robinson
Paul S. Johnson

Ed Seaman
General Manager

Mr. Randy Jerome
Senior Planner
Community Development Dept.
Planning Division
City of Pittsburg
P. O. Box 1518
Pittsburg, CA 94565

Re: Han-Li International Marine Terminal, Draft Environmental
Impact Report. C.V.P. # U-88-36

Dear Mr. Jerome:

CCWD

Thank you for the opportunity to comment on the Draft Environmental Impact Report on the proposed Han-Li International Marine Terminal. As you are aware, the Contra Costa Water District supplies water to nearly 400,000 people in Contra Costa County, including the cities of Antioch, Pittsburg, Concord, Martinez and portions of Pleasant Hill and Walnut Creek. The mission of the Contra Costa Water District is to provide its customers with the highest available drinking water quality at the lowest possible cost.

As indicated in our letter of September 15, 1989 responding to your Notice of Preparation, the District has some concerns that the proposed project could affect water quality at our Mallard Slough intake or at the intake of one of our major wholesale customers, the City of Antioch. The following comments on the Draft EIR reflect these concerns.

Page 5-6: The mitigation measures should include monitoring of any project discharges to New York Slough, especially during periods when the District or the City are taking water from their intakes. Proposed measures should also include actions to eliminate runoff from project areas that would result in degradation of water quality at the intakes. 1

Page 86: The document states "Pollutants discharged into the slough are rapidly dispersed and diluted at the confluence with the Sacramento River." How was this determined? This statement contradicts what one would expect based on typical rates of transverse mixing in rivers and estuaries. This must be clarified and supported with documentation. This same comment applies to the first paragraph of page 90. 2

Mr. Randy Jerome
May 31, 1990

Page 2

Page 87-90. The District is concerned that the sediment testing was inadequate, based upon the San Francisco Regional Water Quality Control Board's comments in Appendix D ("None of the information submitted by you provides an adequate characterization of the sediments that will be dredged and disposed of on site" p. D-1). The sediment characterization (Figure D-2) does not include measurement units, nor the measurement basis (wet or dry weight). No information is available in the Draft EIR concerning the QA/QC employed for the measurement program. It is not possible to judge from the information in the Draft EIR whether the conclusions drawn are correct.

CCWD

3

The Draft EIR suggests (page 142) the curtailment of dredging activities during fish migrations to avoid impacts to anadromous fish populations. A similar mitigation measure should be taken to avoid water quality impacts at intakes of the District or the City when diversions are in progress.

4

Page 93. It is not clear that the proposed mitigation measures will be sufficient. In particular, a basin sizing based upon a 25-year storm may be too small, since it is precisely during wet periods with high river inflows that the river is used as a source of drinking water. Mitigation measures should include elimination of contaminated runoff, monitoring project runoff discharged to New York Slough and notification procedures so that corrective action can be taken if necessary.

5


The Draft EIR does not address, except in a very qualitative way, our request in our response to the Notice of Preparation that the EIR identify the likely concentration and mass of any discharges. The characterization of discharges should be more quantitative so that the District can be assured that the water quality of its supply is not impaired.

6

If you have any questions, please contact Mr. Austin Nelson at 415/674-8057.

Kindest regards,

CONTRA COSTA WATER DISTRICT


Ed Seegmiller
General Manager

ES:ps

cc: Sanford Davis, City of Antioch
William Galston, City of Antioch



Delta Diablo Sanitation District

(Contra Costa County Sanitation District No. 7-A)

OFFICE AND TREATMENT PLANT: 2500 PITTSBURG-ANTIOCH HIGHWAY: ANTIOCH, CA 94509
ADMIN. FAX: (415) 778-8513 TELEPHONE: (415) 778-4040 MAINT. FAX: (415) 778-8565

May 21, 1990

RECEIVED
MAY 21 1990

City of Pittsburg
Community Development Dept.
65 Civic Avenue
Pittsburg, California 94565

Attention: Randy Jerome, Senior Planner

SUBJECT: EIR - HAN LI INTERNATIONAL MARINE TERMINAL

DDSD

Gentlemen:

The District has reviewed the above subject EIR, and has the following comments:

1. The Han Li International Martine Terminal must conform to both the requirements of the Water Quality Resources Control Board and Delta Diablo Sanitation District. 1
2. The District should be involved in the planning stage of the project to ensure that all discharge requirements are met. 2
3. Contaminent source points of concern are: 3
 - a. Bauxite (aluminum)
 - b. Sulfur (Sulfur related compounds)
 - c. Gypsum (Calcium Sulfate)
 - d. Cement (pH)

Very truly yours,

Ricardo P. Cruz
Ricardo P. Cruz
Director, Laboratory &
Industrial Monitoring

hmb



East Bay
Regional Park District

1500 SKYLINE BOULEVARD, OAKLAND, CA 94619-2443 TELEPHONE (415) 531-9300 FAX: (415) 531-3233

BOARD OF DIRECTORS
JAMES H. DUNCAN, President
KAY PETERSEN, Vice President
JOCELYN COMBS, Secretary
HARLAN KESSEL, Treasurer
MARY LEE JEFFERDS
JOHN O'DONNELL
TED RADKE

PAT O'BRIEN
General Manager

June 4, 1990

Mr. Randy Jerome
City of Pittsburg
65 Civic Ave.
Pittsburg, CA 94565

Subject: DEIR for the Han-Li Marine Terminal

EBRPD

Dear Mr. Jerome:

The EBRPD has reviewed the subject document and offers the following comments. The description of the bio-remediation process being used on property south of the project (p. 8) would appear to be in error. Currently described forms of life use one of two metabolic processes, oxygen reduction or sulfur reduction. Oxygen reduction organisms produce carbon dioxide (CO₂) and water (H₂O). Sulfur reduction metabolism results in the production of oxygen (O₂) and hydrogen sulfide (H₂S). Thus, no currently described organism produces carbon monoxide (CO). If there is, however, such an organism on the property to the south of the project site the air quality analysis of the EIR would require significant augmentation and a new analysis of risks may be required. Carbon monoxide is detrimental to humans and most of the animals present on Brown's Island.

1

Both the water quality discussion (pp. 85-93) and the air quality discussion (pp. 95-107) need to be augmented to consider the potential adverse impacts of an upset of the sulfur "prilling" process proposed. The molten sulfur is poured into water as part of this process. This raises the possibility of a physical explosion (sometimes incorrectly referred to as a "steam explosion"). Such an explosion can be extremely powerful resulting in the breaching of the containment structure and possibly resulting in the release of dangerous gas or the "water" used in the prilling process. The gas of greatest concern here is hydrogen sulfide (H₂S) which is given off by the molten sulfur. This gas is discussed in the EIR in the context of potential odor problem, yet no description is given of measures to collect this gas and prevent such a problem. The EIR also should discuss the fact that hydrogen sulfide is a deadly poison, it is flammable, and that (in concentrations of 4.3% to 46%) it is also explosive. The potential release of the prilling "water" is also of concern as it will likely become a mild solution of sulfuric acid during the prilling process. This can occur when the molten sulfur is quenched; sulfur dioxide (O₂S) gas given off by the molten sulfur can combine with water vapor (H₂O) to form sulfuric acid (H₂SO₄). The EBRPD is

2

concerned that the project include measures to contain such gaseous and liquid releases so that its adjacent Brown's Island would not be adversely affected.

The water quality discussion should be augmented to consider the possibility of illegal discharges of sewage or bilge water from the cargo vessels. Possible measures to mitigate against such releases would be to provide for waste water hookups to assure that these potential discharges are processed at a sewage treatment plant prior to discharge.

3

The water quality section should also be augmented to describe more specifically and conclusively the runoff from storage piles. The runoff from lime storage piles is not mentioned. The nature and extent of elemental and acidic content of run off from this as well as the bauxite and gypsum piles should be characterized. Most importantly, the EIR should be augmented to describe what specific measures are proposed to test runoff water for these contaminants and to treat it before it is discharged into New York Slough (and can flow to Brown's Island). If effective measures are not included as part of the project (but merely identified in the EIR), the discussion of Biotic Resources (pp. 133-142) should be augmented to describe the adverse impacts of untreated runoff on the adjacent vegetation and wildlife of Brown's Island.

4

5

The District believes that the responses to these comments will produce significant new information and therefore requests that this be circulated for additional comment prior to the finalization of the EIR. The contact person for this work is the undersigned who may be reached at 530-9650.

Very truly yours,



T. H. Lindenmeyer
Environmental Specialist

THL:ns
tl052390

cc: Pat O'Brien
Tom Mikkelsen
Bob Doyle
Kevin Shea
EBRPD Board

MTC
METROPOLITAN
TRANSPORTATION
COMMISSION

- 7

June 6, 1990

Alameda County
ALEX GIULIANI
EDWARD R. CAMPBELL

Contra Costa County
ROBERT I. SCHRODER
STEVE WEIR
Vice-Chair

Marin County
ROBERT B. STOCKWELL

NAPA County
FRED NEGRI

San Francisco
City and County
DORIS W. KAHN
HARRY G. BRITT

San Mateo County
JANE BAKER
TOM NOLAN

Santa Clara County
JAMES T. BEALL, JR.
ROD DIRIDON
Chairperson

Solano County
JAMES SPERING

Sonoma County
WILLIAM R. LUCIUS

Association of
Bay Area Governments
DIANNE MCKENNA

Bay Conservation
and Development
Commission
ANGELO J. SIRACUSA

State Business
Transportation and
Housing Agency
BURCH BACHTOLD

Executive Director
LAWRENCE D. DAHMS

Deputy Executive Director
WILLIAM F. HEIN

City Of Pittsburg
Department of Planning
65 Civic Avenue
Pittsburg, CA 94565

Attention: Randy Jerome
Subject: Draft Environmental Impact Report,
Han-Li International Marine Terminal

Dear Mr. Jerome:

MTC

This letter contains Metropolitan Transportation Commission (MTC) staff comments on the DEIR for the Han-Li International Marine Terminal. The terminal would be constructed on 15 acres located between East Third Street and the New York Slough in Pittsburg. The terminal would function as a shipping, rail, and trucking storage/transfer facility for various types of dry bulk freight.

1. Freeway Impacts. The DEIR states that project generated truck traffic would have significant impacts on traffic congestion at the Railroad Avenue/Highway 4 interchange and along Highway 4. The proposed mitigation measure for these impacts would limit truck trips from the project area during peak periods. We concur with this mitigation strategy, and recommend that it be made a condition for project approval. While eventual congestion relief for Highway 4 may come with future improvements such as those listed on p. S-5, there is no guarantee that traffic conditions will improve by the time the terminal would be operational. We recommend the City include a peak hour truck traffic restriction in the project's mitigation monitoring plan and consider removing the restriction only when an acceptable level of service is attained on Highway 4.

2. Pavement Deterioration. The DEIR recommends as a mitigation measure that the applicant participate in the cost of upgrading and improving pavement sections of roads used for truck traffic as determined by a future study. We suggest that the freeway on and off ramps at Railroad Avenue and Highway 4 be included in the network of road surfaces to be studied. The distribution of costs according to relative impacts by different users as suggested on p. 82 could be applied to the freeway ramps as well.

3. Proposed Truck Bypass Route. The DEIR discusses the possibility of constructing a bypass route to reduce truck traffic on the Railroad Avenue/Route 4 interchange. The DEIR also suggests that truck traffic should be limited to 80 trucks per day until such a bypass route would be built. It is not clear how the suggested

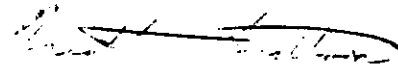
City of Pittsburgh
RE: DEIR, Han-Li Int'l.
June 6, 1990
Page Two

MTC

maximum number of trucks was calculated. The DEIR should describe how this potential limit was estimated and what are the factors which could allow it to rise or fall.

Thank you for the opportunity to comment on the Draft EIR for the Han-Li International Marine Terminal. If you have any questions about these comments, please call me at (415) 464-7862.

Very truly yours,



Keith Mattson
Environmental Review Officer

cc: Commissioner Schroder
Commissioner Weir
S. Germain, ABAG
H. Hilken, BAAQMD
W. Greene, Caltrans Dist. 4

KM:rbp
6849p-76



HOMEOWNERS BUSINESS MANAGEMENT INC.

Condominium Accounting and Management

June 7, 1990

RECEIVED

JUN 8 1990

Mr. Randy Jerome, Associate Planner
City of Pittsburg
P.O. Box 1518
Pittsburg, CA 94563

RE: Draft Environmental Impact Report
Han-Ti International Marine Terminal
C.U.P. Application No. U-88-36

BHPHA

Dear Sir:

The draft report of the above application has been reviewed by members of the Bay Harbor Park Homeowners Association (BHP) and a number of concerns have been developed.

Our representatives have been in contact with the Pittsburg Community Organizing Project (PCOP) (Mr. Mark Smith) and learned that they have similar concerns about the project and have reduced them to written comments and questions. In order to avoid duplication we have attached a copy of PCOP's concerns which are to be considered as representative of BHP's interests in this matter along with a few additional questions.

Responses to all concerns should be referred to the President of BHPHA (Mr. Ross G. De Boie, 261 Shoreline Dr.) and those representatives identified by PCOP>

- A. Should the 3rd Street extension be completed prior to construction of the project to mitigate the amount of truck traffic on Harbor Street and Railroad Avenue during and after construction? 1
- B. What measures will or could be taken to mitigate the dust and other particular exposure to the homes 1,600 feet to the West of the project? 2
- C. What measures will or could be taken to mitigate the impact of increased shipping, train and vehicular traffic air emissions? 3

- D. What measures will or could be taken to mitigate the noise levels to the homes 1,600 feet to the West of the project? 4
- E. If the project is approved, what will the cumulative effect of all the industrial sites regarding PG&E, John Manville, Diablo Services, Cal Asia and U.S. Steel be to the residences South and West of the project. 5

Sincerely,

BAY HARBOR PARK HOMEOWNERS ASSOCIATION



Ross G. De Boie
President

Attachment: Pittsburg Community Organizing Project

ltr018.21

June 7, 1990

City of Pittsburg
2020 Railroad Ave.
Pittsburg, CA 94565

CONC

Is a scrap yard going to be built?

The project description for the Environmental Impact Report for the Han-Li project lists scrap metals as one of the "bulk" commodities that Han-Li will be handling at its project site. Unlike other bulk commodities to be handled, the scrap piles will be exposed, uncovered and very unsightly. Handling, loading and unloading scrap piles involves cranes, magnets, ships, etc. and is an extremely noisy operation. 1

These activities are not adequately covered in the EIR. The scrap handling appears to be a minor portion of the application and could best be addressed by deleting scrap as a commodity permitted to be handled for this project.

The report, in several places, states there will be "no processing" of the bulk materials at the site. Presumably, the "no processing" applies to scrap metals as well as the other listed commodities. In March of 1990, a major scrap dealer announced its plans to open and operate a scrap yard adjacent to USS Posco in Pittsburg adjacent to the proposed Han-Li site. The description of the operation given included the processing of scrap, i.e., balers, shearers, etc.

If such plans exist, they should be made known now and should be considered in the Environmental Impact Report for this project. An EIR must include the cumulative impacts of projects including projects reasonably anticipated in the future.

The current EIR is completely inadequate to analyze the environmental impact of a scrap processing yard at the Han-Li site or adjacent site. The EIR does not address any of the following:

(1) Noise that would be produced from balers and/or shearers, cranes, scrap loading of ships, etc.

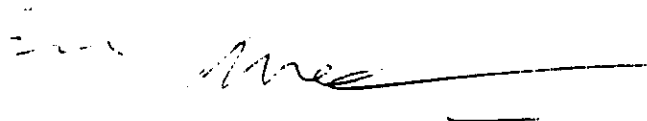
(2) Aesthetic issues related to piles of scrap, crane booms, etc.

(3) Toxic issues related to air quality, water quality, and soil contamination generated by scrap yards.

(4) Traffic. A typical scrap yard probably involves more trucks going in and out each day than the total predicted vehicle trips for the rest of the Han-Li project.

Either a written commitment from Han-Li should be obtained prohibiting the site from use as a scrap yard, or the EIR should be amended to add the environmental impacts associated with a scrap yard operation.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Tom Arce", is written over a horizontal line. The signature is positioned to the right of the typed name "Concerned Citizen".

Concerned Citizen

June 6, 1990

City of Pittsburg
Community Development Department
65 Civic Avenue
Pittsburg, CA 94565

ATTN: Mr. Randy Jerome

DOMTAR

RE: HAN-LI INTERNATIONAL MARINE TERMINAL (U-88-36)

Gentlemen:

It was recently brought to our attention that the Draft EIR for Han-li's proposed terminal refers to our site east of the Antioch city limits as the only potential alternative (ref. draft EIR pages 165-171). The document then proceeds to list a number of disadvantages of this Alternate "D" and concludes by stating in part: "The foregoing provides an adequate basis for evaluating the fundamental merits and weaknesses of the alternative location."

In our opinion, and in light of Goleta II (89C.D.O.S.8705; 1989), we believe that the Draft EIR does not adequately address the issues at stake in this matter, more particularly the study of viable alternative locations. Consequently, the said Draft EIR does not serve either the parties' or the public's best interest. 1

Further, the Draft EIR lists a series of "evident disadvantages" of the Alternate "D" site which, upon closer examination, are not at all evident but appear to be in fact little more than a hurried and inadequate attempt at compliance with CEQA, State Guidelines, and California Supreme Court mandated EIR standards. 2

Specifically, to state as a negative that trucks would have to cross the high-volume AT&SF (used for AMTRAK) railroad track, when from the 3rd Street site in Pittsburg three (3) such tracks (also used by AMTRAK) will have to be crossed, is misleading to this reader. To make an issue of dredge spoils when significant dredging at the Alternate "D" site may not be required is also not a fair evaluation of alternatives. 3
4

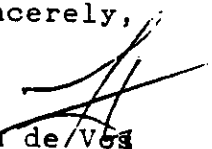
City of Pittsburg
June 6, 1990
Page 2

DOMTAR

Applicant's representatives have not made any proposals to Domtar nor have their investigations and analysis as set forth in the Draft EIR adequately determined if the Alternate "D" site discussed is in fact unfeasible for the proposed project. 5

In sum, in our opinion, the Draft EIR for Han-Li's proposed international marine terminal does not adequately address a range of alternative sites and other requirements as set forth by both "Goleta I" and "Goleta II." In addition, the Draft EIR's specific conclusions about the Alternate "D" site do not appear to be based on reasonably in-depth analysis and objective determination of fact.

Sincerely,


Jim de Vos
Manager, Western Engineering Group

JdV/a

cc: Gary Thatcher
No. Calif. Business Unit

Pittsburg
Community
Organizing
Project

June 1, 1990

RECEIVED
JUN 8 1990
PLANNING DEPARTMENT

Randy Jerome
City of Pittsburg
P.O. Box 1518
Pittsburg, CA 94565

RE: Draft EIR: Han-Li Marine terminal

PCOP

The proposed project would provide storage and/or transfer of up to a total of 2.2 million tons per year of dry-bulk material, which include cement, bauxite, limestone and gypsum, aggregate, grain, sulphur, lumber, and scrap metal.

The questions below are being submitted by the signers of this communication. The format for this submission regarding The Draft EIR was chosen in order to reduce (to the extent possible) duplication of question and effort. It is our understanding on advice from the Planning Department that this format would reduce the person hours necessary to complete this part of the permit process.

Though this document is being submitted by the Pittsburg Community Organizing Project (PCOP) each signer is an individual and should be directly corresponded with when the final EIR is released and other information regarding Han Li is disseminated.

Questions re: The Draft EIR: Han Li Marine terminal

1. What impact will the additional shipping traffic have on current and projected shipping traffic. 1

2. What impact will the additional shipping traffic have on current and projected recreational usage of the Delta such as fishing, boating, etc. 2

3. What will be the impact of truck traffic from Railroad Ave. to 10th St. How will the additional traffic affect the "primary access to the downtown, civic areas, and marina" pg. 84 of DEIR. 3

4. When and where were the "counts" made referenced in the last 4

455 West Fourth Street • Pittsburg, California 94565 • (415) 439-1004

paragraph of pg. 70.

PCOP

5. Traffic volume impacts for Railroad Ave. were not addressed in the DEIR. What are the traffic volume impacts for Railroad Ave. since it is identified as one of the routes proposed to be used. (ref. fig 27 pg. 76)

5

6. What is the estimated distribution of trucks on ALL proposed routes.

6

7. What is the impact on Hwy 4 especially at Willow Pass please include future developments in the calculations. Please address the level of service, road capacity, road wear, and potential improvements needed to the highway as a result of the increased traffic.

7

8. Who would pay for "reconstruction (of major access routes) to the Han Li Project to achieve a TI of 9.5".

8

9. What is the cost for reconstruction of major access routes to achieve a TI of 9.5.

9

10. If reconstruction of major access routes is a requirement then what is the EIR of reconstruction of major access routes to achieve a TI of 9.5.

10

11. Is a truck equivalency factor of 3 used to calculate Project traffic impacts based on a loaded truck or empty truck? (ref. pg.79 paragraph 2)

11

12. What is the level of service for the Harbor/School St. intersection when school is in session and when dismissed, please take into account heavy pedestrian traffic using the crosswalks.

12

13. What is the risk for an accident involving Project related traffic and students?

13

14. How many pedestrians cross the Harbor St. crosswalks at School St. during school session and dismissal? What will be the impact on this pedestrian traffic when Project related trucks are in operation?

14

15. What is the environmental impact of a truck accident and/or turnover of a truck when the truck is carrying molten sulfur?

15

16. What calculations or data indicate that adjusting truck travel patterns around peak hours would mitigate the impact on HWY 4 to a less than significant level. (ref. pg 84 paragraph 1)

16

17. Who makes the judgement whether an impact is significant or insignificant?

17

18. What is the maximum speed attainable for a truck and trailer up Hwy 4 at Willow Pass when the truck is loaded with materials to be transported by this project? If this speed is less than 55mph how will these trucks affect the traffic on Hwy 4 at Willow Pass especially during commute hours?

18

19. What is the hourly distribution of the 33 trucks not traveling

19

between 6:00am and 5:00pm. (ref. table on pg. 75 "remainder of day =33')

20. What are the titles of the 18 jobs created? What level of education is required? How many will be hired locally?

20

21. What are the planning and policy conflicts between the proposed Project and the subarea it will be in (i.e. subarea 1)? Rather than applying policies for the adjacent subarea (i.e. subarea 2). (ref. pg 33)

21

22. If adjacent subarea guidelines are to be applied why were conflicts with subarea 14 not identified and/or applied?

22

23. Who would pay for installing utilities?

23

24. How will process related effluent Ph be controlled? (i.e. "priller generated water").

24

25. Will caustics be stored on site to be used for pH control. If yes, where, how and how much will be stored.

25

26. Is sulfur toxic or hazardous?

26

27. How much dust will the radial stacker create? (pls. provide calculations)

27

28. How was the 15,000 Gal/day of water for dust suppression derived (pls. provide calculations)

28

29. How was the 75% suppression factor derived? Could the suppression factor be less?

29

30. How much "lignin sulfonate" will be used? What is the potential impact of this material on water quality, air quality, vegetation, and animal life.

