

**CALIFORNIA ENVIRONMENTAL QUALITY ACT****INITIAL STUDY  
FOR  
USS-POSCO Industries  
Soil Remediation/  
Unit I Corrective Action Management Unit  
Pittsburg, California**

*The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).*

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**I. PROJECT INFORMATION**

Project Name: Resource Conservation and Recovery Act (RCRA) Corrective Action Remedy Selection for Soils and Post-Closure Permit for an Expanded Former Landfill (Corrective Action Management Unit)

USS-POSCO Industries, EPA Identification Number: CAD 009-150-194

Site Location: USS-POSCO Industries Pittsburg plant located at 900 Loveridge Road, Pittsburg, Contra Costa County, California 94565.

Contact Person/ Address/ Phone Number:

**Mailing Address:**

USS-POSCO Industries  
P.O. Box 471  
Pittsburg, CA 94565

**Street Address:**

900 Loveridge Road  
Pittsburg, CA 94565

**Plant Contact:**

Mr. Mauritz J. Kallerud  
Manager of Environmental Projects  
(925) 439-6093

***Project Description***

In accordance with the California Health and Safety Code, Chapter 6.5, Section 25100 et seq., a corrective action remedy is being proposed by the Department of Toxic Substances Control (DTSC) at USS-POSCO Industries. As part of that remedy, UPI has submitted an application for a post-closure permit for a non-RCRA Corrective Action Management Unit (CAMU) to be located within the existing USS-POSCO plant. The area within the USS-POSCO plant site to be designated as a CAMU is Unit I, a closed hazardous waste landfill within Site L-B. USS-POSCO has proposed creating the CAMU by expanding Unit I for wastes regulated by California as hazardous waste but not regulated by the United States Environmental Protection Agency (U.S. EPA).<sup>1</sup>

The landfill was closed and a post-closure maintenance plan was approved by DTSC on December 28, 1995.

A Consent Agreement for implementation of corrective action was entered into by USS-POSCO and DTSC in June 1998. Upon approval of the remedies for the SWMUs addressed by this

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<sup>1</sup> In February 1993, the U.S. EPA issued the final rule for CAMUs, Corrective Action Provisions under Subtitle C (Federal Register, Volume 58, page 8658). California adopted regulations [California Code of Regulations, Title 22 (22 CCR), Division 4.5, Chapter 14, Section 66264.552] equivalent to the federal CAMU rule on June 29, 1995.

project, a new consent agreement will be entered into between USS-POSCO and DTSC which will be updated to reflect the conditions and time constraints for implementing those remedies. In addition, the consent agreement will lay out the remaining steps required for remediation of SWMUs not addressed in this project and remediation of groundwater.

The planned CAMU (hereafter referred to as the Unit I CAMU, which will be authorized by the proposed issuance of a Post-Closure Permit, is proposed to receive material/soil from only those SWMUs that: (1) have been shown not to be a threat to groundwater; and (2) have been tested to contain contaminants at levels below RCRA criteria for hazardous wastes and therefore not regulated by the U.S. Environmental Protection Agency. Material/soil not meeting this criteria will be directed to appropriate off-site disposal facilities.

A Consent Agreement for implementation of corrective action was entered into by USS-POSCO and DTSC in June 1998. Upon approval of the remedies for the SWMUs addressed by this project, a new consent agreement will be entered into between USS-POSCO and DTSC which will be updated to reflect the conditions and time constraints for implementing those remedies. In addition, the consent agreement will lay out the remaining steps required for remediation of SWMUs not addressed in this project and remediation of groundwater.

The planned CAMU (hereafter referred to as the Unit I CAMU), which will be authorized by the proposed issuance of a Post-Closure Permit, is proposed to receive material/soil from the majority of solid waste management units (SWMUs) to be remediated and from only those SWMUs that: (1) have not impacted groundwater; and (2) have chemicals of interest/contaminants of concern below hazardous waste levels regulated by the US EPA. Material/soil from the remaining SWMUs will be directed to appropriate off-site facilities.