30

31. Is the proposed facility contrary to the general plan?

31

32. Is Best Available Control Technology a requirement? If so why is it not being applied?

32

33. What are the estimated emission numbers for the construction of the Project?

33

34. What are the potential environmental impacts for a rail accident?

34

35. Are there elevation drawings of the facility including sightlines? If so could they please be included in the EIR.

35

36. Why are detection limits set higher than those in Public Notice 87. (ref. pg 89) What are the detection limits of Public Notice 87 vs measured levels?

36

37. How could bauxite effect water pH (ref. pg 91 paragraph 5)? How would this be mitigated? What is the environmental impact of the mitigation measures.

37

38. What impurities exist in bauxite ore and how could they impact water quality? (ref. pg 91 paragraph 5)

38

39. How much sulfuric acid or acidic water will be generated? What is the maximum volume that would be on-site at one time? How would this water be treated? Please provide calculations for acidic water generation.

39

40. What is the static charge build up of grain flowing into ship's holds, thru conveying systems, into sealed trucks and rail cars? What is the estimated potential for explosion. (pls. provide calc. or additional back-up other than "remote possibility" ref. pg 92 paragraph 3)

40

41. Will storm water run-off for the entire facility be captured in a pond and monitored prior to discharge into the Slough?

41

42. What sort of "major spill" is referenced in the last paragraph of page 93?

42

43. If a retention basin is built how much silt will be generated? Would the silt be hazardous? Where would it be disposed? What would the impact on landfills be.

43

44. How are emissions of the "sealed priller" controlled? What is the waste generated i.e. filters, etc. and how is it classified e.g. hazardous, toxic, or designated wasted.

44

45. How much hydrogen sulfide will be generated? Please provide calculations. How will this hydrogen sulfide be controlled, cleaned or mitigated.

45

46. How much hydrogen sulfide will be in the incoming molten sulfur?

46

47. What will be the total amount of solid waste generated? Please include bag filters, silt, plastic used to cover piles, etc? How will these wastes be classified? What is the impact on landfills?

47

48. What will downtown air quality statistics be when currently appvd downtown developments and the Project are taken into account?

48

49. The DEIR assumes that carbon monoxide levels will be highest on Harbor St. However, what are the current carbon dioxide levels for California St? (please take into account proximity to the highway) How will these levels change due to the Project.

49

50. Why was a temperature of 50 degrees Farenheit used for annual averaged concentrations of suspended particulate calculations? (ref. pg E-1 paragraph 2). Shouldn't average annual temeratures for Pittsburg be used instead?

50

51. What is the average annual temperature of Pittsburg and why wasn't this temperature used in the emissions calculations?

51

52. What would be the worst case suspended particulate concentrations? Please describe the situation and provide calulations.

52

53. Why were open hold emmissions based on an capacity of 2.5%? (ref. pg E-2) Please provide data or calculations to validate this number.

53

54. Why was a 5 foot material drop assumed for particulate calculations? (ref. pg E-6)

54

55

55. What is the design distance from the bottom of the unloading hopper to the top of a rail car and/or truck? What is the design distance from the bottom of the unloading hopper to the bottom of a rail car and/or truck? Why wasn't the average of these two distances used to calculate particulate emissions calculations? What would emission statistics be if this revised drop distance is used in the calculations.

56

56. What calculations or data indicate that gypsum, bauxite and limestone have a 2 percent silt content? (ref. pg E-6) Is the reference used for silt content reputable and/or applicable for this EIR since it is another Developers application to construct and operate a facility?

57

57. Are truck emissions greater when starting off from a stop sign?

58

58. How many stop/starts for truck traffic along the proposed route were assumed for the computer modeling of emissions?

59

59. How do district guidelines "suggest a second threshold of significance for regional emissions equal to one percent of the county-wide emissions?" Is this "suggestion" appropriate for application to this project? (ref pg 104 paragraph 2)

60

60. Paragraph 2 on page 109 states that a day/night average noise level of 60 to 70 dB is considered to be "conditionally acceptable" for residential development as specified in the Pittsburg General Plan. What conditions are part of the "conditionally acceptable" and how do these conditions apply to the Project.

61

61. Only average noise levels for the proposed plant are provided. What will be the peak noise levels and when will these noises occur? What are the L10 noise levels and L50 noise levels? What will be the impact of peak noises.

62

62. Page F-5 item (d) states that "a 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse community response". Page 119 paragraph 2 states that the night time Project generated noise will be 9 dB greater than background noise level at the single-family homes to south. Page 119 paragraph 3 states that the Project would not significantly effect the overall residential noise environment. Why is the almost doubling of night time noise levels to the homes in the south identified as a "not significant" impact when it will almost certainly draw complaints?

63

63. Pg 117 item (f) describes how on-site noise levels were predicted and the attenuations used to establish these noise levels. Why was wind direction not accounted for as an attenuation factor? What effect would wind direction have on peak, average, L10, and L50 noise levels in nearby residential neighborhoods?

64

64. Pg 120 states that trucks will only be accepted from 8am to 6pm, however fig. 26 on page 75 shows 33 after hour trips. What is the distribution of these 33 trips? Were these night time trips accounted for in the noise impact calculations? Was the penalty factor of 10 applied to these after hour trips? What is the added environmental impact of these night time trips.

65. What would projected noise levels be if future downtown development is taken into account?

65

66. The EIR states that truck generated noises impact only the homes on Harbor Ave. and California Ave. The EIR also states that the noise levels for the homes on Harbor Ave. and California Ave. already exceed the allowable residential noise limit and therefore the additional 2 dB increase is insignificant. To what distance perpendicular to Harbor Ave. and California Ave. do noise levels exceed residential noise limits and by how much will this distance with Project generated noises? How many extra homes will exceed residential noise limits as a result of the growth of this residential noise exceedance line?

66

67. What is the noise level of a truck and trailer passing by as measured from the homes on Harbor Ave? How often will the homes on Harbor and California Ave. hear this? What is the impact of irregular noise increases due to trucks passing by?

67

68. Pg 122 item (c) states that the East Third St. spur of the Santa Fe would see "significantly more trains (in the summer months)". How does this effect the average and L10 noise levels for the summer months? What is the impact of this increased noise level.

68

69. Pg 123 paragraph 1 under "Mitigation Measures" states that on-site equipment and activities would not generate a significant noise impact. Why was the 9dB increase to the homes in the south not identified as significant if a 10 dB increase will "draw complaints" see pg F5 item d. The paragraph goes on to say that noise from certain activities may be noticeable at times implying certain peak noises not elsewhere identified. What "certain activities" may be heard at the residential area?

69

70. Wind erosion emissions of storage piles were based on an average control factor of 85% (ref. bottom of pg E-7) What calculations show that the proposed water usage will achieve this control factor?

70

71. Pg 143 first paragraph under section A states that "other measures that would further mitigate these effects (irreversible environmental changes) have been identified as being within the jurisdiction of the City of Pittsburg, or other Public and private entities". What measures are being referenced and who would pay for them?

71

72. Pg 144 fourth bullet states that slight increase in noise levels will be produced in the nearest residential neighborhoods. Does this agree with the identified 9 dB average night time increase for the neighborhoods to the south?

72

73. Pg B-4 paragraph 1 states "that product shipment for bauxite, limestone, and gypsum will be by rail (open gondolas) or by truck." Has emissions from moving open gondola rail cars and open trucks been addressed? Please include calculations that show emissions/mile for open trucks and rail cars and extrapolate total emissions based on estimated trip lengths.

73

74. Why does the EIR not address the degree of odor caused in the processing and transportation of molten sulfer? 74
75. Are there calculations to determine the degree of nauseous smells from sulfer that communities would be exposed to. Why were these calculations not included in the EIR? 75
76. Isn't there a chance of a physical explosion when molten sulfer and water are combined in prilling process. 76
77. If an explosion should occur during sulfer processing (prilling etc.), would a plume of hydrogen sulfide or other gases result and to what degree? Is there a plume analysis showing the effects on Brown Island, housing developments, wildlife, etc? 77
78. What mitigation steps would be taken to avoid this accident. Where are the safety plans if this type of accident were to occur? 78
79. Ocean going tankers usually discharge the human effluent and bilge overboard. What are the environmental impacts on Contra Costa water intake, Brown Island and Mallard Slough. 79
80. What are the environmental impacts of a loaded ship accidentally discharging a full load of bauxite, cement, or gypsum into the river from a shipping accident or explosion. 80
81. What effect will storm run off have on the water at New York Landing and Mallord Slough. How will ships that are docked for three days discharge their human effluent and garbage? What effect will the discharge from these ships have on overtaxed landfills. 81
82. What noise levels can residents to the south of the Project expect if all the land zoned industrial is fully developed, If more projects such as GWF and Han Li are approved by the Planning Commission and City Council. Please provide calculations. 82
83. Why does the EIR treat the issues of ozone problems and non compliance with federal regulations regarding ozone depletion lightly when evaluating the future impacts of this project on the environment i.e. carbon dioxide and other gases. Where are the calculations for the total amounts of gases, air pollutants, ozone, carbon monoxide, carbon dioxide that we can expect if all the land zoned industrial is developed with similar projects such as Han Li and GWF. 83
84. What will be the total impact on air quality in Pittsburg and Antioch be when all industrial land in and around Pittsburg is developed with industries that produce similar amounts of particulate matter and other gases as Han Li, GWF, and Diablo Services. 84
85. The General Plan calls for the area to be developed with high technology, labor intensive clean industries. The EIR admits that this project doesn't meet these requirements. How does the EIR conclude that it meets the General Plan. 85
86. Why are 80' domes being proposed when there is a 50' height limit in the zoned area. Why does the EIR not address these issues. Why are not all piles of aggregate sand, bauxite and limestone etc. put in domes to avoid furtheraggregating an already intollerable particulate air pollution problem. Are there not other mitigations 86

that would better represent Best Available Technology. Example; cover the entire operation.

87. Do trucks release hydrogen sulfide into atmospheres when they are unloading molten sulfur. If so then how much would be released each day. Please provide calculations and a plume analysis.

87

88. What percentage of businesses and products that the project proposes to supply are already being supplied in the bay area at other sites. Are they really going to create new jobs in this community or are they just relocating employment from one place to another.

88

89. What are the peak L10 and L50 noise level residents close to the river can expect at night when unloading ships 24 hours a day.

89

90. Pg 149, Alternatives, states that there is almost an infinite number of possible alternatives for the site and that the limited number of types evaluated are representative of this array of options. How did the EIR conclude that other industrial uses i.e. warehousing, manufacturing, retailing, offices, restaurants etc. would be inappropriate absent analysis and comparison to areas which have successfully combined varied industrial usage within an area. Specifically when the above mentioned industrial uses which minimize fumes, noise and odor and which protect communities and future residential developments from negative impacts and are consistent to the General Plan.

90

91. What studies have been done on the possible danger to children who must cross Harbor St. to get to available recreation i.e. the show, roller rink coming soon, bus transportation etc. Especially during non school hours when no crossing guards are on duty on Harbor St. Was this considered?

91

92. Why does the EIR give the appearance of apologizing and/or explaining many of the negative impacts re: the project even though several of the impacts which will cause significant negative and lasting impacts and others which are not measurable at this time.

Duplicates item no. 103

92. What would the L10 and L50 noise levels in the homes on Columbia experience from trucks going down the proposed bypass road that would be built just to the east of the homes backyard.

92

93. What would be the peak noise level in decibels that homeowners would be expected to experience in the rooms on the back of the homes when a truck passes behind the house.

93

94. At night, how many trucks will pass down that road? Please include the number of trucks for Han Li, GWF and Diablo Services.

94

95. What is the turning radius needed for a 45' truck to make that 90° turn at California and Railroad without interfering with on coming traffic. Where is the appropriate traffic study in the EIR to address this problem.

95

96. Why is there no Systems Safety and Reliability section? In an EIR this section usually addresses all of the safety question/accident evaluations etc.

96

97. What is the water usage for cooling pool (priller)? pg.22 97
98. Can the dredged material be compacted to 80% relative density? Is 80% sufficient for monolith domes, buildings etc? What about earthquakes? pg.26 98
99. Dredging 150'-200' wide versus FIG 11 pg.27 which shows 100' wide. pg.87 99
100. Cooled sulfur is not necessarily odorless. pg.99 paragraph 4. 100
101. Pg. 128 talks about what would be visible to the townhouse residents. The photos should be touched up to include the new site fully developed. This is along the same lines as your Q #35. 101
102. What would the peak noise level people would experience in a bedroom located on the back of the house. Assume it is night time with people sleeping and the windows of the room are open. How many times per night would they be subjected to that noise? Why doesn't the EIR address these in detail. It only addresses the fact that some noise level will be experienced and a sound wall may be necessary. Is the EIR's failure to deal with these issues on noises in detail an indication that the EIR is deficient at least and maybe dishonest in its attempt to give an objective assesment of the true environmental impact. Please answer in regards to how the EIR handled these problems. 102
103. Why does the EIR give the appearance of apologizing and/or explaining many of the negative impacts re: the project even though several of the impacts sighted will cause significant negative and lasting impacts and others which are not measurable at this time. 103

Thank you for your careful attention to the above questions. All the signatories to this document and others are very concerned about the future of Pittsburg and that only appropriate industrial development be permitted to proceed. Is Han Li appropriate? Will the negative impacts of Han Li diminish our quality of life.

Area

Address

RECEIVED

Scott B. Keltus	655 Central Ave Pittsburgh	8193 427-4162
Elizabeth Fickert	623 Seneca Ave Pittsburg	427-0781
Mary C Henry	663 Central Ave Pittsburg	427-0781
Ann M. Wells	677 Central Ave Pitt	437 4318
Maria J. JACO	499 E. 12	439-1592
Judi Lopez	679 Central	439-8638
Getta D. Dinniss	685 Central Ave	439-9294
Keith L. McKay	695 CENTRAL	439-3680
Tom Van Ness	695 Central	439-3680
Dennis R. Farnish	695 Central	439-3680
Joyce K. Koh	1247 Pine	432-8538
W. Shepherd	737 Central Ave.	439-2267
Flim Kelly	737 CENTRAL AVE	439-2267
Laura M. Farland	129 Atherton Ave.	439-5667
Elizabeth E. Ellis	743 Central	
James J. Betancourt	168 E. 15th St.	432-3866
Ann J. Padilla	763 Central Ave	432-3286
Sharon A. Birome	771 Central Ave Pittsburg	427-1306
Joseph L. Bruno	775 Central Ave Pittsburg	432-4019
Juanita Jones	1230 Maple St	

Name	Address	Phone
Robert E. AUS	1265 Maple St. Pittsburg	432-1229
Lynn Evans	1265 Maple St Pittsburg	432-1229
Ruth Lozano	823 Central Ave	
Lore Lozano	823 Central Ave	
Randy Clarke	835 Central Ave	_____
Kathleen Leary	835 Central Ave	
Wm. Pazomant	1119 Barros Ave	_____
Carl R. Miller	841 Central Ave	432-0755
Helen M. Tomczak	851 - Central	432-6206 -
Jose D. Mercasio	875 Central Ave	_____
Sal D. Mercasio	" " "	_____
HERESA HALL	896 Central Ave	439-3297
Lynn van derbeck	886 Central Ave	437-1154
Dane & Dolian STECOM	832 CENTRAL AVE.	437-7609
Lynn Lee Campbell	816 Central Ave	432-8894
Jerry [unclear]	766 Central Ave	437-0556
Wesley Perry	758 Central Ave	432-6967
Mary H Donahue	750 Central Ave	439-0937
John Donahue	750 CENTRAL AVE	439-0937
Francesca [unclear]	716 Central Ave	unlisted

Address

Address

Phone

ANNE SHEERAN	535 CENTRAL AVE PITTS	427-4860
George Russo	475- Central ave	432-7077
Kathy Barbee	465 Central Ave	-
Eileen M Cruz	420 Central Ave	
Richard Cruz	420 Central Ave	432-9631
Ollie Nelson	452 Central Ave	-
F. Lopez	462 Central Ave	432-7059
Mabelyn Queen	452 Central Ave	
Rose M. Cardinale	1341 Harbor St.	
Bessie M. Pera	1325 HARBOR ST	432-6674
W.D. Duffey	1140 Redwood St	432-4575
W.O. Duffy Jr.	54 Mildred Ave.	439-1872
Walter F. Feltus	1130 Redwood St	439-7412
Kim Loeffler	151 Shannon	-
Arthur J. Martin	1105 Redwood St	439-5957
Thomas M. Hager	1115 Redwood St.	439-7269
Joyce M. Miller	617 E 12 th St.	427-6782

NAME	Address	Phone
Dora Higgins	187 Adessa St. ^{PITT.}	4395409
Sharon Keller	46 Sharon Dr. ^{PITT.}	_____
Marene Woods	195 Adessa ^{PITT.} Ave Pitta	_____
Marvin Sanders	153 Adessa Av. ^{PITT.}	_____
Samuel Williams	153 Adessa Ave ^{PITT.}	432-211-11
Mike Williams	175 Adessa Ave ^{PITT.}	_____
Mante To Tuck	145 Adessa Ave. ^{PITT.}	_____
Carolyn Lawson	133 Adessa Ave ^{PITT.}	432-7082
Mrs. Emigene Lammie	133 Adessa Ave ^{PITT.}	432-7122
Mr. Mrs. Oscar DeGroot	113 Linda Vista ^{PITT.}	432-7812
Robert Jones	134 Linda Vista ^{PITT.}	432-8099
Daniel Lammie	155 Linda Vista Ave ^{PITT.}	439-8645
George Lammie	155 Linda Vista Ave ^{PITT.}	439-8645
Paula Lammie	147 Adessa ^{PITT.}	_____
Jessie M. Johnson	164 Adessa ^{PITT.}	_____
Henry Townsend	164 Adessa ^{PITT.}	_____
Henry B. Miller	246 Linda Vista Ave	_____

NAME	Address	Phone #
José María	1111 Cedar St Pitts Pa	(415) 432-1407
James White	1111 CEDAR ST Pitts Pa	(415) 432-1407
Joanna ^{P.F.} Coatana	1119 Cedar St. Pitts Pa	(415) 439-3353
Nancy Brooks	1137 Cedar St Pittsburg	432-2040
Ramona	658 E 12 ST	432-1409
Trinidad Acuña	658 E 12 ST	432-1409
Alma Rodriguez	670 E 12th ST	427-5436
Gloria L. Mc	688 E 12th St	
Paula Grant	714 E. 12th	439-9652
Brian Ellis	706 E 12th	427-6785
Martha Lopez	740 E 12th St	439-2458
Karen Watkins	770 E. 12th St.	439-7715
Jason Smith	770 East 12th Street	439-7715
Mary Ann	770 E 12th St	439-7715
José	655 E. 12th ST	439-0275
Linda Juarez	655 E. 12th St.	439-0275
Marie Alvarez	1110 Cedar St	439-8503
Joe Lopez	1110 Cedar St	439-8503
Rudy Alvarez	1110 Cedar St.	439-8503

NAME	Address	Phone
[Faded]	[Faded]	439-2328
[Faded]	1155 Cedar St.	439-5995
Zelma Owens	1155 Cedar St.	439-5995
[Faded]	78 Edgewater Place	714-968-319
[Faded]	1135 E. 1st St.	439-5217
Wanda Hagstrand	1115 Redwood St	439-7269
[Faded]	[Faded]	439-1654
[Faded]	[Faded]	439-1654
[Faded]	71 [Faded]	439-1654
[Faded]	[Faded]	439-1654
[Faded]	1115 REDWOOD St.	439-6010
[Faded]	1115 1st St. N	439-7045
[Faded]	[Faded]	439-9256
[Faded]	[Faded]	439-7045
Mavis Rogers	6855 E. 1st	---
[Faded]	1136 Pine St	439-6720
[Faded]	1136 Pine St	439-2653
[Faded]	[Faded]	[Faded]
[Faded]	[Faded]	[Faded]
[Faded]	[Faded]	[Faded]
[Faded]	[Faded]	[Faded]

NAME	Address	Phone #
Steve Mijares	1136 Pine	439-0926
Shirika Mijares	850 E. Laurel #65	439-7350
Monica Mijares	1136 Pine St	439-0926
Mary Meloni	1029 Pine St	_____
John Smith	124 Elm St	217-3307
Shirika Mijares	1136 Pine St	439-0926
Shirika Mijares	1136 Pine St	439-0926
John Paul	1136 Maple St	439-0926
John Paul	77 E 12th	439-2502
John Bernal	731 E 12th	439-39-89

RECEIVED

JUN 15 1990

Pittsburg
Community
Organizing
Project

June 13, 1990

Randy Jones
of Pittsburg
Box 1518
Pittsburg, CA 94565

Re: Response to DRAFT EIR: Han-Li Marine Terminal

Randy:

The response to the above mentioned EIR submitted by The Pittsburg Community Organizing Project (PCOP) dated June 1, 1990 has a couple of questions that need clarification at Duncan and Jones. Please inform engineers that:

Question 99 should read as follows:

If reconstruction of major access routes is a requirement then what would the environmental impact of the reconstruction of the major access routes be to achieve a T of 9.5.

Questions 92,93,94 and 102 all refer to the proposal of a bypass road to be built behind the homes on Columbia St. Question 102 refers to the homes on Columbia St.

Sincerely,

Mark Smith
Mark Smith

RESPONSES TO COMMENTS



EXECUTIVE SUMMARY: RESPONSES

Comment ANTIOCH-1

"Page S-3: General Plan inconsistency with increases in truck traffic through residential area should be resolved prior to Use Permit issuance."

Response ES-1: DEIR, Page S-3

Refer to Chapter III, pages 64-65, and to Chapter IV, page 82, for discussions of stipulations in the CUP that should be required, in order to resolve the inconsistency between the use of truck routes in residential areas to accommodate truck traffic generated by the Project and the provisions of the General Plan. The methods for defining the number of daily truck trips to be allowed given current capacities of the truck route and other roadways are discussed in greater detail in Response 4-28.

Comment ANTIOCH-3

"Page S-4 to S-5: Traffic impact on SR-4 and alternative route improvements will result in congestion and deterioration of roadways. City or applicant should establish a road maintenance district or fund for repair of streets used by area trucks. Study should be part of EIR."

Response ES-2: DEIR, Pages S-4-5

Comment noted and accepted in part. Ongoing maintenance of truck routes utilized by Project-generated truck trips should be partly funded by the applicant, either directly or through the proposed assessment district. Maintenance of Highway 4 roadway conditions is the responsibility of the State Department of Transportation (Caltrans), which is partly funded by truck registration and truck weight fees, to which the Project operators would be subject. (Also see correction noted on Errata sheet for page S-5 of the DEIR.)

Comment MTC-1

"Freeway Impacts. The DEIR states that project generated truck traffic would have significant impacts on traffic con-

EXECUTIVE SUMMARY: RESPONSES

gestion at the Railroad Avenue/Highway 4 interchange and along Highway 4. The proposed mitigation measure for these impacts would limit truck trips from the project area during peak periods. We concur with this mitigation strategy, and recommend that it be made a condition for project approval. While eventual congestion relief for Highway 4 may come with future improvements such as those listed on p. S-5, there is no guarantee that traffic conditions will improve by the time the terminal would be operational. We recommend the City include a peak hour truck traffic restriction in the project's mitigation monitoring plan and consider removing the restriction only when an acceptable level of service is attained on Highway 4."