The proposed project includes all corrective action, including opening and closing of the Unit 1 CAMU and the associated Post-Closure Permit, off-site disposal of certain wastes, deed restrictions, and post-closure maintenance of the Unit 1 CAMU. USS-POSCO submitted a RCRA Corrective Measures Study Workplan and Report to DTSC with proposed corrective action remedies for soils at this site. The proposed RCRA Corrective Action Remedy Selection for soils remediation and post-closure maintenance project consists of the following activities:

The proposed project includes all corrective action, including excavation of soils/materials, transportation of soils/materials, opening and closing of the Unit 1 CAMU and the associated Post-Closure Permit, off-site disposal of certain wastes, deed restrictions, and post-closure maintenance of the Unit 1 CAMU. USS-POSCO submitted a RCRA Corrective Measures Study Workplan and Report to DTSC with proposed corrective action remedies for soils at the site. The proposed RCRA Corrective Action Remedy Selection for soils remediation and post-closure maintenance of the Unit One CAMU consists of the following activities:

- 1. Reopening Unit 1, the CAMU, into which non-Resource Conservation and Recovery Act (non-RCRA) wastes from Sites L-A and SWMU No. 3 in the active portion of the facility will be placed for final disposal. A Post-Closure Permit is proposed for issuance to authorize the construction and operation of the CAMU.**

Unit I will be expanded both laterally and vertically to accommodate the wastes from Sites L-A and L-B. Lateral expansion will occur to the south over an approximate two-acre area, with a 50-foot set back from the fence line. The resulting Unit I CAMU footprint will be approximately 10 acres. Vertical expansion will be approximately 9 feet (el. 39.5 to el. 48.0), with side slopes lengthened by 50 feet on the south slope and by 60 feet on the north slope. Slope stability analysis will be in accordance with California Code of Regulations, Titles 22 and 27.

- The cap and vegetative cover will be removed from Unit I CAMU, and the Unit will be graded to provide for drainage from the unit by natural gravity flow toward the north and west into the storm water retention basin (SWRB). Lined gutters will be installed so that stormwater collected will be conveyed down the side slopes of the Unit I CAMU in corrugated metal pipes. Stormwater run-off from the south side of the unit would be collected by a drainage channel and would drain from the south side of the unit around the southwest corner of the unit and from there to the north into the SWRB. An access road parallel to this drainage channel will also be constructed.
- An engineered cap for the Unit I CAMU will be installed. Following completion of remediation material/soil consolidation activities, remediation material/soil placed in the Unit I CAMU will be closed in place via construction of an engineered final cover consisting of, from bottom to top: a foundation layer (compacted dried sludge), a geosynthetic clay layer, a geosynthetic drainage layer, a filter fabric, and a vegetation/soil layer. The new geosynthetics layer will overlap, in a shingle effect, the remaining Unit I geosynthetics layer (in areas not receiving remediation material/soil) by a minimum of three feet;
- A final drainage system for the Unit I CAMU will be designed to perform three major functions:
  - (1) facilitate the removal of precipitation on the closed Unit I CAMU in order to minimize infiltration and erosion of the final cover;
  - (2) collect runoff from the Unit I CAMU in the existing SWRB to prevent the runoff from leaving the site area; and
  - (3) divert drainage from adjacent areas to prevent run-on onto the Unit I CAMU closure area.
- New groundwater monitoring wells will be installed. These new wells and existing wells will be monitored to detect any impact to groundwater from the Unit 1 CAMU landfill. Table 1 lists all groundwater monitoring wells and monitoring constituents.

**2. Excavating contaminated material/soil from selected SWMUs located within the USS-POSCO plant Sites L-A and SWMU No. 3 in the active portion of the facility and transporting the excavated material/soil to the Unit I CAMU for disposal.**

Approximately 95, 000 cubic yards of contaminated material/soil will be excavated from the following solid waste management units (SWMUs) for transfer to the Unit 1 CAMU:

- No. 3: Former Caustic Neutralization Area;
- No. 24.1: Site L-A – Dried Sludge Disposal Areas;
- No. 24.3: Site L-A – Lead Scale Disposal Area (East portion only);
- No. 24.5: Site L-A – Oil Disposal Areas (ODA #3); and
- No. 24.8: Site L-A – Lead Impacted Area.

The approximate volume of each SWMU is displayed in Exhibit B.

- Remediation material/soil from the Dried Sludge Disposal Areas (SWMU 24.1) will be excavated and transported by truck directly to the Unit I CAMU (without stockpiling).
- Remediation material/soil from the remaining SWMUs will be excavated, stockpiled (for purposes of collecting and analyzing samples to verify that the remediation material/soil is not RCRA or TSCA regulated waste) and then trucked to the Unit I CAMU.

- Remediation material/soil stockpiles will be placed on a plastic liner, surrounded by a berm, covered with plastic sheeting and secured, as necessary, with sandbags (or secured by other appropriate means).

**3. Transport of wastes to appropriate off-site regulated treatment/disposal facilities.**

- Material/soil from the remediation of the following SWMUs will be directed to appropriate off-site regulated treatment/disposal facilities:
  - No. 17.1: Former Power Substation #1 Area; and
  - No. 24.5: Site L-A – Oil Disposal Areas (ODA #1 and 4).