Response ES-3: DEIR, Page S-5

Comment acknowledged. See also Responses 4-17, 4-22 and 4-29.

Comment ANTIOCH-4

"Page S-6: No discussion of probable impact of mixing of items stored on-site including grain, bauxite gypsum(sic) or sulfur. Mechanical breakdown of conveyor or pneumatic systems may discharge products into the environment. Sulfur mixed with water would be unacceptable."

Response ES-4: DEIR, Page S-6

There is very low probability of an incident in which grain would be mixed with other materials handled on the Project site, because the grain would not be stored on the site, and would require entirely separate operating systems from those utilized for the sulphur, bauxite and aggregates. These materials would be stored in open piles, and some mixing of these materials could occur, but would not result in any adverse environmental impacts.

Mechanical breakdown of operating systems which would discharge materials on to open ground would not constitute an environmental hazard per se, because the grading plan would prevent materials from spilling into the water. Unloading systems such as the front-end loaders on the ship-to-shore ramp, and the clamshell bucket cranes of the ships have the

EXECUTIVE SUMMARY: RESPONSES

potential for accidental discharge of aggregates, lumber, bauxite and other raw ores into New York Slough if the individual machinery operators are careless or if equipment malfunctions.

Although the cement and sulphur will be handled within enclosed transfer systems, a limited potential exists for breakdown of those systems and for the release of these materials into the Slough. A breakdown such as a rupture in the sulphur conveyor belt housing or a break in the cement pipelines would trigger immediate shutdown of the system, thereby keeping spillage to a minimum. Any incident involving cement or sulphur contamination of New York Slough would require clean-up operations, possibly coordinated by the San Francisco Bay Regional Water Quality Control Board.

The threat of substantial fines which may be levied by the Board constitutes an effective incentive for the operators of the facility to maintain the systems in optimum condition for operational safety, and to employ skilled equipment operators to avoid accidents and spillage.

Comment CCWD-1

"Page 5-6: The mitigation measures should include monitoring of any product discharges to New York Slough, especially during periods when the District or the City are taking water from their intakes. Proposed measures should also include actions to eliminate runoff from project areas that would result in degradation of water quality at the intakes."

Response ES-5: DEIR, Page S-6

Comment acknowledged. The detention basin identified in the Draft EIR as a mitigation measure will prevent direct runoff, and will allow monitoring and analysis of discharges of runoff from the Project site, with the express purpose of eliminating discharges which could have a detrimental effect on water quality.

The frequency and extent of chemical analyses of the water in the basin to be conducted should meet the requirements of the SFBRWQCB, the Delta Diablo Sanitation District and the

EXECUTIVE SUMMARY: RESPONSES

Contra Costa Water District. The timing of any discharges from the detention basin should be coordinated with these agencies with regard to their respective schedules for taking water from the intakes downstream from the Project site.

Comment ANTIOCH-5

"Page S-7: Comment on no land uses downwind of the site to the east. The Antioch City limits are less than one (1) mile to the east of the site and is(sic) planned for labor intensive water-oriented uses, similar to those called out for in the Pittsburg General Plan. Should the GWF power plant emissions combine with emissions from the subject site during winter fog conditions, potential toxic conditions could result. In addition, the contribution of nuclei for condensation may produce a micro-climatic change for the area extending impacts to the east."

Response ES-6: DEIR, Page S-7

Page S-7 notes that, with respect to potential construction impacts, there are no sensitive land uses downwind (to the east). Construction impacts can be expected to occur only within a few hundred yards of the construction site, so that planned land uses east of the site within the City of Antioch are too far away to be affected by construction on the Project site.

The potential for combination of the GWF power plant emissions with those of the proposed Project is addressed on page 147 of the DEIR. The potential for combination of the heated, elevated, gaseous plume from the GWF power plant with the ground-based emissions of mineral particulate matter from the proposed Project appears very remote.

Some of the particles generated by the Project would be in the size range of Cloud Condensation Nuclei (CCN). The tendency of these particles to participate in the droplet nucleation process when the atmosphere nears 100 percent humidity, as typically occurs during stagnant periods in the winter months near the site, is dependent on the characteristics of the material and the size of the particle. The types of material to be handled at the Project site are made almost exclusively of non-soluble minerals, which will act

as condensation nuclei at relatively high humidities. The urban and maritime nature of the site means that large numbers of natural and man-made hygroscopic or soluble condensation nuclei will exist that will cause nucleation at lower humidities. The addition of CCN by the Project would therefore not affect the onset or dissipation of fog since this is controlled by other types of nuclei. The addition of CCN to the atmosphere by the Project would most likely increase the number of fog droplets, but with a smaller average size. Since the particles generated by the Project are insoluble, no changes to fog droplet chemistry would be expected.

Comment ANTIOCH-6

"Page S-7: All areas used for storage should be paved with an impervious material. Chemical stabilizers may break down, leaving large areas subject to dust and ground water contamination."

Response ES-7: DEIR, Page S-7

Comment noted. The lignin sulfonate used for stabilizing surface dust is a wood pulp by-product which has no known risk of contaminating ground water or degrading air quality. Runoff from the materials in the open storage piles (i.e., bauxite, gypsum, limestone, etc.) will not cause significant ground water degradation. From a water quality standpoint, it is not considered necessary for the open storage areas to be paved. By leaving these areas unpaved, discharges to New York Slough will be reduced. Chemical stabilizers do lose their effectiveness over time, and have to be reapplied on a periodic basis. Paving all areas would be 100 percent effective in stabilizing surface dust, compared to a 90 to 95 percent effectiveness level which could be achieved with chemical treatment.

Comment BAAQMD-2

"The summary of proposed emissions control measures on page S-7 of the DEIR should be in the 'Mitigation Measures' column and not the 'Impacts' column. It should also be stated in the FEIR that BACT mitigation measures for particulate emissions from this project will be determined by the

District. Please note that mitigation measures stipulated by the District may be more stringent than those provided in the DEIR."

Response ES-8: DEIR, Page S-7

Comment noted. The emission control measures listed in the "Impacts" column indicate the provisions affecting air quality defined by the Project applicants, and do not constitute mitigation measures identified in the EIR. The measures to be stipulated by the District will be identified in response to the application submitted to the District for a Permit to Construct and Operate Industrial Sources. The EIR is intended to evaluate the Project as initially proposed, rather than as revised by the applicants to meet specific permit requirements of the BAAQMD, which will result in a project of a less than "worst-case" character. It is noted on page 107 of the DEIR that additional mitigation measures beyond those identified in the DEIR may be required by the BAAQMD.

Comment ANTIOCH-7

"Page S-8: Use of water sprays to control particulates is not practical if clean water is necessary. Drought conditions make water supply of 15,000 gallons per day questionable. Use of Delta water may not be appropriate and is not analyzed. Recommend other dust control measures rather than water sprays."

Response ES-9: DEIR, Page S-8

Comment noted. Clean water would be necessary for the purpose of controlling particulate materials originating from the open storage piles, and the use of Delta water was not included in the consideration of the operation of this Project. The volume of treated water which would be used is substantial, as noted on page 62 of the DEIR, and is partly inconsistent with the General Plan policies on water conservation. Additional measures to control dust could include covering the open storage piles with canvas or similar protective means of enclosure, although the Project applicant indicates that such a measure would not reduce the usage of water for dust suppression purposes. The applicants contend that requiring elaborate means of controlling dust, such as

EXECUTIVE SUMMARY: RESPONSES

enclosing the storage area in a dome (as is proposed for the cement and sulfur storage), would add excessive cost to the storage and transfer of other materials (i.e., the bauxite, gypsum and aggregates).

Watering can be made more effective through the addition of soluble dust suppressants into the water. These materials coat the outside of the stored materials, binding small particles that can become airborne to the surface of larger pieces. The Project applicant has indicated that the use of dust suppressants on stored materials would introduce impurities into the stored materials that could interfere with the use of the materials in later processing.

The emissions estimates contained in the DEIR were based upon the water spray dust suppression system that was indicated by the Project applicant. As noted on page 107 of the DEIR, the emissions from this Project are sufficiently high to trigger the requirement of Best Available Control Technology (BACT) for all sources. The actual definition of BACT is evolutionary, but it is likely that the water spray system for materials transport and storage would not constitute BACT or be equivalent to BACT. The estimates of emissions from materials transport and handling in the DEIR should be considered as worst-case estimates.

Comment BAAQMD-3

"The air quality analysis presented in the DEIR estimates that emissions of hydrocarbons (HC) and oxides of nitrogen (NO_x) from transportation sources would be approximately 210 and 1960 pounds per day, respectively. The pollutants HC and NO_x are involved in the formation of Ozone. Because the Bay Area is a non-attainment area for Ozone, the District considers projects that would generate emissions at the levels estimated for the Han-Li Terminal to be highly significant; therefore mitigation would be required. Page S-8 of the DEIR indicates that there are no mitigation measures available or practical for the reduction of transportation-related emissions from the project. However, we note that there are some suitable controls for diesel engines, such as the retardation of fuel injection timing for NO_x control. We strongly recommend that the FEIR contain a discussion on potential mitigation measures for the emissions of HC and NO_x."

Response ES-10: DEIR, Page S-8

It is not practical to specify train, ship or truck emission controls for one specific project. The authority to require emission controls on these sources is given to state agencies.

One measure that could conceivably reduce transportation emissions without "hardware" requirements would be the optimization of all shipments to ensure that all trucks, trains and ships arrive and leave filled.

Comment ANTIOCH-8

"Page S-10: Deleted from Biotic Considerations are impacts on the New York Slough cumulatively analyzed in the food chain after bottom disruption. We recommend a mitigation monitoring program after dredging to analyze the impact including possible impacts on aquatic ecology through both chemical monitoring and biological monitoring. Other industries utilizing New York Slough could contribute to the monitoring program."

Response ES-11: DEIR, Page S-10

Comment noted. A discussion of the potential impacts of the proposed dredging activities on the aquatic resources of New York Slough is provided on pages 140 and 141 of the Draft EIR. Samples of near-shore sediments taken by Harding Lawson Associates indicate that dredging activities would not result in the resuspension of adverse levels of heavy metals or organic compounds, and other adverse impacts attributable to dredging would be temporary. Although the chemical and biological monitoring program recommended in the comment may serve to detect unanticipated adverse levels of heavy metals or organic compounds, it does not appear warranted based on the sampling program conducted by Harding Lawson Associates. The sampling report is still under review and must be determined adequate by the Regional Water Quality Control Board prior to initiation of any proposed dredging activities.

I. INTRODUCTION: RESPONSES

Comment PCOP-96

"Why is there no Systems Safety and Reliability section? In an EIR, this section usually addresses all of the safety question/accident evaluations etc."

Response 1-1: DEIR, Pages 1-2

The materials proposed to be transferred and stored on the Project site are, in most respects, non-toxic, inert products. The Environmental Checklist prepared in initial response to the application for the Use Permit, which defines the scope and content of the EIR, indicated that the Project posed no potential for hazards to human health, and created an indeterminate risk of upsets (see Appendix A, pages A-3 to A-10). The various risks and safety controls relating to the Project are discussed throughout the EIR, in terms of the potential for adverse impact on each environmental domain, such as water, air, biotics, etc. A Systems Safety and Reliability chapter in the EIR would constitute a repetition of large portions of the EIR. The Mitigation, Monitoring and Reporting program, which will be developed following certification of the EIR will define in detail the regulatory requirements of the Project's systems.

Comment PCOP-103

"Why does the EIR give the appearance of apologizing and/or explaining many of the negative impacts re: the project even though several of the impacts sighted(sic) will cause significant negative and lasting impacts and others which are not measurable at this time.(sic)"

Response 1-2: DEIR, Pages 1-2, 4-5

The purpose of an EIR is to identify the potentially significant impacts of a Project, and the means by which those impacts may be avoided or reduced to insignificance, in an objective, impartial and measured fashion. It is felt that the Draft EIR did describe and identify the impacts likely to result from the Project in a complete and accurate manner, and in no way constitutes an "apology" for the Project.

I. INTRODUCTION: RESPONSES

In some instances, Project impacts cannot be avoided or adequately mitigated, and these have been discussed in Chapter X, the Overview of Evaluation (see pages 143-146). The analysis of potential adverse impacts on the environment is not intended to make final conclusions as to the significance or insignificance of an identified impact, although it can and does express the degree to which a potential impact requires mitigation.

Comment PCOP-17

"Who makes the judgement(sic) whether an impact is significant(sic) or insignificant?"

Response 1-3, DEIR, Pages 1-5

Impacts are determined to be significant when a defined threshold is surpassed, such as a level of service for an intersection, a noise level or a concentration of dust particulates. Many thresholds are identified in the Pittsburgh General Plan or in local, regional and state regulations or standards. In some cases, where the basis for evaluation is qualitative rather than quantitative, such as the relative conformance of an activity with a given policy, or the aesthetic quality of a proposed development, the assessment is made by the preparers of the EIR. It remains the responsibility of the Lead Agency decision-makers to accept, modify or reject the indications of significance identified in the EIR.

II. DESCRIPTION OF THE PROJECT: RESPONSES

Comment EBRPD-1

"The EBRPD has reviewed the subject document and offers the following comments. The description of the bio-remediation process being used on property south of the project (p. 8) would appear to be in error. Currently described forms of life use one of two metabolic processes, oxygen reduction or sulfur reduction. Oxygen reduction organisms produce carbon dioxide (CO₂) and water (H₂O). Sulfur reduction metabolism results in the production of oxygen (O₂) and hydrogen sulfide (H₂S). Thus, no currently described organism produces carbon monoxide (CO). If there is, however, such an organism on the property to the south of the project site the air quality analysis of the EIR would require significant augmentation and a new analysis of risks may be required. Carbon monoxide is detrimental to humans and most of the animals present on Brown's Island."

Response 2-1: DEIR, Page 8

Comment noted. See correction noted for page 8 in the Errata sheet. The metabolic product of the bio-remediation organisms should have been shown as CO₂, not CO.

Comment PCOP-2

"What impact will the additional shipping traffic have on current and projected recreational usage of the Delta such as fishing, boating, etc."

Response 2-2: DEIR, Page 13

The Delta and New York Slough shipping channels are currently utilized for transportation of bulk materials. The Project could generate an estimated maximum of 84 ships per year, and may periodically or seasonally load as many as two ships per week. The increase in shipping movements generated by the Project may be moderated in part by the likelihood that the facility operation will result in the transfer of some existing shipping activity from other ports to this site. The impact on recreational boating, current or future, has, therefore, not been rated as significant, and

II. DESCRIPTION OF THE PROJECT: RESPONSES

the possible relocation of shipping activity by the Project may reduce the use of upstream Delta channels by bulk cargo ships.

Comment CCCDD-3

"Figure 5 indicates that several structures in the area will be 90 feet in elevation. While this area is well removed from Buchanan Field airport, recreational flyers are known to fly along the Delta area. A mitigation measure could be proposed to coordinate with the County's Airport Manager's Office to determine if visual aids, e.g. night lights, should be installed."

Response 2-3: DEIR, Page 16

The height threshold for requirements for visual aids for aircraft is a minimum of 200 feet in this area, and therefore night lighting would not be necessary. However, lighting of the towers and rigging of the bulk cargo ships, estimated to be about as high as the Project domes, is required by maritime regulations.

Comment PCOP-35

"Are there elevation drawings of the facility including sightlines(sic)? If so could they please be included in the EIR."

Response 2-4: DEIR, Pages 16, 21, 23

The Project applicant has not provided elevation drawings of the proposed facility.

Comment PCOP-1

"What impact will the additional shipping traffic have on current and project shipping traffic.(sic)"

Response 2-5: DEIR, Page 18

See Response 2-2, above.

Comment PCOP-24

"How will process related effluent Ph(sic) be controlled? (i.e. 'priller' generated water)."

II. DESCRIPTION OF THE PROJECT: RESPONSES

Response 2-6: DEIR, Page 22

The Project applicant has indicated that the priller water will be continuously recycled, using a "fin/fan" evaporation system that is closed, within which all water vapor is recaptured. On the periodic occasions when the priller water is replaced, the pH factor would be modified by the use of liquid sodium hydroxide prior to discharge as wastewater. See also Response 2-7 below.

Comment PCOP-25

"Will caustics be stored on site to be used for pH control. If yes, where, how and how much will be stored."

Response 2-7: DEIR, Page 22

The applicants estimate that a maximum of 100 gallons of caustics (including sodium hydroxide and sodium carbonate) will be stored on the Project site at the detention pond/treatment plant. A condition should be defined for inclusion in the Use Permit which would limit the maximum quantities to be stored at the site to 100 gallons, and which would require these chemicals to be stored in an enclosed structure with a suitable foundation.

Comment PCOP-26

"Is sulfur toxic or hazardous?"

Response 2-8: DEIR, Page 22

Sulphur is neither toxic nor hazardous in a cooled state (under 235 degrees Fahrenheit), and has a low degree of toxicity in its molten state (melting temperature is between 235 and 246 degrees Fahrenheit). Molten sulphur may release hydrogen sulfide, a toxic gas, which can irritate the eyes and respiratory tract at concentrations of 10 to 15 parts per million (ppm), and in concentrations of 600 ppm has resulted in death. Molten sulphur can burn on contact, and particles in eyes would cause temporary pain, swelling and blurred vision requiring immediate first aid treatment. Molten sulphur, however, does not generally form particulate

II. DESCRIPTION OF THE PROJECT: RESPONSES

material, and the quantity of hydrogen sulfide that could be released in the event of a mishap (see Response 2-9 below) would be measured only in parts per billion (ppb), or at a scale one-thousand times smaller than ppm measurements (Ref. MSDS, Thorup). For a more complete description of the hazards associated with molten sulphur, see the Material Safety Data Sheet (MSDS) included in the Appendix attached to this Response to Comments document.

Comment PCOP-76

"Isn't there a chance of a physical explosion when molten sulfur(sic) and water are combined in prilling process.(sic)"

Response 2-9: DEIR, Page 22

There is virtually no possibility of an explosion of molten sulphur occurring in the prilling process, due to conditions under which the sulphur is handled. Sulphur cannot explode unless it is exposed to heat levels in excess of 335 degrees Fahrenheit (100 degrees Fahrenheit above the low end of the melting temperature range), is already in a dry, solid form which could form dust particles, and is ignited by a flame, electrical spark, or a burning ash such as a discarded cigarette butt. In the prilling process, molten sulphur is extruded through a perforated stainless steel plate into bb-sized droplets that are rapidly cooled by the water. The sulphur is retained in a moistened form in the storage dome, and would not be subject to any source of unusual heat (Ref. Thorup).

Comment PCOP-87

"Do trucks release hydrogen sulfide into atmospheres when they are unloading molten sulfur(sic). If so then how much would be released each day.(sic) Please provide calculations and a plume analysis."

Response 2-10: DEIR, Page 22

The unloading process uses an enclosed piping system which will not release gases into the atmosphere. The sulphur line is encased in a hot oil line to maintain the fluid state of the sulphur. Any break in the line would result in

II. DESCRIPTION OF THE PROJECT: RESPONSES

an immediate system shutdown because the sulphur would quickly stop flowing, as it cooled to its non-molten temperature. The stoppage in the flow would prevent further atmospheric release. The amount of hydrogen sulfide which could potentially be released would be measured in parts per billion or parts per trillion, and would be wholly undetectable beyond a distance of ten feet from the point of discharge (Ref. Thorup). See also Response 6-3 below.

Comment PCOP-97

"What is the water usage for cooling pool (priller)? pg. 22"

Response 2-11: DEIR, Page 22

The sulphur priller has a water capacity of 125 gallons, of which approximately 17½ gallons per day is consumed by the process. An estimated four percent is absorbed by the sulphur, and about 10 percent evaporates.

Comment CALTRANS-9

"The DEIR should explain the origins and destinations of the truck and train trips arriving and leaving the facility."

Response 2-12: DEIR, Pages 24-8

The truck and train trips will disperse throughout the Bay Area and the Central Valley regions, the distribution of which is undetermined. The EIR has considered traffic impacts of the Project as these affect Highway 4 in the Pittsburg vicinity. It is difficult, if not impossible, to extend these analyses to the wider region, in the absence of clearly defined target customers/markets, which can be expected to be subject to fluctuations and change on a continuous basis in response to business conditions. The number of truck movements is not sufficiently large to have measurable or perceptible effects on projected traffic conditions in the regional circulation system beyond a limited distance from the Project site.

Comment ANTIOCH-9

"Lacking are exhibits showing railroad lines and current train movements and projected increases in train movements."

II. DESCRIPTION OF THE PROJECT: RESPONSES

Impacts at grade road crossings and residential neighborhoods are glossed over but not specifically identified."

Response 2-13: DEIR, Pages 24-8

The Project will primarily increase the number of loaded train cars rather than actual train movements. There are no at-grade road crossings in the Pittsburg area, outside of the Project site. Train movement impacts are determined to be insignificant for these reasons.

Comment ANTIOCH-10

"Where do items handled at the facility come from and where are they destined? Are there existing facilities in the area, including the Ports of Stockton, Sacramento, and Oakland that currently handle similar materials so that this facility will duplicate a service already being provided elsewhere?"

Response 2-14: DEIR, Pages 24-8

The proposed Project facility will compete in some aspects with port facilities such as those named in the comment and may, to an undetermined extent, increase, replace or consolidate some of the bulk material handling operations currently carried out in those existing port facilities. See also Response 2-12, above.

Comment CONC-1

"The project description for the Environmental Impact Report for the Han-Li project lists scrap metals as one of the 'bulk' commodities that Han-Li will be handling at its project site. Unlike other bulk commodities to be handled, the scrap piles will be exposed, uncovered and very unsightly. Handling, loading and unloading scrap piles involves cranes, magnets, ships, etc. and is an extremely noisy operation."

Response 2-15: DEIR, Page 25

Comment noted. The scrap metal materials handled by the proposed Project are not intended to be stored on the site but would be hauled directly from existing nearby scrap metal storage areas and transferred to waiting barges, as described on page 25 of the DEIR.

II. DESCRIPTION OF THE PROJECT: RESPONSES

Comment ANTIOCH-11

"What impact will ship turning have on the turning basin located off Antioch? Will channel modifications be necessary due to movements?"

Response 2-16: DEIR, Page 26

No impacts from ship turning movements have been identified, and no channel modifications should be necessary. The type of bulk cargo ships which would utilize the Project facility are similar to those already using these channels.

Comment PCOP-30

"How much 'lignin sulfonate' will be used? What is the potential impact of this material on water quality, air quality, vegetation(sic), and animal life?"

Response 2-17: DEIR, Page 26

The Project applicants did not provide a specified quantity of lignin sulfonate to be used. This material is in widespread use by the U.S. Forest Service and other users. The material, as described on page 26 of the DEIR, is an organic compound by-product which is determined to have no environmental impact on water, air or biotic conditions.

Comment PCOP-98

"Can the dredged material be compacted to 80% relative density? Is 80% sufficient for monolith domes, buildings, etc.? What about earthquakes? pg. 26"

Response 2-18: DEIR, Page 26

The Project applicants certify that compaction to 80 percent relative density can be obtained, in compliance with engineering and building codes. Earthquake-resistant engineering of foundations and pier pilings will be required.

Comment PCOP-20

"What are the titles of the 18 jobs created? What level of education is required? How many will be hired locally?"