Remediation material/soil from these SWMUs will be excavated, stockpiled (for purposes of collecting and analyzing samples for waste profiling purposes), and then trucked to the off-site regulated treatment/disposal facilities. The approximate volume of each area is as follows:

- No. 17.1: Former Power Substation No. 1 Area: 21 cubic yards; and
- No. 24.5: Site L-A – Oil Disposal Areas #1: 100 cubic yards.

**4. Post-Closure Maintenance of the Unit I CAMU**

Post-closure maintenance, as specified in the Unit I Closure and Post-Closure Maintenance Plan will be maintained throughout the CAMU post-closure period. Systems requiring maintenance will include: monitoring, final cover, drainage, and security. These systems will be inspected monthly.

Reference maps of the City of Pittsburg, the USS-POSCO facility boundaries, CAMU location, and the SWMU locations are located in Attachment B as Exhibits E, F, G, and H respectively.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Removal Action Plan        |
| <input type="checkbox"/> Permit Renewal                     | <input type="checkbox"/> Removal Action Workplan    |
| <input type="checkbox"/> Permit Modification                | <input type="checkbox"/> Interim Removal            |
| <input type="checkbox"/> Closure Plan                       | <input checked="" type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Regulations                        | RCRA Corrective Action Proposed<br>Remedy Selection |
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Program/ Region Approving Project:

State of California, Department of Toxic Substances Control  
Standardized Permitting and Corrective Action Branch

Contact Person/ Address/ Phone Number:  
Andrew Berna-Hicks, P.E.,  
Department of Toxic Substances Control  
Standardized Permitting and Corrective Action Branch  
700 Heinz Avenue, Bldg. F, Suite 200  
Berkeley, California 94710-2737

Telephone: (510) 540-3956

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact".

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Aesthetics        | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Population and Housing        |
| <input type="checkbox"/> Agricultural Resources       | <input checked="" type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Public Services               |
| <input checked="" type="checkbox"/> Air Quality       | <input checked="" type="checkbox"/> Land Use and Planning           | <input type="checkbox"/> Recreation                    |
| <input type="checkbox"/> Biological Resources         | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Transportation and Traffic    |
| <input type="checkbox"/> Cultural Resources           | <input checked="" type="checkbox"/> Noise                           | <input type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Geology And Soils |   | <input checked="" type="checkbox"/> Cumulative Effects |

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

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**1. Aesthetics**

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*Project activities likely to create an impact:*

- Increase in height of the CAMU by nine feet.

- Temporary loss of vegetation on the surface of the CAMU until new grasses appear.

*Description of Environmental Setting:*

In visiting the site, a very large, grassy mound now exists. The mound obscures some parts of the USS-POSCO and the Los Medanos Energy facilities in the distance.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Have a substantial adverse effect on a scenic vista.

There is presently no scenic vista surrounding the site.

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.

Presently, there are no such resources at or near the site. The site is not located within a designated scenic highway.

- c. Substantially degrade the existing visual character or quality of the site and its surroundings.

The additional height (9 feet) of Unit I will alter the existing visual industrial character of the site and its surroundings. However, the cap will be coated with a material similar to existing conditions (grasses and weeds) so that the appearance will be similar to that now seen from the surrounding residential neighborhoods. In addition, the mitigation measures shall provide that USS-POSCO, in coordination with the City of Pittsburg, provide landscaping in the form of trees selected for growth characteristics to reach a height that will provide screening at not less than 48 feet installed at the perimeter of the project site to screen the Unit I landfill.

- d. Create a new source of substantial light of glare which would adversely affect day or nighttime views in the area.

The removal and construction activities will take place during daylight hours only. No artificial lighting will be necessary to carry out the project.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993

[http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm)

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact

- No Impact

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## 2. Agricultural Resources

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*Project activities likely to create an impact:*

None.

*Description of Environmental Setting:*

The USS-POSCO plant is an existing facility located in an industrially zoned area. The facility is bordered on the north by the New York Slough and industrial facilities; on the west by Harbor Street and industrial facilities; on the south by the Pittsburg-Antioch Highway and a low density single-family residential area; and on the east by Loveridge Road and industrial facilities. As such, no further analysis of Agricultural Resources is deemed necessary.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- b. Conflict with existing zoning or agriculture use, or Williamson Act contract.
- c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 3. Air Quality

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during construction activities by vehicles;
- Wind erosion over exposed earth surfaces;
- Soil excavation/construction activities;
- Hauling over unpaved roads, grading, and compacting activities; and

- Vapors emitted from SWMUs shallow exposed soils during excavation activities.

*Description of Environmental Setting:*

The project is located within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD is responsible for enforcing air quality standards within its jurisdiction established by the California Air Resources Board (CARB) and the federal Environmental Protection Agency. These air quality standards contain averaging times and threshold concentration levels for certain criteria pollutants that cannot be exceeded by proposed projects.