II. DESCRIPTION OF THE PROJECT: RESPONSES

Response 2-19: DEIR, Pages 26-8

The specific titles and educational requirements for the facility's employees have not been identified but it is anticipated that the majority of the positions will be for equipment operators. However, this information is not closely related to the environmental impact of the proposed Project. As indicated in the DEIR on page 66, the City may pursue means to incorporate the Project site into its Enterprise Zone, in order to provide incentives for hiring employees from areas of high unemployment in the City.

Comment PCOP-34

"What are the potential environmental impacts for a rail accident?"

Response 2-20: DEIR, Pages 26-8

The materials which will be transported by rail to and from the proposed Project are all non-toxic and generally inert materials. The railroad operations associated with the Project present no greater risk of accidents than existing rail traffic, and an accident involving a spill of these materials would not produce environmental hazards.

Comment PCOP-47

"What will be the total amount of solid waste generated? Please include bag filters, silt, plastic used to cover piles, etc.? How will these wastes be classified? What is the impact on landfills?"

Response 2-21: DEIR, Pages 26-8

The amount of solid waste which would be generated by the proposed facility has not been quantified or classified. However, there is no reason to expect the Project to produce waste materials in either substantial volumes or of a hazardous character. Because no processing, packaging or manufacturing is proposed to take place on the Project site, the Project would produce very limited solid waste, compared to other industrial activities that process materials into products.

II. DESCRIPTION OF THE PROJECT: RESPONSES

Comment PCOP-88

"What percentage of businesses and products that the project proposes to supply are already being supplied in the bay area at other sites.(sic) Are they really going to create new jobs in this community or are they just relocating employment from one place to another.(sic)"

Response 2-22: DEIR, Pages 26-8

The information requested in the comment is not available, and would not contribute to identifying the impacts of the proposed Project. See also Responses 2-12, 2-14 and 2-19, above.

Comment CCCCDD-1

"A major area which hasn't been addressed is the issue of marine safety. This project will bring additional cargo ships into the Bay and into New York Slough. What is the estimated draft of the ships involved? Will additional dredging of waterways be required beyond the bank protection dredging shown on Figure 11? The Final EIR needs to address if any marine safety issues are involved with this project."

Response 2-23: DEIR, Page 27

The Project will only marginally increase the amount of cargo shipping in the Delta and San Francisco Bay because the Project generally seeks to compete with existing bulk material handling operations. Increases in overall shipments will be related to the growth in the regional markets resulting from increases in population and economic activity. The estimated draft of the bulk cargo ships is 36 feet (see page 26 in the DEIR), which will not require any additional dredging other than that defined in the DEIR. Marine safety risks associated with the Project have not been considered to be significant.

Comment PCOP-99

"Dredging 150'-200' wide versus FIG 11 pg. 27 which shows 100' wide. pg. 87"

II. DESCRIPTION OF THE PROJECT: RESPONSES

Response 2-24: DEIR, Page 27

The distance between the pierhead line (the edge of the shipping channel) and the Project site shoreline varies between 150 and 200 feet. Figure 11 is a typical cross-section, and not a representation of the entire area to be dredged.

Comment PCOP-28

"How was the 15,000 Gal/day of water for dust suppression derived (pls. provide calculations)"

Response 2-25: DEIR, Page 28

The Project applicant did not provide calculations for establishing this figure for water requirements. It was derived from information on existing bulk material handling facilities.

Comment PCOP-23

"Who would pay for installing utilities?"

Response 2-26: DEIR, Page 29

As described in the DEIR, page 29, an assessment district would be established for the financing of water, sewer, street and power facilities to be installed in the area. Preliminary planning for the assessment district is described in Appendix A, pages A-11 to A-16.

Comment BHPHA-1

"Should the 3rd Street extension be completed prior to construction of the project to mitigate the amount of truck traffic on Harbor Street and Railroad Avenue during and after construction?"

Response 2-27: DEIR, Page 30

Improvements to 3rd Street from Harbor Street to the Project site and to the GWF site will be necessary prior to any major construction on either of the two sites, as well as the establishment of the proposed assessment district, to

II. DESCRIPTION OF THE PROJECT: RESPONSES

provide the financial means of implementing those improvements. The street improvements must be coordinated with the previously approved realignment of the intersection of Harbor and Third Streets (see page 30 in the DEIR). Planning for the proposed truck bypass route must be resolved prior to the implementation of any of the street improvements considered for the general area of this intersection.

II. DESCRIPTION OF THE PROJECT: RESPONSES

(This page has been purposely left blank.)

III. PLANNING AND POLICY CONTEXT: RESPONSES

Comment PCOP-21

"What are the planning and policy conflicts between the proposed Project and the subarea it will be in (i.e. subarea 1)? Rather than applying policies for the adjacent subarea (i.e. subarea 2). (ref. pg 33)"

Response 3-1: DEIR, Pages 31-3

Refer to Chapter III, Planning and Policy Context, for discussion of the sub area boundaries and their corresponding policies, particularly on page 33 in the DEIR.

Comment PCOP-22

"If adjacent subarea guidelines are to be applied why were conflicts with subarea 14 not identified and/or applied?"

Response 3-2: DEIR, Page 31-3

See Response 3-1, above.

Comment PCOP-86

"Why are 80' domes being proposed when there is a 50' height limit in the zoned area. Why does the EIR not address these issues. Why are not all piles of aggregate sand, bauxite and limestone etc. put in domes to avoid furtheraggregat-ing(sic) an already intollerable(sic) particulate air pollution problem. Are there not other mitigations that would better represent Best Available Technology. Example; cover the entire operation(sic)."

Response 3-3: DEIR, Pages 52, 105-7

The height of the domes is required to achieve the storage capacity objectives of the Project. The height restrictions of the zoning district are discussed in the DEIR on page 52, and the variance and acceptability of the Project with regard to those limits is described on page 63.

The Project applicant has indicated that a domed enclosure for materials currently proposed for open storage would add

III. PLANNING AND POLICY CONTEXT: RESPONSES

excessive cost to the handling of those particular materials. See also Responses ES-9, above, and 6-20, below.

Comment ANTIOCH-12

"An Economic Feasibility Analysis should be requested by the City of Pittsburg and reviewed by City Staff to determine the cost and benefit to the City prior to approval. It appears the return to the City will be minimal whereas a use employing more people and making a product, not a shipping and storage facility, would be consistent with the City General Plan and provide a better economic return."

Response 3-4: DEIR, Page 60

Comment noted. Refer to Chapter III, Planning and Policy Context, page 60, for discussion of the character of the Project with respect to the objectives of the General Plan. The proposed Project, while not employment-intensive, takes greater advantage of the transportation-related potential of the site than would a manufacturing use. Manufacturing uses would be unlikely to require as frequent water- or rail-borne movement of materials and products as the proposed Project. See also Response 2-21, above.

Comment PCOP-85

"The General Plan calls for the area to be developed with high technology labor intensive clean industries. The EIR admits that this project doesn't meet these requirements. How does the EIR conclude that it meets the General Plan."

Response 3-5: DEIR, Page 60

See Response 3-4, above.

Comment PCOP-31

"Is the proposed facility contrary to the general plan?"

Response 3-6: DEIR, Pages 60-63

The Project is neither wholly inconsistent nor in total conformance with the Pittsburg General Plan, but has various aspects that promote some objectives while not promoting

III. PLANNING AND POLICY CONTEXT: RESPONSES

others. Therefore, the question can not be answered yes or no. See also Response 3-4, above.

III. PLANNING AND POLICY CONTEXT: RESPONSES

(This page has been purposely left blank.)

IV. TRAFFIC AND CIRCULATION: RESPONSES

Comment PCOP-4

"When and where were the 'counts' made referenced in the last paragraph of pg. 70."

Response 4-1: DEIR, Page 70

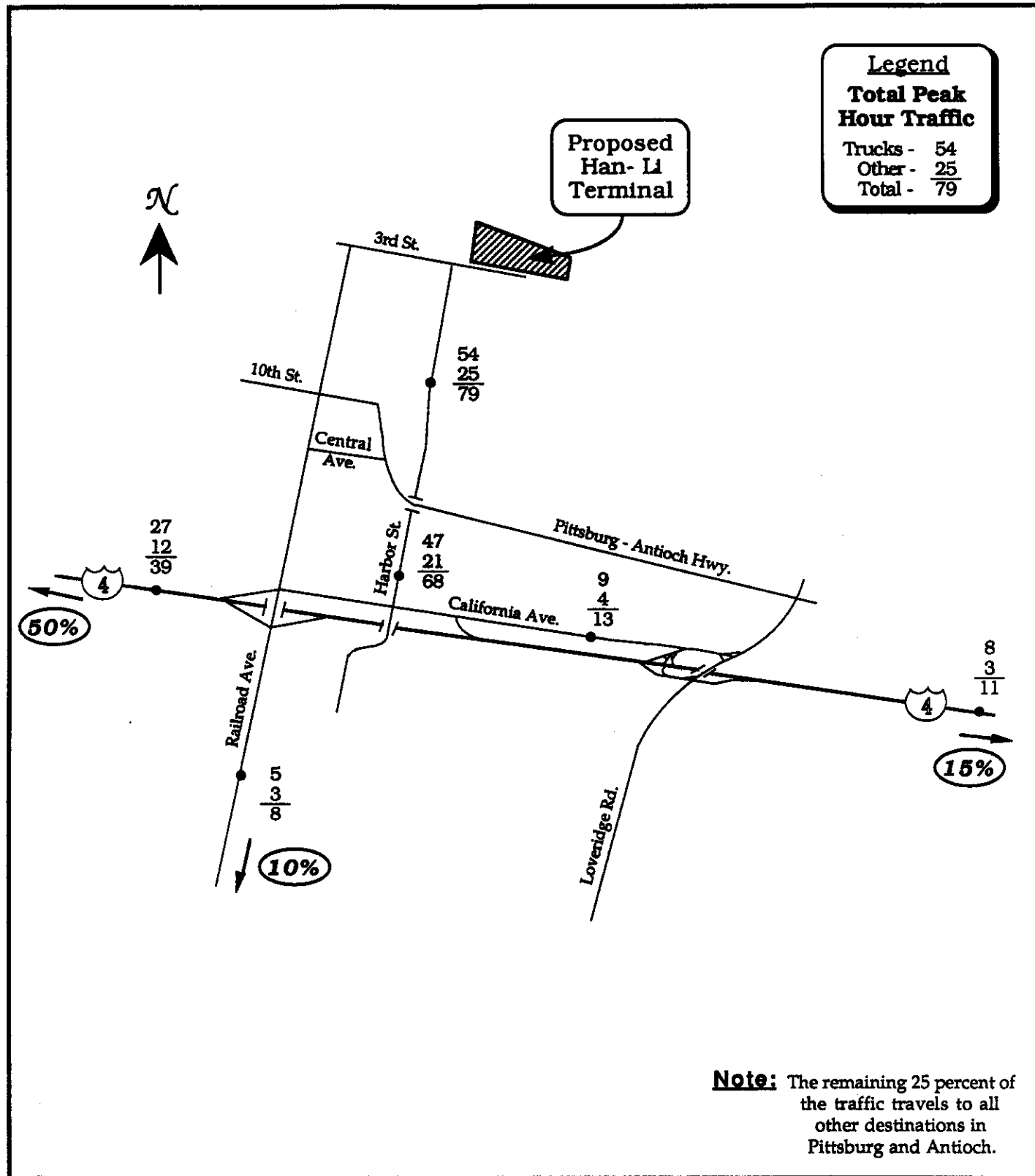
The counts were made during the fall of 1989 at each of the affected intersections noted in the Draft EIR. The data on the counts were included in Appendix "C" of the Draft EIR. Counts from other recent traffic studies in the City of Pittsburg were also used, including the Bulk Handling Distribution Center Traffic Impact Analysis (Ref. 52) and the Downtown Specific Plan Circulation Study (Ref. 54). The traffic counts on Harbor Street at 3rd Street, 10th Street, and California Avenue were taken by Abrams Associates.

Comment CALTRANS-8

"The trip distribution and assignment and its methodology should be clearly stated. The DEIR should explain the origins and destinations of the truck and train trips arriving and leaving the facility."

Response 4-2: DEIR, Page 72

Figure RC-1 provides additional detail on the assumptions that were made regarding trip distribution and assignment for the roadways in the immediate area of the Project. The estimates of trip distribution were based on descriptions of the Project that have been provided by the applicant, such as likely destinations for various materials. The truck trips were then assigned to the various roadways. The assumptions are that 50 percent of all truck traffic would use Highway 4 toward the west, 10 percent would use Railroad Avenue toward Concord and Clayton, and 15 percent would use Highway 4 toward the east. The remaining traffic would travel on other streets in Pittsburg and Antioch, largely toward other industrial areas. While the locations of truck destinations are somewhat speculative, these assumptions were confirmed by the applicant to be a reasonable approximation of the likely travel patterns from the Project site.



Han - Li Terminal
 City of Pittsburg
 EIR Traffic Impact Study

Figure RC-1
Traffic Distribution and Assignment
 Abrams Associates

IV. TRAFFIC AND CIRCULATION: RESPONSES

Comment PCOP-19

"What is the hourly distribution of the 33 trucks not traveling between 6:00am and 5:00pm. (ref. table on pg. 75 'remainder of day=33')"

Response 4-3: DEIR, Page 75

The 33 trucks traveling between the hours of 5 p.m. and 6 a.m. represent only six percent of the total truck trips generated by the proposed action. These truck trips would likely occur very close to the opening or closing times of the facility's operating hours. It should be noted that the number of trucks during any given hour of the off-peak period would have an imperceptible effect on traffic operations.

Comment CALTRANS-1

"Although the DEIR has recognized the negative impact of the increased truck traffic on Route 4 and freeway ramps, the document neglects to include appropriate mitigation measures to lessen the adverse effects caused by this increased traffic on Route 4."

Response 4-4: DEIR, Page 76

Comments noted. The peak period impacts on Highway 4 can be mitigated to a less than significant level by restricting truck travel during these periods. Impacts during other times of the day can be mitigated to some degree by the measures noted on page 70 of the DEIR, but not entirely. No matter what the size of the Project, there will be some impacts to Highway 4, due to additional truck trips. These off-peak traffic capacity impacts and truck impacts on Highway 4 were rated as not significant in the Draft EIR, given the numerical relationship between the incremental trips and existing/projected overall volumes.

Comment CALTRANS-11

"The Average Daily Traffic figures shown in figure 27, on page 76 for the State Route 4/Railroad Avenue Interchange, have included a low estimate. Accurate figures can be found in the publication titled Ramp Volumes on California State Highways."

IV. TRAFFIC AND CIRCULATION: RESPONSES

Response 4-5: DEIR, Page 76

Caltrans data indicate that the ADT volumes for the on-ramp and off-ramps at Railroad Avenue and Highway 4 are higher than those shown in the EIR. The EB on-ramp is measured to be 6,300 vehicles per day by Caltrans, as compared to 4,800, which is shown on page 76 of the EIR. Similar differences were noted for other ramps. These differences, while significant, do not affect the conclusions in the EIR. The intersection capacity data are based on peak hour turning movement counts, which come from other sources, described in Response 4-1, above.

Comment PCOP-5

"Traffic volume impacts for Railroad Ave. were not addressed in the DEIR. What are the traffic volume impacts for Railroad Ave. since it is identified as one of the routes proposed to be used. (ref. fig 27 pg. 76)"

Response 4-6: DEIR, Page 76

Railroad Avenue and 10th Street will have relatively limited impact from Project-generated truck trips, amounting to between 10 and 15 percent of all truck trips, or from about 50 to a maximum of 80 trips per day. Although Figure 23 in the DEIR shows these street segments as Primary Truck Routes, Figure 23 is an illustration of City-adopted truck routes, not the primary truck routes to be used by the Project operation. Most of the truck traffic on these street segments will be en route to or from local destinations not requiring the use of Highway 4.

Comment PCOP-6

"What is the estimated distribution of trucks on ALL proposed routes."

Response 4-7: DEIR, Page 76

The distribution is shown on Figure 27 of the DEIR. Figure RC-1 shows the number of truck trips and other traffic that are estimated to occur during the hours of 10 and 11 a.m. on a typical weekday. This is predicted to be the highest

IV. TRAFFIC AND CIRCULATION: RESPONSES

hourly truck traffic that would be generated by the Project. These data are also discussed on page 74 of the DEIR. The truck trips are shown in Figure RC-1 as two-way total of both directions of traffic. (Also see Response 4-6, above.)

Comment CALTRANS-10

"The Pavement Deterioration Impacts section of page 77 should include a thorough analysis of Traffic Indexes for Route 4 and the highway ramps in the project vicinity. The DEIR discussion on this subject is very limited and should be expanded."

Response 4-8: DEIR, Page 77

An analysis of Highway 4 should not be required. As a State Highway, it has been designated as a truck route, and it is assumed that it has been designed and built to accommodate the maximum truck loads that are allowed under state law. See also Response ES-2, above.

Comment PCOP-7

"What is the impact on Hwy 4 especially at Willow Pass please include future developments in the calculations. (sic) Please address the level of service, road capacity, road wear, and potential improvements needed to the highway as a result of the increased traffic."

Response 4-9: DEIR, Page 77

The Project will result in an estimated total of 270 trips per day, traveling over Willow Pass on Highway 4. This represents one-third of one percent of the existing Average Daily Traffic at Willow Pass, which is approximately 79,000 vehicles per day. The Contra Costa General Plan identifies the Willow Pass grade as currently having Level of Service "F" for a.m. westbound and p.m. eastbound peak-hour traffic, but no LOS is given for the off-peak hours, when it is assumed there will be adequate capacity and an acceptable LOS to absorb the number of Project-generated trucks on Highway 4. Road wear from the Project-generated truck traffic will be undetectable, relative to either existing or projected total traffic volumes. Also see Response ES-2, above.

IV. TRAFFIC AND CIRCULATION: RESPONSES

Comment PCOP-8

"Who would pay for 'reconstruction (of major access routes) to the Han Li Project to achieve a TI of 9.5'."

Response 4-10: DEIR, Page 77

Han-Li will share in these costs in a manner to be determined by the City of Pittsburg in their conditions of approval, and by use of the required assessment district which is in preliminary planning stages.

Comment PCOP-9

"What is the cost for reconstruction of major access routes to achieve a TI of 9.5."

Response 4-11: DEIR, Page 77

These costs will be known when further studies are prepared for the assessment district required for street, sewer and water improvements. The financial responsibility will be determined by the City of Pittsburg, and the cost proportions will be allocated by the City.

Comment PCOP-10

"If reconstruction of major access routes is a requirement then what is the environmental impact of the reconstruction of the major access routes to achieve a TI of 9.5."

Response 4-12: DEIR, Page 77

The reconstruction of specific roadways identified in the DEIR is not considered to have significant environmental impacts. Some detours would probably result but this type of work is consistent with ongoing street maintenance, repair and construction work. The need for the reconstruction work is partly based on other industrial development projects in Pittsburg, and would be subject to some environmental review as part of the proposed assessment district.

Comment PCOP-18

"What is the maximum speed attainable for a truck and trailer up Hwy 4 at Willow Pass when the truck is loaded with

IV. TRAFFIC AND CIRCULATION: RESPONSES

materials to be transported by this project? If this speed is less than 55mph how will these trucks affect the traffic on Hwy 4 at Willow Pass especially during commute hours."

Response 4-13: DEIR, Page 77

The maximum speed attainable for a truck and trailer traveling up the grade on Highway 4 is dependent upon many variables and would likely not be the same for any two given trucks. Factors include truck type, weight, engine horsepower, truck condition, ambient traffic flow and even driver temperament. This makes it impossible to develop a maximum speed which could be universally applied to the majority of trucks. Many trucks can maintain the speed limit, while others may slow to as low as 35 mph. The effect that slower moving trucks have on traffic flow is considered in the capacity analyses through the truck equivalency adjustment factor. The grades on both approaches to Willow Pass have additional lanes for the use of slow-moving vehicles, in recognition of the problems such vehicles present for through traffic, although these lanes are not specifically designated for this purpose.

Comment PCOP-11

"Is a truck equivalency factor of 3 used to calculate Project traffic impacts based on a loaded truck or empty truck? (ref. pg. 79 paragraph 2)"

Response 4-14: DEIR, Page 79

The truck equivalency factor is an average value, based on numerous studies of the effect of an average truck on the traffic stream. It is a general factor, and is not based on whether the truck is loaded or not, but rather on roadway grade, type of truck, roadway geometry (i.e., number of lanes, etc.), and general vehicle mix of the traffic flow. The truck equivalency factor is used to convert Vehicles Per Hour (VPH) to Passenger Car Equivalents Per Hour (PCPH) for capacity analysis computations. The truck equivalency adjustment represents the number of passenger cars that would occupy the same percentage of the freeway's capacity as one truck under given roadway and traffic conditions. Several studies have been conducted to ascertain the effects of heavy truck traffic on roadway operations and the data are

IV. TRAFFIC AND CIRCULATION: RESPONSES

presented for typical truck categories. The data do not make reference to the cargo status. The choice of the truck equivalency factor to be used in traffic analyses is based on professional references and judgment.

Comment PCOP-15

"What is the environmental impact of a truck accident and/or turnover of a truck when the truck is carrying molten sulphur?"

Response 4-15: DEIR, Page 79

In the event of an accident involving a truck loaded with molten sulphur, the environmental impact could be significant in three regards. First, the molten sulphur, if released from the transport container and spilled on to the roadway, would solidify as it cooled to its non-molten solid temperature, after bonding to the roadway surface. In the case of concrete roadways, the sulphur would settle into cracks before solidifying, thus requiring the material to be first scraped off by a grader, and then possibly sprayed by a water cannon to remove remaining spilled material. In the case of asphalt roadways, the bonding is more complex, and typically requires replacement of the affected asphalt. However, the amount of area affected would be limited due to the rapid cooling of the sulphur to non-molten temperatures. The State Department of Transportation, which would be responsible for the cleanup, would assess fines and cleanup/repaving costs to the trucking company and/or their insurer. The Project applicants would not be directly responsible for cleanup costs, because the proposed facility will contract for trucking services rather than manage and operate the trucks.

A second potential impact of a truck accident involving molten sulphur would involve the release of hydrogen sulfide, a toxic gas which irritates eyes and the respiratory tract. The dangers associated with this gas are discussed in greater detail in Response 2-8, above, and in the Material Safety Data Sheet (MSDS) for molten sulphur included in the Appendix attached to this Response to Comments document. The amount of the hydrogen sulfide which would be released under these conditions would be limited due to the relatively small amount of sulphur which a truck is capable of carry-

IV. TRAFFIC AND CIRCULATION: RESPONSES

ing, but in calm weather with a temperature inversion, the gas could require an emergency response from the appropriate local fire department. Each department is required to have trained personnel and effective means of extinguishing or controlling a release of this kind. Although downwind areas should generally be cleared, evacuation of nearby residents may or may not be required, depending on the severity, location and wind conditions around the fire

The third potential environmental impact could arise from the possibility that the material, which is transported in a sealed condition that prevents it from igniting (by the absence of oxygen), were to be spilled and doused with flaming truck fuel, causing it to ignite. This is generally the only circumstance under which the sulphur could ignite. The fire would produce sulphur dioxide and potentially small amounts of sulphur trioxide, from the combustion of (and elimination of) the hydrogen sulfide. These by-product gases also irritate the eyes and respiratory tract, and are classed as toxic air pollutants. An emergency response equivalent to that described above would be necessary.

It may be noted that federal regulations do not require trucks carrying molten sulphur to bear placards indicating the shipment is toxic or hazardous, such as are required for fuel tanker trucks.

Because the proposed Project operation would transfer existing truck shipments of molten sulphur from other routes to routes serving the Project site, there may be an increase in the localized risk of an accident, although the Project in and of itself would not be likely to result in any general increase in the risk of an accident. However, the accident risk and likelihood of severe damage of the kind that would release and ignite molten sulphur is extremely low, due to the reduced speeds on the local streets that the proposed facility would utilize. The recommended truck bypass would greatly reduce the risk of such an accident occurring within a residential area.

Comment PCOP-95

"What is the turning radius needed for a 45' truck to make that 90' turn at California and Railroad without interfering with on coming(sic) traffic. Where is the appropriate traffic study in the EIR to address this problem."

IV. TRAFFIC AND CIRCULATION: RESPONSES

Response 4-16: DEIR, Page 79

These parameters are described in the Caltrans Highway design Manual. Generally, about a 30-foot curb radius is required. The design of this mitigation will be reviewed and approved by the City of Pittsburg. The intersection of California and Railroad is among those intersections defined in the DEIR as inadequate and which the DEIR recommends for improvement, the costs of which are to be shared by the applicant, other industrial uses which generate substantial truck traffic, and the City of Pittsburg.

Comment CALTRANS-2

"Page 81 of the document states that significant traffic impacts will occur on Highway 4 and at the freeway ramp intersections. The DEIR, however, states that with the implementation of a truck route bypass from Third Street to Highway 4, most of the traffic impacts of this project can be mitigated. The truck bypass will not, in any way, mitigate the impact of truck traffic on Highway 4. It would only alleviate the impacts of traffic on surrounding residential neighborhoods. Route 4 would still be negatively affected by the large number of truck trips generated by this operation."

Response 4-17: DEIR, Page 81

Comment acknowledged. Additional truck traffic will be added to Highway 4 as a result of this Project. The DEIR states that the truck route will mitigate Railroad Avenue and local street problems in the City of Pittsburg. Highway 4 on- and off-ramp impacts will be lessened by this truck route because the trips will use the Loveridge interchange, where there is more capacity and less congestion than at Railroad Avenue. As noted, restricting trucks to off-peak time periods will mitigate the peak hour capacity problems to a less than significant level.

Comment PCOP-12

"What is the level of service for the Harbor/School St. intersection when school is in session and when dismissed, please take into account heavy pedestrian traffic using the crosswalks."

IV. TRAFFIC AND CIRCULATION: RESPONSES

Response 4-18: DEIR, Page 81

The existing traffic levels on Harbor Street are quite low during the non-peak hours when the school is assembling, in session and at dismissal. Therefore, the Level of Service would remain at "A", regardless of pedestrian traffic, which is concentrated at brief intervals during the day.

Comment PCOP-13

"What is the risk for an accident involving Project related traffic and students?"

Response 4-19: DEIR, Page 81

The potential for an accident involving Project-related traffic and students would not be expected to differ from the accident potential of other components of the traffic stream. The increased risk would result from the higher truck volumes on the subject roadways and the greater stopping distances associated with heavy trucks. Pedestrian and bicycle safety impacts are discussed on page 81 of the DEIR. Proper signage in the vicinity of the school -- to alert both drivers and pedestrians -- and driver and student education regarding the potential hazards, could serve to minimize the potential risk. The recommended truck bypass route would mitigate this impact.

Comment PCOP-14

"How many pedestrians cross the Harbor St. crosswalks at School St. during school session and dismissal? What will be the impact on this pedestrian traffic when Project related trucks are in operation?"

Response 4-20: DEIR, Page 81

A crossing guard controls this intersection during the time periods before and after school. Counts of the number of pedestrians are not available at this location, but conditions indicate that the Project-generated truck traffic may significantly impact pedestrian safety, as noted on page 81 of the DEIR. (Also, see Response 4-19, above.) The risk of an accident involving Project-related traffic and students

IV. TRAFFIC AND CIRCULATION: RESPONSES

would not be expected to differ from the accident potential of other components of the traffic stream.

Comment PCOP-91

"What studies have been done on the possible danger to children who must cross Harbor St. to get to available recreation i.e. the show, roller rink, coming soon(sic), bus transportation etc. Especially during non school hours when no crossing guards are on duty on Harbor St. Was this considered?"

Response 4-21: DEIR, Page 81

No special studies have been done as a part of this EIR. (See Responses 4-19 and 4-20, above.)

Comment CALTRANS-13

"The environmental document should include a discussion of the financing, scheduling, implementation responsibilities and monitoring of all mitigation proposed for this development. This information was requested in our response to the Notice of Preparation in our letter dated September 13, 1989 and included in pages A-22 and A-23 of the DEIR."

Response 4-22: DEIR, Pages 81-4

Much of this discussion with regard to the description of traffic mitigations has been included in the DEIR, where it is available. Following certification of the EIR by the Lead Agency, the Project application will be reviewed and a decision rendered. If the Project is approved as submitted, modified or conditioned, the City of Pittsburg will define the scheduling of the mitigations and financing arrangements regarding the distribution of fiscal, regulatory and implementation responsibilities, including the monitoring and reporting procedures to be followed.

Comment CALTRANS-3

"The spreading out of the truck traffic among several routes will lessen the impact on the city's roads and on the residential neighborhoods; however, this measure will not mitigate the impacts to State Route 4 or the affected highway ramps."

IV. TRAFFIC AND CIRCULATION: RESPONSES

Response 4-23: DEIR, Page 82

Comment acknowledged. See also the response to Caltrans-2. Highway 4 impacts will be lessened by this mitigation because some trucks will use the Loveridge interchange, where there is more capacity and less congestion than at Railroad Avenue. However, Highway 4 itself will be impacted by this development.

Comment MTC-2

"Pavement Deterioration. The DEIR recommends as a mitigation measure that the applicant participate in the cost of upgrading and improving pavement sections of roads used for truck traffic as determined by a future study. We suggest that the freeway on and off ramps at Railroad Avenue and Highway 4 be included in the network of road surfaces to be studied. The distribution of costs according to relative impacts by different users as suggested on p. 82 could be applied to the freeway ramps as well."

Response 4-24: DEIR, Page 82

Comment acknowledged. See also Response 4-7, above.

Comment MTC-3

"Proposed Truck Bypass Route. The DEIR discusses the possibility of constructing a bypass route to reduce truck traffic on the Railroad Avenue/Route 4 interchange. The DEIR also suggests that truck traffic should be limited to 80 trucks per day until such a bypass route would be built. It is not clear how the suggested maximum number of trucks was calculated. The DEIR should describe how this potential limit was estimated and what are the factors which could allow it to rise or fall."

Response 4-25: DEIR, Pages 82-3

The suggested maximum number of trucks of 80 per day noted on page 83 of the EIR was chosen only as an example. The exact number could be chosen based on road capacity constraints, pavement conditions or other factors. However, it is difficult to define subjectively a precise number since

IV. TRAFFIC AND CIRCULATION: RESPONSES

there are so many variables. The total number of truck trips is estimated to be as high as 271 trucks per day at full buildout. A limit such as 80 truck trips per day would permit the Project to be started, but would limit full development until the truck bypass route is actually implemented. Caltrans has offered to assist the City in objectively determining the appropriate number of trucks.

Comment CALTRANS-12

"The rail transportation element of this project has not been properly discussed. Because railroads can transport large quantities of bulk material in a single trip, Caltrans believes that increased rail use should be explored and considered as mitigation in order to minimize the number of trucks needed to transport materials to and from the terminal.

"In addition to alleviating the impacts to the State Highway system, the increase of rail use would also lessen the air quality impacts caused by this project. The feasibility of increased railroad use should be analyzed with consideration of the possible cost of mitigation to State highway facilities."

Response 4-26: DEIR, Pages 82-4

Comment noted. The Project applicants have indicated that their long-range (5-10 years) plan is to shift material handling from trucks to trains and barges. The projected 56,400 truck trips per year are expected to be reduced by approximately one-quarter to an estimated 43,000 truck trips per year. Most of this decrease is expected to be achieved from use of rail cars and barges which are designed specifically for transporting cement. However, the increased use of rail or barge transport does not change the conclusions of the EIR for recommended mitigation measures.

Comment CALTRANS-4

"The scheduling of truck traffic to avoid weekday commute hours is considered the most effective mitigation measure. Route 4 is experiencing periods of intense congestion, therefore, no truck trips should take place during the AM and PM peak hours. Caltrans is in support of scheduling of

IV. TRAFFIC AND CIRCULATION: RESPONSES

trucks during the evening and early morning hours. This type of scheduling, however, should remain in place even after the proposed truck bypass has been constructed."

Response 4-27: DEIR, Page 84

Comment acknowledged. This restriction will have to be considered by the City of Pittsburg in defining the conditions of approval. Retaining, lifting or revising the limit upon completion of the bypass may be considered, subject to traffic analysis and consultation with Caltrans.

Comment CALTRANS-5

"The mitigation measure which recommends limiting the number of truck trips generated by the terminal would lessen the impacts on both the residential neighborhoods and on Highway 4. The document states that a figure for the maximum number of trips should be agreed upon. Caltrans is interested in providing assistance in calculating an agreeable figure. We believe that this mitigation measure should also remain in place after the truck bypass has been built."

Response 4-28: DEIR, Page 84

Comment acknowledged. The City of Pittsburg should obtain assistance from Caltrans in establishing an appropriate limit as part of the conditions of approval. Also see Response 4-27, above.

Comment CALTRANS-6

"Page 84 of the environmental document States(sic) that limiting the number of truck trips leaving the terminal between 6:30 to 8:30 AM and between 4:00 to 6:00 PM would be sufficient to mitigate the impact on Highway 4 to a less than significant impact. This statement would only be true if the number of trucks traveling during those times is limited to zero, and if there is sufficient capacity in the off peak hours."

Response 4-29: DEIR, Page 84

Comment acknowledged. As stated above (e.g., Responses 2-12, 4-4, 4-9, among others), the Project will generate addi-

IV. TRAFFIC AND CIRCULATION: RESPONSES

tional truck trips that will impact travel on Highway 4. It is recognized that Highway 4 is subject to congestion and delay, especially during peak hours, and that programmed or proposed improvements are in part intended to remedy existing capacity deficiencies. Every new residential unit, retail facility, office use or industrial facility, or expansion of existing structures or activities in north, east or central Contra Costa County (and other areas) is likely to add an increment to the traffic volumes using Highway 4. The impact of the proposed Project on Highway 4 should be subject to the same standards of evaluation and the same requirements or restrictions as any other project contributing increments of demand on the limited capacities of infrastructure.

The numerical relationship between the number of vehicles the Project would be likely to add to existing or projected traffic volumes at the peak hours, off-peak hours or to overall average daily traffic is relatively insignificant in size, and the effects are not likely to be perceptible to the users of Highway 4. It is estimated that the Project will generate daily vehicle trips likely to use Highway 4 amounting to about one-half of one percent of the current volumes on that route in the Pittsburg area.

Comment CALTRANS-7

"The mitigation measures discussed on page 84 also mention that impacts to Highway 4 would also be mitigated to some extent by the implementation of highway projects that will widen Route 4. Please be advised that previously approved highway projects are not to be used as mitigation for this or other proposed developments. Projects such as the widening of Highway 4 and the lowering of the Willow Pass Grade are intended to relieve existing congestion, not to mitigate this specific project's impact on the state transportation system. The Lead Agency is responsible for mitigating impacts to State highway facilities."

Response 4-30: DEIR, Page 84

Comment acknowledged.

IV. TRAFFIC AND CIRCULATION: RESPONSES

Comment PCOP-3

"What will be the impact of truck traffic from Railroad Ave. to 10th St. How will the additional traffic affect the 'primary access to the downtown, civic areas, and marina' pg. 84 of DEIR."

Response 4-31: DEIR, Page 84

Refer to Response 4-6, above. The impact on Railroad Avenue with regard to access to the downtown, civic center and marina as a result of Project-generated traffic will not be significant. However, the intersection of Railroad Avenue and California Street, and the on-ramps and off-ramps of Railroad Avenue at Highway 4 were indicated in the Draft EIR (on page 79) to be subject to significant increases in congestion in the PM peak hour. These impacts would affect several areas of Pittsburg, including the downtown and other areas served by Railroad Avenue, but the recommended mitigation measures, including the truck bypass route would reduce the impact on Railroad Avenue to a less than significant level.

Comment PCOP-16

"What calculations or data indicate that adjusting truck travel patterns around peak hours would mitigate the impact on HWY 4 to a less than significant(sic) level. (ref. pg 84 paragraph 1)"

Response 4-32: DEIR, Page 84

The off-peak hours on Highway 4 have significant excess capacity. This can be seen by an analysis of Highway 4 traffic count data. The addition of truck trips during midday hours can be handled at an acceptable level of service.

IV. TRAFFIC AND CIRCULATION: RESPONSES

(This page has been purposely left blank.)

V. WATER QUALITY: RESPONSES

Comment CCWD-2

"Page 86: The document states 'Pollutants discharged into the slough are rapidly dispersed and diluted at the confluence with the Sacramento River.' How was this determined? This statement contradicts what one would expect based on typical rates of transverse mixing in rivers and estuaries. This must be clarified and supported with documentation. This same comment applies to the first paragraph of page 90."

Response 5-1: DEIR, Pages 86, 90

The high flow rate through the New York Slough, compared to the low rate of discharge that can be expected from the Project site, means that a large degree of dilution will immediately occur. Further dilution will occur at the confluence with the Sacramento River. A quantitative assessment of the degree of dilution is not considered necessary.

Comment CCWD-3

"Page 87-90. The District is concerned that the sediment testing was inadequate, based upon the San Francisco Regional Water Quality Control Board's comments in Appendix D ('None of the information submitted by you provides an adequate characterization of the sediments that will be dredged and disposed of on site' p. D-1). The sediment characterization (Figure D-2) does not include measurement units, nor the measurement basis (wet or dry weight). No information is available in the Draft EIR concerning the QA/QC employed for the measurement program. It is not possible to judge from the information in the Draft EIR whether the conclusions drawn are correct."

Response 5-2: DEIR, Pages 87-90

The letter from the SFBRWQCB (dated 1/24/90) was written before any sediment analyses had been conducted. In fact, information enclosed with that letter specified the testing requirements.

V. WATER QUALITY: RESPONSES

Figure D-2 should state: "units are ppm (unless stated)". Full details of the sampling and analysis procedures are available in the sediment analysis report (Ref. 35) which is incorporated into the Draft EIR by reference.

Since the time of preparation of the Draft EIR, the results of the sediment testing for Total Sulfide and Butyltin Compounds have been received. The results, which are given below, should be added to Figure D-2 in Appendix D.

ADDITIONAL INFORMATION FOR FIGURE D-2 IN DRAFT EIR

	<u>Boring B-1</u>	<u>Boring B-2</u>	<u>STLC</u>	<u>TTLIC</u>
Total Sulfide (Mg/Kg)	1.2	<0.62	NE	NE
Butyltin Compounds (Mg/Kg)	<0.49	<0.55	NE	NE

NE: Concentration thresholds have not been established for these compounds.

STLC: Soluble Threshold Limit Concentrations.

TTLIC: Total Threshold Limit Concentrations.

Comment PCOP-36

"Why are detection limits set higher than those in Public Notice 87. (ref. pg 89) What are the detection limits of Public Notice 87 vs measured levels?"

Response 5-3: DEIR, Page 89

Detection limits were set higher than required by Public Notice 87, because of incorrect laboratory procedures carried out by the applicants' sediment analysis consultant. A comparison of the detection limits required by Public Notice 87 versus those actually used is given in Appendix D, Figure D-1. The SFBRWQCB has indicated that it considers the results of the analysis to be valid, regardless of these inadequacies.

V. WATER QUALITY: RESPONSES

Comment EBRPD-2, duplicated as Comment EBRPD-3

"Both the water quality discussion (pp. 85-93) and the air quality discussion (pp. 95-107) need to be augmented to consider the potential adverse impacts of an upset of the sulfur 'prilling' process proposed. The molten sulfur is poured into water as part of this process. This raises the possibility of a physical explosion (sometimes incorrectly referred to as a 'steam explosion'). Such an explosion can be extremely powerful resulting in the breaching of the containment structure and possibly resulting in the release of dangerous gas or the 'water' used in the prilling process. The gas of greatest concern here is hydrogen sulfide (H_2S) which is given off by the molten sulfur. This gas is discussed in the EIR in the context of potential odor problem, yet no description is given of measures to collect this gas and prevent such a problem. The EIR also should discuss the fact that hydrogen sulfide is a deadly poison, it is flammable, and that (in concentrations of 4.3% to 46%) it is also explosive. The potential release of the prilling 'water' is also of concern as it will likely become a mild solution of sulfuric acid during the prilling process. This can occur when the molten sulfur is quenched; sulfur dioxide (O_2S) gas given off by the molten sulfur can combine with water vapor (H_2O) to form sulfuric acid (H_2SO_4). The EBRPD is concerned that the project include measures to contain such gaseous and liquid releases so that its adjacent Brown's Island would not be adversely affected."

Response 5-4: DEIR, Page 91

There is no evidence that an explosion of any kind would be a reasonable possibility as a result of the prilling operation. Sulphur can explode only under circumstances substantially different from the conditions anticipated in the prilling operation as proposed by the applicant. See Response 2-9 above. The prilling water is periodically replaced after treatment with caustics to adjust the pH factor for disposal as stated in Response 2-6 above. In the unpredictable event of a natural disaster, runoff from the sulphur storage area would be culverted to the detention basin. The City could adopt a provision in the Use Permit that in the event of a major spill, the detention basin water should be retained in the detention basin until tested, treated or removed elsewhere for treatment. See also Response 6-3.

V. WATER QUALITY: RESPONSES

Comment PCOP-37

"How could bauxite effect(sic) water pH (ref. pg 91 paragraph 5)? How would this be mitigated? What is the environmental impact of the mitigation measures."

Response 5-5: DEIR, Page 91

The bauxite could cause a minor increase in pH. Facilities to monitor and adjust pH at the detention basin would mitigate this. This mitigation measure would have no environmental impact.

Comment PCOP-38

"What impurities exist in bauxite ore and how could they impact water quality? (ref. pg 91 paragraph 5)"

Response 5-6: DEIR, Page 91

Impurities in bauxite are typically: silica, clay, silt and iron oxides. Water quality impacts from these materials would be limited to increased turbidity and minor changes in pH.

Comment PCOP-39

"How much sulfuric acid or acidic water will be generated? What is the maximum volume that would be on-site at one time? How would this water be treated? Please provide calculations for acidic water generation."

Response 5-7: DEIR, Page 91

Sulphuric acid is formed from sulphur trioxide, a by-product of sulphur combustion or burning. Combustion of the sulphur would not be possible in the prilling operation. Small trace amounts of sulphur trioxide, detectible only at the scale of measurement of ppbs (parts per billion) may be released by the molten sulphur in the prilling process due to impurities or inefficiencies in the sulphur production process. The potential for water vapor to combine with the sulphur trioxide to create sulphuric acid is limited by the minute amount of the trace quantities. At this scale the

V. WATER QUALITY: RESPONSES

quantity would be highly variable and dependent on the character of the product being received. The priller water is periodically disposed of after treatment with liquid sodium hydroxide, as described in Response 2-6 above.

Comment DDSD-3

"Contaminant(sic) source points of concern are:

- "a. Bauxite (aluminum)
- "b. Sulfur (Sulfur related compounds)
- "c. Gypsum (Calcium Sulfate)
- "d. Cement (pH)"

Response 5-8: DEIR, Pages 91-3

Comment acknowledged. See Chapter V, Water Quality, for discussion of the handling of these materials, pages 91-93.

Comment EBRPD-5

"The water quality section should also be augmented to describe more specifically and conclusively the runoff from storage piles. The runoff from lime storage piles is not mentioned. The nature and extent of elemental and acidic content of runoff from this as well as the bauxite and gypsum piles should be characterized. Most importantly, the EIR should be augmented to describe what specific measures are proposed to test runoff water for these contaminants and to treat it before it is discharged into New York Slough (and can flow to Brown's Island). If effective measures are not included as part of the project (but merely identified in the EIR), the discussion of Biotic Resources (pp. 133-142) should be augmented to describe the adverse impacts of untreated runoff on the adjacent vegetation and wildlife of Brown's Island."

Response 5-9: DEIR, Pages 91-3

The only lime to be stored at the site will be in the form of cement, which will be handled and stored in sealed enclosures. The materials to be stored in the open storage piles are: Limestone bauxite, gypsum, sand and gravel. Possible water quality impacts of these materials are as follows:

V. WATER QUALITY: RESPONSES

Limestone (calcium carbonate, CaCO_3). Could cause minor increases in hardness (from the calcium) and alkalinity (from the carbonate). These cannot be considered adverse water quality impacts.

Bauxite (aluminum ore). Bauxite is a rock which is composed of hydrated aluminum oxides ($\text{Al}_2\text{O}_3 \cdot n\text{H}_2\text{O}$) and impurities in the form of free silica, clay, silt and iron oxides. Bauxite is formed naturally by a leaching process in which most of the common elements such as calcium, sodium and silicon are washed away, leaving behind the bauxitic material which is unaffected by the water action. Because of this inherent resistance to water action, the quality of water trickling down through the bauxite pile will not be grossly impacted, although there could be some increase in pH and turbidity. If necessary, pH could be adjusted at the detention basin, where some turbidity reduction will also occur.

Gypsum (calcium sulphate, CaSO_4), also known as plaster of paris. Gypsum, though non-toxic, is relatively soluble, so there could be significant aesthetic water quality degradation of the runoff from the gypsum storage pile. The maximum solubility of gypsum in cold water is about 2,500 mg/l. Runoff from the gypsum pile will be diluted by a factor of at least 10 in the detention basin. So a maximum concentration of 250 mg/l can be expected to be discharged in the New York Slough. Given the high degree of dilution that will occur immediately upon discharge to New York Slough, it can be concluded that there will be no adverse impact from gypsum on wildlife or vegetation.

Sand and Gravel. Storage of these materials cannot be considered threatening to water quality.

Comment EBRPD-4

"The water quality discussion should be augmented to consider the possibility of illegal discharges of sewage or bilge water from the cargo vessels. Possible measures to mitigate against such releases would be to provide for waste water hookups to assure that these potential discharges are processed at a sewage treatment plant prior to discharge."

V. WATER QUALITY: RESPONSES

Response 5-10: DEIR, Page 92

It would be feasible to provide sewer connections at the docking area to allow ships to dispose of their effluent, provided that the Delta Diablo Sanitation District is willing to accept wastewater from ships. However, the applicant has expressed an intention to have wastewater from ships discharged in international waters.

Comment PCOP-40

"What is the static charge build up of grain flowing into ship's holds, thru(sic) conveying systems, into sealed trucks and rail cars? What is the estimated potential for explosion. (pls. provide calc. or additional back-up other than 'remote possibility' ref. pg 92 paragraph 3)"

Response 5-11: DEIR, Page 92

The level of static electricity that would trigger a grain explosion can only occur when substantial volumes of grain dust are generated in an enclosed space, such as in large grain elevators. The applicants propose to transfer grain from rail cars to ships. Under these proposed conditions, the amount of grain contained in each rail car is not sufficiently large to generate the conditions required for triggering an explosion. The open holds of the cargo ships would provide the enclosed conditions favoring the buildup of dust/static electricity to critical levels. No trucks would be involved in the grain handling operation.

Comment PCOP-79

"Ocean going(sic) tankers usually discharge human effluent and bilge overboard. What are the environmental impacts on Contra Costa water intake, Brown Island and Mallard Slough."

Response 5-12: DEIR, Page 92

Discharge of effluent from ships is illegal in the San Francisco Bay. Any illicit discharging would be equivalent to dumping raw wastewater which would clearly have serious adverse water quality impacts. See also Response 5-10, above.

V. WATER QUALITY: RESPONSES

Comment PCOP-80

"What are the environmental impacts of a loaded ship accidentally discharging a full load of bauxite, cement, or gypsum into the river from a shipping accident or explosion."

Response 5-13: DEIR, Page 92

Of bauxite, cement and gypsum, the most serious environmental impact would be from an accidental discharge of cement. The effect of such a discharge could be to increase the pH of the surrounding water to such a level that aquatic biota would be killed. The extent of the environmental damage would depend on the quantity of cement spilled and the rate at which sufficient dilution would occur to restore the pH to acceptable levels. The environmental impacts of bauxite and gypsum spillages would be comparatively minor.

Comment PCOP-81

"What effect will storm run off have on the water at New York Landing and Mallord(sic) Slough. How will ships that are docked for three days discharge their human effluent and garbage? What effect will the discharge from these ships have on overtaxed landfills."

Response 5-14: DEIR, Page 92

Storm runoff from the Project site would not be expected to have any significant impact on water quality at New York Landing or Mallard Slough. See also Response 5-10, above.

Comment CCWD-6

"The Draft EIR does not address, except in a very qualitative way, our request in our response to the Notice of Preparation that the EIR identify the likely concentration and mass of any discharges. The characterization of discharges should be more quantitative so that the District can be assured that the water quality of its supply is not impaired."

Response 5-15: DEIR, Pages 92-3

Discharge from the Project site is expected to occur only during and immediately following storms. With the exception

V. WATER QUALITY: RESPONSES

of gypsum, the effects of the stored materials on runoff quality are anticipated to be limited to pH changes and minor turbidity increases. The pH of the stormwater can be monitored and neutralized in the detention basin. See also Response 5-9, above.

Comment CCWD-5

"Page 93. It is not clear that the proposed mitigation measures will be sufficient. In particular, a basin sizing based upon a 25-year storm may be too small, since it is precisely during wet periods with high river inflows that the river is used as a source of drinking water. Mitigation measures should include elimination of contaminated runoff, monitoring project runoff discharged to New York Slough and notification procedures so that corrective action can be taken if necessary."

Response 5-16: DEIR, Page 93

Comment noted. Notification procedures should be established with the Contra Costa Water District and the City of Antioch, so that corrective action could be taken if necessary in the unlikely event of a spill. See also Response 5-17, below.

Comment DDS-1

"The Han Li International Martine(sic) Terminal must conform to both the requirements of the Water Quality Resources Control Board and the Delta Diablo Sanitation District."

Response 5-17: DEIR, Page 93

Comment acknowledged. Final construction plans for the proposed Project should be approved by the SFBRWQCB, the Delta Diablo Sanitation District and the Contra Costa Water District.

Comment DDS-2

"The District should be involved in the planning stage of the project to ensure that all discharge requirements are met."

V. WATER QUALITY: RESPONSES

Response 5-18: DEIR, Page 93

Comment acknowledged. See Response 5-17, above.

Comment PCOP-41

"Will storm water run-off for the entire facility be captured in a pond and monitored prior to discharge into the Slough?"

Response 5-19: DEIR, Page 93

All runoff from the site will be routed through the detention basin.

Comment PCOP-42

"What sort of 'major spill' is referenced in the last paragraph of page 93?"

Response 5-20: DEIR, Page 93

The last sentence of the Water Quality section is intended merely to illustrate that the detention basin would be an additional contingency measure for water quality protection. It is not intended to imply that any spill is anticipated. An accident or natural disaster (such as a major earthquake or major flood, for example) could conceivably cause a breakdown of one or more of the Project's operating systems, including the storage domes, conveyor belts or trains. In these types of events, the detention basin would serve to minimize possible discharges of materials into New York Slough.

Comment PCOP-43

"If a retention basin is built how much silt will be generated? Would the silt be hazardous? Where would it be disposed? What would the impact on landfills be."

Response 5-21: DEIR, Page 93

The rate of sediment accumulation in the detention basin would be expected to be fairly slow and sediment removal would probably only be necessary about once every five years. Sediment accumulated from the open storage piles

V. WATER QUALITY: RESPONSES

will not be hazardous and probably could be disposed of on-site. However, chemical testing should be performed prior to deciding on the means of disposal.

Comment CCWD-4

"The Draft EIR suggests (page 142) the curtailment of dredging activities during fish migrations to avoid impacts to anadromous fish populations. A similar mitigation measure should be taken to avoid water quality impacts at intakes of the District or the City when diversions are in progress."

Response 5-22: DEIR, Page 93 (142)

Comment acknowledged. The dredging must not be performed during periods when the Contra Costa Water District or the City of Antioch are withdrawing water from their intakes downstream of the Project site.

V. WATER QUALITY: RESPONSES

(This page has been purposely left blank.)

VI. AIR QUALITY: RESPONSES

Comment PCOP-33

"What are the estimated emission numbers for the construction of the Project?"

Response 6-1: DEIR, Page 98 (E1-11)

Information exists on the emissions associated with individual construction activities, but little information exists on aggregate emissions from construction activities. Emissions from construction tend to vary from day to day as the number of vehicles, types of activities and weather conditions change. The Bay Area Air Quality Management District suggests a rough estimate for construction dust of 1.2 tons/acre/month of active construction.

Comment PCOP-48

"What will downtown air quality statistics be when currently appvd(sic) downtown developments and the Project are taken into account?"

Response 6-2: DEIR, Pages 98-103

The effect of the Project and cumulative development on downtown air quality will differ depending on the pollutant considered. For regional pollutants such as ozone, nitrogen dioxide and sulphur dioxide concentrations in Pittsburg are primarily determined by activities upwind in the greater Bay Area, and the Project and cumulative development would not be expected to affect air quality statistics.

For PM-10, which is a more local pollutant, the Project could be expected to have a minor effect on downtown concentrations. The analysis included in the Draft EIR indicates that this impact would be substantially less than 1 microgram per cubic meter.

For carbon monoxide, which is a very localized pollutant, the extent of impact on downtown Pittsburg air quality statistics would depend on changes in traffic volumes near the monitoring site. The Draft EIR analysis shows that the

VI. AIR QUALITY: RESPONSES

local impacts of Project-related traffic would, under worst-case conditions, increase carbon monoxide levels by 0.3 PPM along Harbor Street (the street most impacted by the Project). Downtown traffic volumes would be only slightly changed by the proposed Project; any effect on downtown carbon monoxide statistics would be similarly slight.

Comment EBRPD-2

"Both the water quality discussion (pp. 85-93) and the air quality discussion (pp. 95-107) need to be augmented to consider the potential adverse impacts of an upset of the sulfur 'prilling' process proposed. The molten sulfur is poured into water as part of this process. This raises the possibility of a physical explosion (sometimes incorrectly referred to as a 'steam explosion'). Such an explosion can be extremely powerful resulting in the breaching of the containment structure and possibly resulting in the release of dangerous gas or the 'water' used in the prilling process. The gas of greatest concern here is hydrogen sulfide (H_2S) which is given off by the molten sulfur. This gas is discussed in the EIR in the context of potential odor problem, yet no description is given of measures to collect this gas and prevent such a problem. The EIR also should discuss the fact that hydrogen sulfide is a deadly poison, it is flammable, and that (in concentrations of 4.3% to 46%) it is also explosive. The potential release of the prilling 'water' is also of concern as it will likely become a mild solution of sulfuric acid during the prilling process. This can occur when the molten sulfur is quenched; sulfur dioxide (O_2S) gas given off by the molten sulfur can combine with water vapor (H_2O) to form sulfuric acid (H_2SO_4). The EBRPD is concerned that the project include measures to contain such gaseous and liquid releases so that its adjacent Brown's Island would not be adversely affected."

Response 6-3: DEIR, Page 99

An explosion of molten sulphur during the prilling process is not a reasonable possibility, due to the wet condition of the sulphur, and the cooling-down process. As described in Response 2-9, above, the sulphur could explode only at very much higher temperatures in dry or dusty conditions, and with the additional occurrence of a flame or spark. Trace amounts of hydrogen sulfide could potentially be released

VI. AIR QUALITY: RESPONSES

during the prilling process, because it is the raw material from which elemental sulphur is produced. Hydrogen sulfide can be fatal at concentrations in excess of 600 parts per million (ppm) and the U.S. Occupational Safety and Health Administration (OSHA) standard for maximum exposure is 10 ppm in an eight-hour period (Ref. MSDS, in Appendix to this document).

However, industry sources have described the quantities of hydrogen sulfide which could be released during the prilling process to be measurable only in terms of parts per billion (ppb). There is no reasonable possibility that hydrogen sulfide would reach sufficient concentrations (in parts per hundreds) to pose any risk of an explosion of the gas (Ref. Thorup). In the event of a major natural upset such as an earthquake or flood, damage to the prilling containment structure or prilling pool might result in the release into the atmosphere of any gases present in the form of a "puff" that would be transported and diluted by the wind. Cessation of the prilling process would prevent further production of any gases, and no continuous plume would be formed.

The limited potential for sulfuric acid to be created during the prilling process is discussed in Response 5-4, above.

Comment PCOP-44

"How are emissions of the 'sealed priller' controlled? What is the waste generated i.e. filters, etc. and how is it classified e.g. hazardous, toxic, or designated wasted."

Response 6-4: DEIR, Page 99

Emissions of hydrogen sulfide and sulphur dioxide are regulated by the Bay Area Air Quality Management District. The release of hydrogen sulfide is subject to Regulation 9, Rule 2 of the BAAQMD Rules and Regulations, which specifies maximum ground level concentrations that are permissible. District regulations require monitoring of hydrogen sulfide concentrations.

Regulation 9, Rule 1 covers emissions of sulphur dioxide. In this case, the regulation takes the form of both a maximum concentration within the air stream at the point of release and maximum ground level concentrations. Depending

VI. AIR QUALITY: RESPONSES

on the significance of the source, monitoring of ground level concentrations can be required.

The waste material removed from the filters would constitute cooled, non-prilled sulphur, and it would be classed as general waste, not as hazardous or toxic (Ref. Othman).

Comment PCOP-45

"How much hydrogen sulfide will be generated? Please provide calculations. How will this hydrogen sulfide be controlled, cleaned or mitigated."

Response 6-5: DEIR, Page 99

Hydrogen sulfide would not be generated in the prilling process. The possibility exists that traces of hydrogen sulfide, a gas, may be dissolved in the molten sulphur to be prilled. The amount of hydrogen sulfide contained in molten sulphur, if any, is variable. During prilling the molten sulphur is momentarily exposed to the atmosphere and the release of hydrogen sulfide is possible. The gases within the prilling chamber would be vented to the outside via a scrubber. See Response 6-4, above, for discussion of the regulation of hydrogen sulfide releases.

Comment PCOP-46

"How much hydrogen sulfide will be in the incoming molten sulfur?"

Response 6-6: DEIR, Page 99

See also Responses 6-3 and 6-5, above. A specific quantity cannot be determined in advance, because it depends on the efficiency of the production process and the characteristics of petroleum from which the sulphur is derived, which could contain randomly varying concentrations of hydrogen sulfide. The range of concentrations is generally considered to be low, but, because the quantity cannot generally be determined, safety precautions are required, as outlined in Response 6-4, above.

VI. AIR QUALITY: RESPONSES

Comment PCOP-74

"Why does the EIR not address the degree of odor caused in the processing and transportation of molten sulfur(sic)?"

Response 6-7: DEIR, Page 99

It is not possible to calculate the "degree" of odors that might emanate from an industrial facility such as the proposed sulfur priller. The facility would be designed to contain and remove odorous substances from the exhaust air stream, and the site is not located near sensitive land uses, so that the potential for odor problems is limited assuming all equipment is working properly. See Response 6-4 regarding the control requirements of the Bay Area Air Quality Management District.

The San Joaquin County Air Pollution Control District reports that a sulfur prilling operation located in the Port of Stockton has not generated any odor complaints during its operation.

Comment PCOP-75

"Are there calculations to determine the degree of nauseous smells from sulfur(sic) that communities would be exposed to. Why were these calculations not included in the EIR?"

Response 6-8: DEIR, Page 99

See Response 6-7, above.

Comment PCOP-77

"If an explosion should occur during sulfur(sic) processing (prilling etc.), would a plume of hydrogen sulfide or other gases result and to what degree? Is there a plume analysis showing the effects on Brown Island, housing developments, wildlife, etc.?"

Response 6-9: DEIR, Page 99

As stated in Responses 2-9 and 6-3, above, an explosion of sulfur is not a credible possibility during the prilling process as proposed (including transportation to and from

VI. AIR QUALITY: RESPONSES

the site). Natural disasters could cause a release of hydrogen sulfide or sulphur dioxide in trace amounts insufficient to create a continuous plume, as discussed in Response 6-3, above.

Comment PCOP-78

"What mitigation steps would be taken to avoid this accident (explosion of sulphur). Where are the safety plans if this type of accident were to occur?"

Response 6-10: DEIR, Page 99

As stated in Responses 2-9, 6-3 and 6-9, above, an explosion is not a credible possibility. See also Response 5-4, above.

Comment PCOP-100

"Cooled sulfur is not necessarily odorless. pg. 99 paragraph 4."

Response 6-11: DEIR, Page 99

Pure sulphur in solid form is considered to be tasteless and odorless. In the prilled form of the solid material, the potential for noticeable odors is extremely small. See Response 6-7 regarding the potential for odors during the prilling process.

Comment BAAQMD-1

"The project proponent has applied to the District for an Authority to Construct permit. As part of the review of the permit application, the proponent has submitted to the District estimates of particulate emissions based upon control technology that is more stringent than the controls discussed in the DEIR. The FEIR should be updated to reflect these new emissions estimates. In particular, Figure 31 on page 100 of the DEIR should be revised to reflect the newer estimates."

Response 6-12: DEIR, Page 100

According to the Project applicant, Bay Area Air Quality Management District staff are preparing revised emissions

VI. AIR QUALITY: RESPONSES

estimates based upon more stringent controls than those reflected in the Draft EIR. The Draft EIR addresses the Project as described in the application for a Use Permit submitted to the City of Pittsburgh. As noted on Page 107 of the Draft EIR, some aspects of the Project as proposed would not be considered as representing Best Available Control Technology as defined by the BAAQMD. The estimates of emissions in the Draft EIR should be considered as worst-case estimates.

Comment PCOP-27

"How much dust will the radial stacker create? (pls. provide calculations)"

Response 6-13: DEIR, Page 100 (E1-11)

Radial stacker emissions are calculated as 65.0 pounds/day for Total Suspended Particulate and 30 pounds/day for PM-10. The calculation of these emissions is shown in Figure E-5, page E-9 of the Draft EIR.

Comment PCOP-52

"What would be the worst case suspended particulate concentrations? Please describe the situation and provide calculations."

Response 6-14: DEIR, Page 100 (E1-9)

Figure 32, page 102 of the Draft EIR provides an estimate of worst-case concentrations from the proposed Project. These estimates are worst-case in that they:

- assume no deposition or removal by rain or fog;
- are based on maximum annual throughput for all materials;
- assume emission controls as proposed by the applicant.

As noted on Page 107 of the Draft EIR, the emissions from this Project are sufficiently high to trigger the requirement of Best Available Control Technology (BACT) for all sources. The actual definition of BACT is evolutionary, but it is likely that the water spray system for materials transport and storage would not constitute BACT or be equivalent to BACT. The estimates of emissions from materials

VI. AIR QUALITY: RESPONSES

transport and handling in the Draft EIR should be considered as worst-case estimates.

Comment PCOP-49

"The DEIR assumes that carbon monoxide levels will be highest on Harbor St. However, what are the current carbon monoxide levels for California St.? (please take into account proximity to the highway) How will these levels change due to the Project."

Response 6-15: DEIR, Page 103

Existing calculated worst-case carbon monoxide concentrations along the most heavily traveled section of California Avenue are 9.6 Parts Per Million (PPM) for the one-hour averaging period and 6.7 PPM for the eight-hour averaging period. With the addition of Project traffic, these estimates would rise to 9.9 PPM and 6.9 PPM for the one- and eight-hour averaging periods, respectively. These values are all below the applicable state and federal standards.

Comment PCOP-83

"Why does the EIR treat the issues of ozone problems and non compliance with federal regulations regarding ozone depletion lightly when evaluating the future impacts of this project on the environment i.e. carbon dioxide and other gases. Where are the calculations for the total amounts of gases, air pollutants(sic), ozone, carbon monoxide, carbon dioxide that we can expect if all the land zoned industrial is developed with similar projects such as Han Li and GWF."

Response 6-16: DEIR, Pages 103-5

The Draft EIR identifies the emissions of hydrocarbons and oxides of nitrogen (two precursors of ozone) in Figure 33 of the Draft EIR. On page 104 these emissions are shown to represent a significant increase in regional emissions. On page 105 of the Draft EIR it is noted that these emissions would contribute to the continuing ozone problem in the Bay Area, and could affect ozone concentrations as far away as Sacramento.

A calculation of pollutants that would be associated with development of all land in Pittsburg zoned for industry is

VI. AIR QUALITY: RESPONSES

beyond the scope of this EIR. Such a calculation would be very difficult to make since the emissions associated with industrial lands can vary enormously depending on the amount and types of processes and sources proposed.

Comment BAAQMD-5

"The FEIR should include estimates of emissions of sulfur dioxide (SO₂) in Figure 33 on page 104 of the DEIR. The significance and potential impacts of the SO₂ emissions should be discussed in the text."

Response 6-17: DEIR, Page 104

Emissions of sulfur dioxide from Project transportation sources are calculated as:

Trains:	11.4 lbs/day
Ships:	75.3 lbs/day
Barges:	23.6 lbs/day
Trucks:	140.1 lbs/day
TOTAL:	250.4 lbs/day

This amount exceeds the BAAQMD threshold of significance of 150 lbs/day.

Comment PCOP-59

"How do district guidelines 'suggest a second threshold of significance for regional emissions equal to one percent of the county-wide emissions?' Is this 'suggestion' appropriate for application to this project? (ref pg 104 paragraph 2)"

Response 6-18: DEIR, Page 104

As described on page 104 of the Draft EIR, the second suggested "threshold of significance" was applied to the Project (see Figure 33 of the DEIR); the proposed Project was found not to exceed this second threshold.

Comment BAAQMD-4

"On a related matter, page 105 of the DEIR indicates that emissions of HC and NO_x would contribute to the formation of

VI. AIR QUALITY: RESPONSES

ozone in areas east of the project site, possibly even as far as Sacramento. Because the cargo ships traveling to and from the project site would be using the shipping channels of San Pablo Bay and the Golden Gate, the FEIR should note that project emissions would also contribute to ozone formation in areas as far south as the Santa Clara Valley."

Response 6-19: DEIR, Page 105

While the majority of ship emissions would be carried northeast towards Sacramento, ship emissions released between the central San Francisco Bay and the San Francisco pilot station would tend to be carried southward towards San Jose, so that the proposed Project would also contribute to ozone formation in the South and East Bay.

Comment BHPHA-2

"What measures will or could be taken to mitigate the dust and other particular(sic) exposure to the homes 1,600 feet to the West of the project?"

Response 6-20: DEIR, Pages 105-107

Measures to reduce dust and particulate emissions are listed on pages 105-107 of the Draft EIR. All measures that would take place on the Project site would act to reduce impacts in the vicinity of the site. As pointed out on page 107 of the Draft EIR, additional mitigation measures may be required during the Bay Area Air Quality Management District's permitting process.

Comment BHPHA-3

"What measures will or could be taken to mitigate the impact of increased shipping, train and vehicular traffic air emissions?"

Response 6-21: DEIR, Pages 105-107

See Response ES-10, above.

Comment PCOP-29

"How was the 75% suppression factor derived? Could the suppression factor be less?"

VI. AIR QUALITY: RESPONSES

Response 6-22: DEIR, Page 106

Empirical data on the efficiency of water sprays for dust suppression indicate that the range of efficiencies of various water spray systems is 70-95%. The 75% used in the Draft EIR was selected as an appropriately conservative estimate of overall efficiency.

Comment PCOP-32

"Is Best Available Control Technology a requirement? If so why is it not being applied?"

Response 6-23: DEIR, Page 107

Best Available Control Technology (BACT) is a requirement of the Bay Area Air Quality Management District for all new sources exceeding 150 pounds per day of any criteria pollutant (550 pounds per day for carbon monoxide). BACT must be applied to all contributing sources within a project, regardless of its contribution to the total emission. The emissions shown in Figure 31 exceed the 150 pounds per day, so it is apparent that BACT will be required. As noted on page 107 of the Draft EIR, certain aspects of the Project as currently defined would not be considered BACT.

The definition of what constitutes BACT is constantly evolving. Whether BACT will be required and what constitutes BACT will be determined during the District's permit process. The use of BACT throughout the Project would result in emissions lower than those indicated in the Draft EIR. The Draft EIR emissions represent a worst-case analysis of Project emissions and resultant impacts.

VI. AIR QUALITY: RESPONSES

(This page has been purposely left blank.)

VII. NOISE CONSIDERATIONS: RESPONSES

Comment PCOP-60

"Paragraph 2 on page 109 states that a day/night average noise level of 60 to 70 dB is considered to be 'conditionally acceptable' for residential development as specified in the Pittsburg General Plan. What conditions are part of the 'conditionally acceptable' and how do these conditions apply to the Project."

Response 7-1: DEIR, Page 109

The City of Pittsburg in its Noise Element of the General Plan considers an L_{dn} of 60 to 70 dB to be "conditionally acceptable" for residential development. This standard is typically used when assessing the compatibility of a residential project proposed in a noisy area. However, the policy does indicate the sensitivity of existing residential land use to new sources. According to the Noise Element, when a new project is exposed to "conditionally acceptable" noise levels, "new construction or development should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design."

Comment PCOP-65

"What would projected noise levels be if future downtown development is taken into account?"

Response 7-2: DEIR, Pages 115-123

Future noise levels could be affected by downtown development. Noise levels along the access road routes of the Han-Li Project could be affected by increased traffic. The downtown Specific Plan, adopted in 1986, does not contain the specific traffic volume estimates required to perform a noise impact analysis. In general, a doubling of traffic volumes will result in a 3-dB increase in average traffic noise levels.

VII. NOISE CONSIDERATIONS: RESPONSES

Comment PCOP-63

"Pg 117 item (f) describes how on-site noise levels were predicted and the attenuations used to establish these noise levels. Why was wind direction not accounted for as an attenuation factor? What effect would wind direction have on peak, average L10, and L50 noise levels in nearby residential neighborhoods?"

Response 7-3: DEIR, Page 117

Wind can have a significant effect on the sound propagation for distances between the source and receiver of 1,000 feet or greater. Wind speeds are slightly higher above the ground than at the ground, and the resulting wind speed gradients tend to bend sound waves over large distances. This affects the sound level by deemphasizing attenuation due to the ground for receivers downwind of the source and emphasizing the attenuation due to the ground for receivers upwind of the source. The predominant direction of the wind in the study area is from the west to the east. Therefore, the wind effects would be negligible for the homes to the south of the Project site, perpendicular to the direction of the wind. Homes to the west of the Project site would receive more accoustical attenuation from the ground than modeled in the "Noise" section. These potentially lower residential noise levels were not included in the analysis because of the variability of this effect. A noise level reduction of up to 25 dB can occur for distances greater than 1,000 feet for wind speeds about 10 to 15 mph. All noise level descriptors including maximum, average, L10, and L50 would be affected similarly.

Comment PCOP-89

"What are the peak L10 and L50 noise level residents close to the river can expect at night when unloading ships 24 hours a day."

Response 7-4: DEIR, Pages 117-119

Figure 38 on page 118 of the Draft EIR contains nighttime noise levels for residential receivers close to the river. The sources which make up this nighttime noise would be the collection hoppers, conveyor motors and docksider. Since

VII. NOISE CONSIDERATIONS: RESPONSES

these are relatively steady state or constant noise sources, the maximum noise levels, L₁₀ and L₅₀, are expected to be close to the average noise level (i.e., within 3 dB).

Comment PCOP-61

"Only average noise levels for the proposed plant are provided. What will be the peak noise levels and when will these noises occur? What are the L₁₀ noise levels and L₅₀ noise levels? What will be the impact of peak noises."

Response 7-5: DEIR, Page 118

Average noise levels generated by the proposed Project are provided because the City's noise standard is in terms of average noise level. Sources such as collection hoppers, conveyor motors, and the docksider generate relatively steady-state noise. Maximum noise levels from these sources are approximately equal to the average noise levels. Diesel and loading noise from trucks and trains tend to have a more time-variable characteristic. The Draft EIR discusses maximum A-weighted noise levels of 57 dB at the nearest residences from the impacts of railroad cars. Noise from diesel engines would be expected to be somewhat less. The L₁₀ noise levels would be approximately 2- to 4-dB greater than the average noise levels shown in the report, and the L₅₀ would be 2- to 4-dB less than the average noise levels. The impact of these time-variable sounds would be minimized because truck and train activities would occur only during daytime hours.

Comment PCOP-62

"Page F-5 item (d) states that 'a 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse community response'. Page 119 paragraph 2 states that the night time Project generated noise will be 9 dB greater than background noise level at the single-family homes to south. Page 119 paragraph 3 states that the Project would not significantly effect(sic) the overall residential noise environment. Why is the almost doubling of night time noise levels to the homes in the south identified as a 'not significant' impact when it will almost certainly draw complaints?"

VII. NOISE CONSIDERATIONS: RESPONSES

Response 7-6: DEIR, Page 119 (F-5)

For the purposes of this assessment, the discussion regarding increases in noise level (see Appendix F-5) should be applied to average noise levels. The difference in noise levels discussed in this comment is between Project-generated average noise level and existing background noise level (L_{90}). Project-generated noise at the homes to the south was not identified as a significant impact because the average noise levels which would result from the Project do not exceed the existing average noise level. Project-generated average noise levels would be 9 dB greater than existing nighttime background noise levels at the homes to the south. Therefore, on-site Project-generated noise was identified as potentially audible at the residential areas. In summary, significant impacts are assessed by comparing Project-generated average noise levels to existing average noise levels, and noticeability is assessed by comparing Project-generated average noise levels to existing background noise levels. Project-generated noise may be noticeable without generating a significant noise impact.

Comment PCOP-64

"Pg 120 states that trucks will only be accepted from 8am to 6pm; however fig. 26 on page 75 shows 33 after hour trips. What is the distribution of these 33 trips? Were these night time trips accounted for in the noise impact calculations? Was the penalty factor of 10 applied to these after hour trips? What is the added environmental impact of these night time trips."

Response 7-7: DEIR, Page 120

The effect of off-hour truck trips is shown in Figure 39 in the Draft EIR, page 121. The traffic analysis indicates 33 truck trips between the hours of 6 p.m. and 6 a.m. For the noise analysis, it was assumed that nine of these truck trips were between 5 a.m. and 6 a.m. and nine truck trips were between 6 p.m. and 7 p.m. The remaining 15 trucks were distributed evenly between the hours of 7 p.m. and 5 a.m. These nighttime truck noise levels were penalized by 10 dB when the L_{dn} was calculated.

VII. NOISE CONSIDERATIONS: RESPONSES

Comment PCOP-66

"The EIR states that truck generated noises impact only the homes on Harbor Ave. and California Ave. The EIR also states that the noise levels for the homes on Harbor Ave. and California Ave. already exceed the allowable residential noise limit and therefore the additional 2 dB increase is insignificant. To what distance perpendicular to Harbor Ave. and California Ave. do noise levels exceed residential noise limits and by how much will this distance with Project generated noises?(sic) How many extra homes will exceed residential noise limits as a result of the growth of this residential noise exceedance line?"

Response 7-8: DEIR, Page 120

The existing L_{dn} at homes along Harbor Avenue is 67 dB. Project-generated trucks will cause the L_{dn} to increase to 69 dB. At a second row of homes, the L_{dn} is estimated to be 58 dB. The reduction includes distance from the roadway and shielding from the first row of homes. Project-generated trucks will increase the L_{dn} by 2 dB to 60 dB, just reaching the City's residential noise standard. Therefore, no additional homes will exceed the residential noise standard as a result of the Project. Along California Avenue, the effect of Project-generated trucks will be significantly less. The existing noise levels are due to traffic from California Avenue and Highway 4. The increase in truck traffic on California will be significantly less than on Harbor Avenue because the Project-generated truck volume will be split into two directions. The increase in the distance to the 60 dB L_{dn} contour is not expected to measurably increase.

Comment PCOP-67

"What is the noise level of a truck and trailer passing by as measured from the homes on Harbor Ave? How often will the homes on Harbor and California Ave. hear this? What is the impact of irregular(sic) noise increases due to trucks passing by?"

Response 7-9: DEIR, Page 120

Noise measurements at homes along Harbor Avenue north of East 9th Street indicate maximum noise levels due to heavy

VII. NOISE CONSIDERATIONS: RESPONSES

trucks ranging from 74 dB to 82 dB. This is consistent with truck noise emission levels used to predict future noise levels in the noise assessment. This sound level is high enough to disrupt speech in a normal voice outdoors during the truck passby.

Comment PCOP-68

"Pg 122 item (c) states that the East Third St. spur of the Santa Fe would see 'significantly more trains (in the summer months)'. How does this effect(sic) the average and L10 noise levels for the summer months? What is the impact of this increased noise level."

Response 7-10: DEIR, Page 122

Maximum noise levels of 85 to 90 dB are expected from train passbys on the Harbor Avenue Spur. This maximum noise level is due to the locomotive. Rail car noise would be approximately 76 dBA. The locomotive maximum noise levels would be 3 to 5 dB higher than loud truck passbys. Because they would occur much less frequently than trucks, even during the summer months, the average noise levels at homes along Harbor Avenue would not be significantly increased. Since the train passbys would not occur for more than 10 percent of the time, the L₁₀ noise levels would likewise not increase significantly.

Comment PCOP-69

"Pg 123 paragraph 1 under 'Mitigation Measures' states that on-site equipment and activities would not generate a significant noise impact. Why was the 9dB increase to the homes in the south not identified as significant if a 10 dB increase will 'draw complaints' see pg F5 item d. The paragraph goes on to say that noise from certain activities may be noticeable at times implying certain peak noises not elsewhere identified. What 'certain activities' may be heard at the residential area?"

Response 7-11: DEIR, Page 123

The issue of the 9 dB increase at the homes to the south is discussed in Response 7-6, above. Examination of the contributions to the various sources during nighttime hours in-

VII. NOISE CONSIDERATIONS: RESPONSES

dicates that the docksider will be the major contributor. Since this is a steady-state noise source and of a different character than other noise sources, mitigation measures for this equipment are discussed in the Draft EIR.

Comment BHPHA-4

"What measures will or could be taken to mitigate the noise levels to the homes 1,600 feet to the West of the project?"

Response 7-12: DEIR, Pages 123-125

Measures which will or could be taken to mitigate the noise levels at homes 1600 feet to the west are discussed in the "Noise" Section of the EIR. These measures include:

- Sound-absorptive barriers or earthberms near equipment and loading areas;
- The use of damping material in the hopper construction;
- Silencers at the air outlets of the "docksider" cement unloading equipment;
- Restricting construction activities to between 7 a.m. and 5 p.m., Monday through Friday.

VII. NOISE CONSIDERATIONS: RESPONSES

(This page has been purposely left blank.)

VIII. VISUAL AND OTHER CONSIDERATIONS: RESPONSES

Comment PCOP-101

"Pg. 128 talks about what would be visible to the townhouse residents. The photos should be touched up to include the new site fully developed. This is along the same lines as your Q #35."

Response 8-1: DEIR, Pages 128-129

Comment noted. Touching up the photos for the purpose of showing the visual appearance of the Project after it is fully developed would require site elevations, which were not provided by the Project applicant.

VIII. VISUAL AND OTHER CONSIDERATIONS: RESPONSES

(This page has been purposely left blank.)

IX. BIOTIC RESOURCES: RESPONSES

Comment EBRPD-6

"If effective measures are not included as part of the project (but merely identified in the EIR), the discussion of Biotic Resources (pp. 133-142) should be augmented to describe the adverse impacts of untreated runoff on the adjacent vegetation and wildlife of Brown's Island."

Response 9-1: DEIR, Pages 133-142

Additional information on runoff from the site is provided in Response 5-9, which provides specific measures for testing and treating runoff before it enters New York Slough. Significant impacts to the vegetation and wildlife resources of Brown's Island would not occur with appropriate management of the detention pond as described in Response 5-9 and in the Draft EIR on page 93.

Comment SLC-1

"In Section IX, Biotic Resources, the document describes potential impacts to wetland and aquatic resources; however, mitigation measures are not provided for all of these impacts. Instead, the required mitigation is deferred to be determined by future agreements with the Corps and the California Department of Fish and Game. Under the California Environmental Quality Act (CEQA), the EIR must specify and evaluate the effectiveness of appropriate mitigation measures. It is not adequate to merely rely on future compliance with regulatory programs of other agencies. (See Citizens for Quality Growth v. City of Mount Shasta 198 Cal App. 3d 443)."

Response 9-2: DEIR, Pages 140-141

The concerns of the commenter regarding the need to provide adequate information on recommended mitigation of impacts on wetlands resources is noted. However, the environmental review process can not define requirements which would be developed under a separate process in obtaining a Stream Bed Alteration agreement with the California Department of Fish and Game and a Section 404 permit from the Army Corps of

IX. BIOTIC RESOURCES: RESPONSES

Engineers. Other measures recommended on page 142 in the Draft EIR, related to the need to provide landscaping with native plant species and limitations on dredging periods, would serve to mitigate potential adverse impacts of the project on wetland resources to a level of insignificance. These mitigation measures are assumed to be consistent with those developed during the coordination process with other jurisdictional agencies.

X. OVERVIEW OF EVALUATION: RESPONSES

Comment PCOP-71

"Pg 143 first paragraph under section A states that 'other measures that would further mitigate these effects (irreversible environmental changes) have been identified as being within the jurisdiction of the City of Pittsburg, or other Public and private entities'. What measures are being referenced and who would pay for them?"

Response 10-1: DEIR, Page 143

The text from the Draft EIR quoted in the comment refers to other requirements that the Project would have to meet in addition to those mitigation measures selected by the City from among those identified as available for reducing the significance of the Project, in the event that the City acts favorably on the conditional use permit application. These requirements are of two main types, as follows:

- Stipulations of a more general character applicable to areas larger than the Project site itself or activities of the type proposed for the Project site. These may be related to programs or regulatory activities initiated or undertaken by the City of Pittsburg to achieve broader planning or governmental purposes. An example of a program of this type is the Specific Plan for the Northeast River Industrial Area, which is intended to define and clarify in greater detail than is provided in the General Plan policies and provisions to guide future industrial development in the area, including changes and improvements to the circulation system. A planning effort of this type is usually paid for in the form of fees, assessments or taxes by the properties which it encompasses, and the costs of defined improvements are borne by the activities which are benefited.
- Regulatory and administrative actions may be undertaken by a number of governmental agencies, other than the City of Pittsburg, relating to the proposed Project. These may include (among others) the BAAQMD, the SFBRWQCB, Caltrans, the State Lands Commission and the

X. OVERVIEW OF EVALUATION: RESPONSES

U.S. Army Corps of Engineers, and would occur pursuant to any required permitting procedure, with the applicant paying fees defined by the agencies affected.

In each case, the activities proposed by the applicant may be subject to additional conditions and stipulations which would serve to mitigate possible adverse effects to a greater degree than the mitigation measures identified in this EIR are intended to achieve. The Draft EIR defined in a complete and adequate manner the general context of planning programs and the specific regulatory procedures to which the Project would be subject.

Comment PCOP-72

"Pg 144 fourth bullet states that slight increase in noise levels will be produced in the nearest residential neighborhoods. Does this agree with the identified 9 dB average night time increase for the neighborhoods to the south?"

Response 10-2: DEIR, Page 144

The statement on page 144 reflects the conclusion in Chapter VII, Noise Considerations, that the Project-generated noise will be audible on occasion. The average noise levels will not increase by 9 dB. See Response 7-6, above, for clarification of the change in noise levels that the Project is expected to produce.

Comment PCOP-82

"What noise levels can residents to the south of the Project expect if all the land zoned industrial is fully developed, if more projects such as GWF and Han Li are approved by the Planning Commission and City Council. Please provide calculations."

Response 10-3: DEIR, Page 146

The noise-emitting characteristics of possible future industrial projects in the lands currently zoned for industry in northeast Pittsburg cannot be determined at the present time, and it would be speculative to attempt such an analysis.

X. OVERVIEW OF EVALUATION: RESPONSES

Comment PCOP-84

"What will be the total impact on air quality in Pittsburg and Antioch be(sic) when all industrial land in and around Pittsburg is developed with industries that produce similar amounts of particulate matter and other gases as Han Li, GWF, and Diablo Services."

Response 10-4: DEIR, Page 146

The potential air quality changes that could result from future industrial development in the Pittsburg-Antioch area cannot be determined at the present time. Any attempt to project such changes or impacts would be speculative.

Comment BHPHA-5

"If the project is approved, what will the cumulative effect of all the industrial sites regarding PG&E, John(sic) Manville, Diablo Services, Cal Asia and U.S. Steel be to the residences South and West of the project."

Response 10-5: DEIR, Pages 146-147

The existing industrial development in the area surrounding the Project site is considered in the Draft EIR as part of the Project setting, and those projects which have been adequately defined for future development, such as the GWF project, are given consideration as part of cumulative development. Therefore, the cumulative impacts described in the Draft EIR are reflective of industrial development that either exists, is approved for development, or is expected with reasonable certainty. Longer-range planning for the industrial area as a whole is anticipated to be undertaken in a Specific Plan for the Northeast River Industrial Area. The level of impacts (noise, air quality, etc.) from some as yet undetermined mix of activities and intensity of buildout would be appropriately addressed in the EIR on that Plan.

X. OVERVIEW OF EVALUATION: RESPONSES

(This page has been purposely left blank.)

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

Comment PCOP-90

"Pg 149, Alternatives, states that there is almost an infinite(sic) number of possible alternatives for the site and that the limited number of types evaluated are representative of this array of options. How did the EIR conclude that other industrial uses i.e. warehousing, manufacturing, retailing, offices, restaraunts(sic) etc. would be inappropriate absent analysis and comparison to areas which have successfully combined varied industrial usage within an area. Specificly(sic) when the above mentioned industrial uses which minimize fumes, noise and odor and which protect communities and future residential developments from negative impacts and are consistant(sic) to th(sic) General Plan."

Response 11-1: DEIR, Page 149

The Draft EIR does not make any conclusions that alternative industrial uses of the Project site would be unsuitable. On page 151 of the Draft EIR it is suggested that due to the heavy industrial character of the surrounding area, retailing and restaurants would be out of place. However, the evaluation of the various Alternatives is not intended to be conclusive, but rather is intended to define in broad terms the possible effects of each selected alternative on the future development of the Project site and its vicinity. As stated on page 151 of the Draft EIR, light industrial uses of the Project site would be consistent with the General Plan, and could be of a type that would have limited fumes, noise or odor.

Comment ANTIOCH-2

"Non-Labor Intensive Activity--18 employees on 15 acres should be studied to show effect on local employment if the site were developed with a more labor intensive use."

Response 11-2: DEIR, Page 151

Analysis of employment impacts of an alternative, labor-intensive use of the Project site was not undertaken in the

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

Draft EIR, as such an analysis would be generally speculative and inconclusive. Alternative "A" in Chapter XI, Alternatives to the Project, assessed eventual development of the Project site with an alternative use, which potentially could employ a greater number of persons. However, an alternative with concentrated employment would represent an additional alternative to the Project. The range of alternatives addressed in Chapter XI is sufficiently broad and representative of the possible variety of alternative future uses to enable the Lead Agency to arrive at a well-reasoned basis for making a decision on the application.

Comment CCCDD-2

"Chapter IV, dealing with Traffic and Circulation points out the anticipated substantial increase in truck traffic which would occur due to this proposal. On pages 158-162, a revised access concept is discussed as an alternative to the project proposal which would allow the shifting of traffic to the east away from residential areas. The Final EIR should consider a mitigation measure for this as a project requirement or requiring the property owner to agree to participate in an assessment district to finance these improvements. A time line for completion of such improvements should be considered. The Final EIR should discuss the impacts of such a new alignment so that additional CEQA review wouldn't be required to allow the completion of the roadway."

Response 11-3: DEIR, Pages 158-162

Comment acknowledged. The Draft EIR has identified as a mitigation measure the possibility that the truck bypass should be built before the proposed Project operation activity exceeds a specific number of trucks per day, to be defined in the conditions of Project approval. The time line for completion of the bypass should be defined in the Mitigation, Monitoring and Reporting program, although the timing of the bypass may be contingent on the need demonstrated by the Project applicants to generate the maximum number of trucks to be permitted. The routing, design and feasibility of a truck bypass are insufficiently defined at present to permit an adequate evaluation of its potential impacts. Separate CEQA review of the truck bypass would be necessary, and is beyond the scope defined for the EIR.

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

Comment BAAQMD-6

"We note that a proposed mitigation for impacts from truck traffic would be the construction of a by-pass route that would divert truck traffic from local residential areas. The DEIR also proposes, as an additional means of reducing impacts, that the number of truck trips per day be limited until the by-pass road could be constructed. The by-pass road is, however, only a proposal and there is the possibility that it would not be constructed. We recommend that the FEIR discuss what impacts would result if the by-pass road is not constructed. If the bypass road is not approved, will the project make heavier use of trains for the shipping of materials? If so, the FEIR should discuss the potential impacts from an increase in train trips."

Response 11-4: DEIR, Page 163

Comment acknowledged. In the event that the truck bypass is not constructed, the Project-related truck traffic would be permanently limited to the number of truck trips per day defined in the conditions of approval. The Project applicants have indicated that they intend to make increased use of rail cars and barges for transporting materials, primarily cement, in the long-term (beyond five years after Project buildout). This change is not related to approval of the recommended truck bypass road, although it may be reasonable to expect that the applicants' intent to place greater reliance on rail and barge transportation would be hastened by the imposition of limits on truck trips using existing roadways. If a limit on truck trips is imposed, it appears likely to be very difficult for this Project to handle larger volumes of material by train or barge than is projected with the facility as currently proposed. Truck traffic from the Project site is primarily for the delivery of materials to its end-use. For example, gravel and sand would be trucked to construction sites for use in concrete or as roadbed material. Since this type of delivery could not be made by train, restricting truck trips to/from the site is unlikely to shift the transport of these materials from trucks to trains. An increase in train movements serving the Project site does not therefore appear likely to result from failure to build the truck bypass road.

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

Comment PCOP-92

"What would the L10 and L50 noise levels in the homes on Columbia experience from trucks going down the proposed bypass road that would be built just to the east of the homes backyard."

Response 11-5: DEIR, Pages 163-164

The new truck route could potentially generate significant adverse noise impacts for these homes. Therefore, the truck route should be considered as a separate project and potential noise impacts addressed in its own environmental documentation. This study should address the projected volume of traffic on the roadway, including any nighttime truck trips. The noise levels generated by the roadway would depend on this traffic volume and the roadway alignment and, therefore, cannot be presented at this time.

Comment PCOP-93

"What would be the peak noise level in desibis(sic) that homeowners would be expected to experience in the rooms on the back of the homes when a truck passes behind the house (on the proposed bypass road)."

Response 11-6: DEIR, Pages 163-164

See Response 11-5, above.

Comment PCOP-94

"At night, how many trucks will pass down that (proposed bypass) road? Please include the number of trucks for Han Li, GWF and Diablo Services."

Response 11-7: DEIR, Pages 163-164

The proposed truck bypass route will transfer truck trips from other roadways to the bypass, so it is probable that some nighttime truck trips will use the bypass roadway. However, the volumes cannot be estimated prior to a more complete definition of the characteristics of the roadway, which are not available at the present time. Measures to

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

mitigate the impacts of traffic on the bypass may be introduced as conditions for its approval and construction as part of the CEQA review process. (Also see Response 11-5, above.)

Comment PCOP-102

"What would the peak noise level people would experience in a bedroom located on the back of the house.(sic) Assume it is night time with people sleeping and the windows of the room are open. How many times per night would they be subjected to that noise? Why doesn't the EIR address these in detail. It only addresses the fact that some noise level will be experienced and a sound wall may be necessary. Is the EIR's failure to deal with these issues on noises in detail an indication that the EIR is deficient at least and maybe dishonest in its attempt to give an objective assesment(sic) of the true environmental impact. Please answer in regards to how the EIR handled these problems."

Response 11-8: DEIR, Pages 163-164

Noise levels from trucks along Harbor generate maximum noise levels of approximately 80 dB. Outdoor noise levels at the back of the house would be approximately 65 dB, accounting for shielding from home and extra distance. Assuming open windows, indoor maximum noise levels inside rooms along the back of the house would be approximately 50 dB. The frequency of nighttime passbys is addressed in Response 7-7. Average sound levels are used in the impact assessment of the EIR because the City's noise standards are expressed in terms of average sound levels.

Comment DOMTAR-4

"To make an issue of dredge spoils when significant dredging at the Alternate 'D' site may not be required is also not a fair evaluation of alternatives."

Response 11-9: DEIR, Page 170

The Project applicants indicated that dredging would be required on the alternative site similar to that required at the proposed Project site. See also Responses 11-10 and 11-11, below.

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

Comment DOMTAR-2

"Further, the Draft EIR lists a series of 'evident disadvantages' of the Alternate 'D' site which, upon closer examination, are not at all evident but appear to be in fact little more than a hurried and inadequate attempt at compliance with CEQA, State Guidelines, and California Supreme Court mandated EIR standards.:

Response 11-10: DEIR, Pages 170-171

The summary of "evident disadvantages" of the Alternative "D" site represents considerable research and investigation and addresses the requirements for a discussion of an alternative site. See also Response 11-11, below.

Comment DOMTAR-1

"In our opinion, and in light of Goleta II (89C.D.O.S.8705; 1989), we believe that the Draft EIR does not adequately address the issues at stake in this matter, more particularly the study of viable alternative locations. Consequently, the said Draft EIR does not serve either the parties' or the public's best interest."

Response 11-11: DEIR, Page 171

Comment noted. The "Goleta II" decision, as described on page 150 of the Draft EIR, explained why discussing the feasibility or infeasibility of a specific use on a particular site serves the public interest. However, the mandatory requirement for broad, comprehensive analysis of the potential impacts of using an alternative site for a proposed project extends only to those sites which can feasibly reduce the significant impacts of a proposed project to a less than significant level. With respect to the sensitivity of the adjacent homes and the National Wildlife Refuge to potential noise and dust impacts of a facility identical to that proposed for the Project site, and the need for disposal of dredge spoils, use of the Alternative "D" site would not reduce the relative scale of significant impacts in comparison with the proposed Project site. It appears that measures to reduce the probable impacts of relocating marine terminal uses, as proposed, to the Alternative "D" site are

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

less reasonably feasible than on the Project site, due to the proximity of the residential units and the wildlife refuge to the Alternative "D" site.

Comment DOMTAR-3

"Specifically, to state as a negative that trucks would have to cross the high-volume AT&SF (used for AMTRAK) railroad track, when from the 3rd Street site in Pittsburg three (3) such tracks (also used by AMTRAK) will have to be crossed, is misleading to this reader."

Response 11-12: DEIR, Page 171

The proposed Project-generated traffic will not be required to cross any railroad tracks other than the proposed rail spur on the Project site. However, the proposed truck bypass route would divert truck trips to the Pittsburg-Antioch Highway, where the Southern Pacific railroad tracks would have to be crossed, which is used by Amtrak trains.

Comment DOMTAR-5

"Applicant's representatives have not made any proposals to Domtar nor have their investigations and analysis as set forth in the Draft EIR adequately determined if the Alternate 'D' site discussed is in fact unfeasible for the proposed project."

Response 11-13: DEIR, Page 171

It would be inappropriate for the Project applicants or the preparers of the Draft EIR to make any substantive proposal to the owners of an alternative site. It is possible that the Project applicants may wish to investigate the potential use of the Alternative "D" site further. The Draft EIR does not conclusively deny the possible use of the alternate site for the proposed facility, although it does establish the probable difficulties that would have to be overcome, or which would limit the facility's operation.

XI. ALTERNATIVES TO THE PROJECT: RESPONSES

(This page has been purposely left blank.)

XII. PARTICIPANTS AND REFERENCES

(No comments were received on this Chapter of the DEIR.)

(This page has been purposely left blank.)

APPENDIX A. MATERIALS FROM THE CITY OF PITTSBURG: RESPONSES

(No comments were received on this section of the DEIR.)

APPENDIX B. MATERIALS FROM THE APPLICANT, HAN-LI INTERNATIONAL GROUP: RESPONSES

Comment PCOP-73

"Pg B-4 paragraph 1 states 'that product shipment for bauxite, limestone, and gypsum will be by rail (open gondolas) or by truck.' Has emissions(sic) from moving open gondola rail cars and open trucks been addressed? Please include calculations that show emissions/mile for open trucks and rail cars and extrapolate total emissions based on estimated trip lengths."

Response B-1: DEIR, Page B-4

A review of air pollutant emission factors and rates published by local, state and federal agencies revealed no available emission factors in wind losses from open rail cars and open trucks. The multiple-spray system proposed for dust control would ensure that all materials leaving the site via open truck or rail cars would be wet and have a low potential for wind losses. As loaded materials dry, the potential for wind losses would increase. Any truck or rail wind losses are, therefore, likely to occur at a distance from the site, along rail lines or freeways. Truck and rail wind losses do not appear to be major sources of particulate pollution in the Bay Area, as they are not considered in the Bay Area Air Quality Management District's emission inventory.

APPENDIX C. TRAFFIC AND CIRCULATION DOCUMENTATION: RESPONSES

(No comments were received on this section of the DEIR.)

**APPENDIX D. NEAR-SHORE SEDIMENT SAMPLE DOCUMENTATION:
RESPONSES**

(No comments were received on this section of the DEIR.)

APPENDIX E. AIR QUALITY BACKGROUND DOCUMENTATION: RESPONSES

Comment PCOP-50

"Why was a temperature of 50 degrees Farenheit(sic) used for annual averaged concentrations of suspended particulate calculations? (ref. pg E-1 paragraph 2). Shouldn't average annual temeratures(sic) for Pittsburg be used instead?"

Response E-1: DEIR, Page E-1

The second paragraph, page E-1 of the Draft EIR, describes the assumptions used for vehicle emissions. Since vehicle emissions increase as temperature decreases, the use of a low temperature is actually a worst-case assumption. This temperature assumption is used by the Bay Area Air Quality Management District in their guidance document for air quality analyses.

Comment PCOP-51

"What is the average annual temperature of Pittsburg and why wasn't this temperature used in the emissions calculations?"

Response E-2: DEIR, Page E-1

See Response E-1, above.

Comment PCOP-53

"Why were open hold emmissions(sic) based on an(sic) capacity of 2.5%? (ref. pg E-2) Please provide data or calculations to validate this number."

Response E-3: DEIR, Page E-2

The word in question on page E-2 of the Draft EIR is "opacity" rather than "capacity". Opacity is a measure of the obscuration of light as it passes through a plume of light-scattering material in the atmosphere. The use of the 2.5 percent opacity was recommended by the staff of the Bay Area Air Quality Management District.

APPENDIX E. AIR QUALITY BACKGROUND DOCUMENTATION: RESPONSES

Comment PCOP-55

"What is the design distance from the bottom of the unloading hopper to the top of a rail car and/or truck? What is the design distance from the bottom of the unloading hopper to the bottom of a rail car and/or truck? Why wasn't the average of these two distances used to calculate particulate emissions calculations? What would emission statistics be if this revised drop distance is used in the calculations."

Response E-4: DEIR, Page E-5

The design of unloading and loading hoppers is not sufficiently detailed to provide maximum and minimum drop distances. In the Draft EIR, an average drop distance of five feet was employed, an assumption that was reviewed by staff of the Bay Area Air Quality Management District. This average drop distance is considered reasonable and appropriately conservative.

Comment PCOP-54

"Why was a 5 foot material drop assumed for particulate calculations? (ref. pg E-6)"

Response E-5: DEIR, Page E-6

A five-foot material drop was assumed for both batch loading (discrete loads of material from front end loaders, etc.) and for continuous loading operations (conveyor loading). This height was taken as average for the types of equipment to be utilized on-site.

Comment PCOP-56

"What calculations or data indicate that gypsum, bauxite and limestone have a 2 percent silt content? (ref. pg E-6) Is the reference used for silt content reputable and/or applicable for this EIR since it is another Developers application to construct and operate a facility?"

Response E-6: DEIR, Page E-6

As indicated on page E-6 of the Draft EIR, the assumption has been made that the silt and moisture content of lime-

APPENDIX E. AIR QUALITY BACKGROUND DOCUMENTATION: RESPONSES

stone is representative of that for bauxite and gypsum. No specific data exist for silt or moisture content for bauxite or gypsum at aggregate handling facilities. The source of these data is erroneously cited as Reference 5 in the Draft EIR. The correct citation is Reference 6, which has been noted in the Errata section of this document.

Comment PCOP-70

"Wind erosion, emissions of storage piles were based on an average control factor of 85% (ref. bottom of pg E-7) What calculations show that the proposed water usage will achieve this control factor?"

Response E-7: DEIR, Page E-7

The emission reduction of 85 percent is based on control factors determined by the US EPA, derived from empirical research into the effectiveness of standard operating practices at other facilities, rather than on a specific water usage figure for this site. On page 28, the figure of 15,000 gallons per day is indicated as the applicants' anticipated water usage for suppression of particulate emissions.

Comment PCOP-57

"Are truck emissions greater when starting off from a stop sign?"

Response E-8: DEIR, Page E-10

Truck emissions and auto emissions tend to be greater during acceleration (such as when starting off from a stop sign) than they are when traveling at a constant speed.

Comment PCOP-58

"How many stop/starts for truck traffic along the proposed route were assumed for the computer modeling of emissions(sic)?"

Response E-9: DEIR, Page E-10

Emission rates from vehicles are based upon measured emissions from vehicles as they perform a standard driving cycle

APPENDIX E. AIR QUALITY BACKGROUND DOCUMENTATION: RESPONSES

that includes numerous stops and starts. When applied to a specific situation, no specific number of stops and starts is assumed. Instead, an average vehicle speed is specified that reflects the average driving conditions, speed limit and number of stops along a route. An average vehicle speed of 25 mph was employed in the analysis contained in the Draft EIR.

**APPENDIX F. FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL NOISE:
RESPONSES**

(No comments were received on this section of the DEIR.)

APPENDIX 1

**ORGANIZATIONS AND PERSONS CONTACTED
(Supplements Draft EIR, Chapter XII)**



APPENDIX 1

ORGANIZATIONS AND PERSONS CONTACTED
(Supplements Draft EIR, Chapter XII, Section B)

ADDITIONAL ORGANIZATIONS AND PERSONS CONTACTED

California Highway Patrol, Hazardous Material Section
Paul Horgan, Engineer.

Chevron Chemical Company, Fertilizer Division
Jim Thorup, Manager.

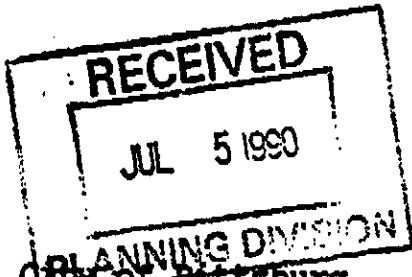
San Joaquin County Air Pollution Control District
Ali Othman, Inspector.



APPENDIX 2

ADDITIONAL CORRESPONDENCE





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region, HCB
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

July 2, 1990

F/SWR13:TDW

City of Pittsburg
Community Development Department
65 Civic Avenue
Pittsburg, California 94565

Dear Sirs:


We reviewed the Draft Environmental Impact Report (DEIR) and "Chemical Evaluation of Near-Shore Sediments" for the Han-Li International Marine Terminal, located in the City of Pittsburg, California. We offer the following comments for your consideration.

The National Marine Fisheries Service is responsible for preserving and enhancing marine, estuarine, and anadromous fish resources and the habitats that support these resources. Our concerns with the Han-Li project included a lack of information on the dredge sediments.

We have since reviewed the DEIR, which contained bulk sediment and bioassay testing. We agree with the findings of these tests; the material does not appear to be hazardous. However, the DEIR does not have results of total sulfide and butlytin compounds. They are not anticipated to be of any concern, but we will want to review these additional test results before we remove any objections to the project.

If you have questions concerning these comments or wish to discuss the project further, please contact Diane Windham of my staff at: National Marine Fisheries Service, 777 Sonoma Avenue, Room 325, Santa Rosa, California 95404; telephone (707) 578-7513.

Sincerely,


James R. Bybee
Environmental Coordinator
Northern Area





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region, HCB
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

July 31, 1990

F/SWR13

Colonel Stanley G. Phernambucq
District Engineer
San Francisco District
Corps of Engineers
211 Main Street
San Francisco, California 94105

Dear Colonel Phernambucq:

We have reviewed the Draft Environmental Impact Report, the Chemical Sediment Analysis, and final sediment reports for the City of Pittsburg's Han-Li Marine Terminal Project (Public Notice Number 17554E59B). We concur with the conclusion that the material to be dredged does not contain elevated levels of contaminants.

Based on this analysis, we remove our objection to the project as proposed. We appreciate the additional information supplied to us by the applicant to assist in our review.

If you have questions concerning these comments or wish to discuss the project further, please contact Diane Windham of my staff at: National Marine Fisheries Service, 777 Sonoma Avenue, Room 325, Santa Rosa, California 95404; telephone (707) 578-7513.

Sincerely,

James R. Bybee
Environmental Coordinator
Northern Area

cc: EPA, P. Oshida
CDFG, D. Lollock
FWS, J. McKevitt
~~_____~~



APPENDIX 3

MATERIAL SAFETY DATA SHEET (MSDS) FOR MOLTEN SULPHUR





Material Safety Data Sheet

SULPUR (Molten)

Page 1 of 7

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS.

The Chevron MSDSs have been reformatted and expanded to provide you with useful hazard warnings and health evaluations and to facilitate your compliance with local, State and Federal regulations.

1. PRODUCT IDENTIFICATION

SULPUR (Molten)

DANGER: - MAY RELEASE HYDROGEN SULFIDE GAS (H₂S)
- DUST MAY FORM EXPLOSIVE MIXTURE WITH AIR

SYNONYM: BRIMSTONE

PRODUCT INFORMATION: (800)346-7237

Revision Number: 0 Revision Date: 12/14/89 MSDS Number: 003914
NDA - No Data Available NA - Not Applicable

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by the Chevron Environmental Health Center, Inc., P.O. Box 4054, Richmond, CA 94804.

2. FIRST AID

EYE CONTACT:

If the hot melted material should splash into the eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses if worn. See a doctor for treatment.

SKIN CONTACT:

Wash skin thoroughly with soap and water. If hot material gets on skin, flush skin thoroughly with cool water. See a doctor for extensive burns. Launder contaminated clothing.

INHALATION:

DO NOT ADMINISTER FIRST AID WITHOUT WEARING ADEQUATE RESPIRATORY PROTECTION. If there are signs or symptoms as described in this document due to breathing hydrogen sulfide, move the person to fresh air. If breathing has stopped, apply artificial respiration. Call a doctor. SEE A DOCTOR IMMEDIATELY - Prompt action is essential.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. Consult medical personnel before inducing vomiting. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

Note to Physician: In addition to the use of 100% oxygen and supportive care, suggested treatment for hydrogen sulfide poisoning includes the use of nitrites. This is based on similar mechanisms of toxicity between hydrogen sulfide and hydrogen cyanide. The nitrite-induced methemoglobin is thought to bind the toxic hydrosulfide ion. Initial inhalation of amyl nitrite pearls for 15 to 30 seconds of each minute should be initiated until 10 ml of a 3% solution of sodium nitrite can be administered intravenously at 2.5 to 5 ml per minute. While the efficacy of nitrites in hydrogen sulfide poisoning has not been unequivocally demonstrated, their use is recommended as part of the treatment regimen. Hyperbaric oxygen therapy has been used for cyanide poisoning with some success and may be of benefit in hydrogen sulfide poisoning if other measures are ineffective.

3. IMMEDIATE HEALTH EFFECTS

EYE CONTACT:

The cool material is not expected to cause eye irritation. However, thermal burns may result from contact with the hot material. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain, tears, swelling, redness, and blurred vision.

SKIN IRRITATION:

The cool material is not expected to cause skin irritation. However, thermal burns may result from contact with the hot material. The degree of the injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Signs and

Revision Number: 0

Revision Date: 12/14/89

MSDS Number: 003914

NDA - No Data Available

NA - Not Applicable

symptoms may include pain, discoloration, and swelling.

DERMAL TOXICITY:

NDA

RESPIRATORY/INHALATION:

This substance may be irritating if inhaled. Signs and symptoms of respiratory tract irritation may include, but may not be limited to, one or more of the following: nasal discharge, sore throat, coughing, bronchitis, pulmonary edema and difficulty in breathing. Read the Additional Health Data section (12) of this document for more information. This substance contains sulfur compounds which may form hydrogen sulfide. The rotten eggs odor of hydrogen sulfide is unreliable as an indicator of concentration. Signs and symptoms of overexposure to hydrogen sulfide include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbances, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. Hydrogen sulfide concentrations of 1000-2000 ppm can be extremely hazardous.

INGESTION:

If swallowed, this substance is considered practically non-toxic to internal organs. This product contains a significant amount of sulfur. Ingestion of large quantities of sulfur (exceeding 10 grams) may result in toxicity due to the formation of hydrogen sulfide. Read the Additional Health Data section (12) of this document for more information.

4. PROTECTIVE EQUIPMENT

EYE PROTECTION:

If this material is used at elevated temperatures, wear chemical goggles, a face shield, or safety glasses.

SKIN PROTECTION:

If this material is used at elevated temperatures, skin contact can be minimized by wearing protective clothing.

RESPIRATORY PROTECTION:

This material may be an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended. Note: If any of the applicable hydrogen sulfide standards are likely to be exceeded, positive supplied-air respiratory protection must be used. The ACGIH TLV for hydrogen sulfide is 10 ppm. The OSHA PEL ceiling is 20 ppm. The maximum peak above the ceiling for an eight-hour shift is 50 ppm for 10 minutes once only if no other measurable exposures occur.

VENTILATION:

No special ventilation is necessary.

5. FIRE PROTECTION

FLASH POINT: NDA 335-405F (Variable with purity)

AUTOIGNITION: 374F (Dust in air)

FLAMMABILITY: NA 35-1,400mg/l(Dust in air)

EXTINGUISHING MEDIA:

CO₂, water fog, steam and sand smothering. Avoid solid streams of water which may stir up dust clouds.

Revision Number: 0

Revision Date: 12/14/89

MSDS Number: 003914

NDA - No Data Available

NA - Not Applicable

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0; Special NDA;
HMIS RATINGS: Health 1; Flammability 1; Reactivity 0; Other NDA;
(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard evaluation of the Chevron Environmental Health Center. Read the entire document and label before using this product.

FIRE FIGHTING PROCEDURES:

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

COMBUSTION PRODUCTS:

Combustion may produce toxic compounds of hydrogen sulfide. Normal combustion produces toxic fumes of sulfur dioxide and sulfur trioxide.

6. STORAGE, HANDLING, AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

Molten sulfur may liberate hydrogen sulfide (H₂S) gas.

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

INCOMPATIBILITY:

May react with strong bases or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

SPECIAL PRECAUTIONS:

REFER TO PRODUCT LABEL OR MANUFACTURERS' TECHNICAL BULLETINS FOR THE PROPER USE AND HANDLING OF THIS MATERIAL. DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed. Store away from strong oxidizing materials.

Toxic quantities of hydrogen sulfide (H₂S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H₂S is present. See Special Protective Information. DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR OR self-contained breathing equipment.

7. PHYSICAL PROPERTIES

SOLUBILITY: Insoluble in water. Somewhat soluble in alcohol, acetone and aromatic hydrocarbons.

APPEARANCE: Generally an opaque yellow to brown solid or mottled yellow liquid.

BOILING POINT: 832F

MELTING POINT: 235 - 246F (Range)

Revision Number: 0

Revision Date: 12/14/89

MSDS Number: 003914

NDA - No Data Available

NA - Not Applicable

EVAPORATION: NA
 SPECIFIC GRAVITY: 1.92 - 2.07 (Range)
 VAPOR PRESSURE: 0.1mm Hg @ 284F
 PERCENT VOLATILE (VOLUME %): NA
 VAPOR DENSITY (AIR=1): NA
 MOLECULAR WEIGHT: 32

8. SPILL RESPONSE AND DISPOSAL

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300 (24 hour).

SPILL/LEAK PRECAUTIONS:

This material is not expected to present any environmental problems other than those associated with oil spills. Clean up spills immediately, observing precautions in Protective Equipment section. If safe and practicable, reclaim material.

DISPOSAL METHODS:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100.0 % SULFUR (Molten)

CONTAINING

100.0 % SULFUR
CAS7704349

INCLUDING

CAS7783064 HYDROGEN SULFIDE
 10ppm ACGIH TLV
 15ppm ACGIH STEL
 10ppm OSHA PEL
 15ppm OSHA STEL
 SARA 302/304 RQ=100 POUNDS TPQ=500 POUNDS
 CERCLA 302.4 RQ=100 POUNDS

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

Revision Number: 0

Revision Date: 12/14/89

MSDS Number: 003914

NDA - No Data Available

NA - Not Applicable

STEL - Short-term Exposure Limit
RQ - Reportable Quantity
CC - Chevron Chemical Company

TPQ - Threshold Planning Quantity
CPS - CUSA Product Code
CAS - Chemical Abstract Service Number

10. REGULATORY INFORMATION

DOT SHIPPING NAME: NDA
DOT HAZARD CLASS: NDA
DOT IDENTIFICATION NUMBER: NDA

- SARA 311 CATEGORIES:
- 1. Immediate (Acute) Health Effects; YES
 - 2. Delayed (Chronic) Health Effects; NO
 - 3. Fire Hazard; YES
 - 4. Sudden Release of Pressure Hazard; NO
 - 5. Reactivity Hazard; NO

WHEN A COMPONENT OF THIS MATERIAL IS SHOWN IN THIS SECTION, THE REGULATORY LIST ON WHICH IT APPEARS IS INDICATED.

SULFUR 02,10,
HYDROGEN SULFIDE (H₂S) 02,10,14,15,17,18,28,

REGULATORY LISTS:

- | | | |
|-------------------------|------------------------|------------------------|
| 01-SARA 313 | 02-MASS RTK | 03-NTP Carcinogen |
| 04-CA Prop. 65 | 05-MI 406 | 06-IARC Group 1 |
| 07-IARC Group 2A | 08-IARC Group 2B | 09-SARA 302/304 |
| 10-PA RTK | 11-NJ RTK | 12-CERCLA 302.4 |
| 13-MN RTK | 14-ACGIH TLV | 15-ACGIH STEL |
| 16-ACGIH Calculated TLV | 17-OSHA PEL | 18-OSHA STEL |
| 19-Chevron TLV | 20-EPA Carcinogen | 21-TSCA SECT 4 |
| 22-TSCA SECT 5 SNUR | 23-TSCA SECT 6 RULE | 24-TSCA SECT 12 EXPORT |
| 25-TSCA SECT 8A CAIR | 26-TSCA SECT 8D REPORT | 27-TSCA SECT 8E |
| 28-Canadian WHMIS | | |

11. PRODUCT TOXICOLOGY DATA

EYE IRRITATION:

NDA.

SKIN IRRITATION:

NDA.

DERMAL TOXICITY:

NDA.

RESPIRATORY/INHALATION:

NDA.

INGESTION:

NDA.

ADDITIONAL TOXICOLOGY DATA:

The acute LC50 for channel catfish was > 10 g/liter.

Revision Number: 0

Revision Date: 12/14/89

MSDS Number: 003914

NDA - No Data Available

NA - Not Applicable

12. ADDITIONAL HEALTH DATA

ADDITIONAL HEALTH DATA COMMENT:

Sulfur has a low degree of toxicity. Hydrogen sulfide, which may be liberated from molten sulfur is toxic. Because of the rapid occurrence of olfactory fatigue, odor is an unreliable indicator of concentration. Ingestion of large quantities of sulfur (exceeding 10 grams) may result in toxicity due to the formation of hydrogen sulfide. Signs and symptoms resulting from overexposure to H₂S include respiratory irritation, headaches, dizziness, nausea, gastrointestinal disturbances, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H₂S air concentrations of 1000-2000 ppm may be immediately hazardous to life; death has occurred following exposures to 600 ppm.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