Of the various air pollutants, the BAAQMD has been designated by the CARB as being in attainment for PM<sub>2.5</sub>, PM<sub>10</sub>, and carbon monoxide. A 1999 federal court ruling blocked the implementation of the 8-hour ozone standard. Presently, its status is not clear. In August 1998, the Bay Area was redesignated to nonattainment-unclassified for the national 1-hour ozone standard. The above data was extracted from the summary contained within the BAAQMD's Ambient Air Quality Standards & Bay Area Attainment Status (January 2002) table.

The USS-POSCO land is zoned industrial. The USS-POSCO plant is located on approximately 483 acres in an industrial area. The construction project is described in Section I of this document and entails the removal of certain RCRA wastes off-site and the relocation of certain non-RCRA wastes to the proposed CAMU (which is the presently closed Unit 1) location at the USS-POSCO plant.

The SWMUs to be remediated under this project include the following:

Wastes currently planned for CAMU disposal:

- No. 3: Former Caustic Neutralization Area;
- No. 24.1: Site L-A – Dried Sludge Disposal Areas;
- No. 24.3: Site L-A – Lead Scale Disposal Area (East);
- No. 24.3: Site L-A – Lead Scale Disposal Area (Central);
- No. 24.5: Site L-A – Oil Disposal Areas (ODA #3);
- No. 24.8: Site L-A – Lead Impacted Area;

Wastes currently planned for off-site disposal:

- No. 17.1: Former Power Substation #1 Area; and
- No. 24.5: Site L-A – Oil Disposal Areas (ODA #1 and #4).

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan.

Staff of the Bay Area Air Quality Management District has indicated that a permit may be required to undertake the removal/remedial activities included under this project. USS-POSCO will procure all permits necessary to complete the work under this project and perform all air sampling necessary as the contaminated soils/materials are excavated from Sites L-A and L-B to ensure worker safety and the safety of residents surrounding the USS-POSCO facility.

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

See response to Item a. above. USS-POSCO will secure all necessary permits to carryout project work activities and will conduct all necessary sampling and monitoring requirements of the BAAQMD.

- c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

The construction project has the potential to create two types of air emission impacts: (1) equipment and vehicle exhausts, fugitive dust and SWMU related dust or vapors during remedial activities (i.e., excavation and transportation of SWMU remediation material/soil, and construction and closure of the Unit I CAMU); and (2) dust or vapors from SWMUs with shallow exposed soils that will not be remediated because chemical of interest (contaminant) concentrations are no greater than the site-specific soil cleanup levels calculated for the industrial/commercial worker. Construction impacts are considered potentially significant.

Diesel-powered heavy-duty equipment and vehicles, used during remedial activities, will be a source of pollutants such as hydrocarbons, oxides of nitrogen, carbon monoxide, PM-10 and sulfur oxides. The duration of remedial activities will be four to five months. Fugitive dust will be generated during construction activities by vehicles and wind erosion over exposed earth surfaces. Excavation, hauling over unpaved roads, grading, and compacting activities will be the source of construction dust emissions. Construction dust impacts are extremely variable, being dependent on wind speed, soil type, soil moisture, the type of construction activity, and acreage affected by construction activity. The highest potential for construction dust impacts will occur during the dry late spring, summer, and early fall months when soils are dry.

The effects of fugitive dusts will be increased dustfall and locally suspended particulates. Prevailing westerly winds will tend to carry construction emissions to the east. The closest residences to Site L-A (325 feet) are located to the southwest across the Pittsburg-Antioch Highway. The distance from Unit I to the closest residence across Harbor Street is about 375 feet. Although the potential for dust disturbance during construction of the Unit I CAMU is somewhat limited by the location and distance to the closest homes, this impact is considered potentially significant.

Off-site residential inhalation exposures from SWMU-related dust or vapors during remedial activities were evaluated in a report entitled "Evaluation of Off-site Residential Inhalation Exposures," July 31, 2000, prepared by USS-POSCO's consultant, Exponent. The evaluation focused on the activities associated with anticipated remedial activities, including the excavation of materials from the SWMUs, transport, compaction, and covering of the remediation material/soil) at SWMUs containing remediation material/soil that will be placed into the Unit I CAMU. These activities are potential sources of particulates suspended by wind or volatilization of vapors into ambient air that could theoretically transport SWMU chemicals of interest (contaminants) off-site to the nearby residents. Volatile organic compounds were not evaluated.

Based on Exponent's report of residential inhalation exposure evaluation, no adverse off-site residential inhalation exposure/risk is anticipated from remedial activities. Contaminants evaluated in Exponent's study included the contaminants found in each of the SWMUs.

SWMUs exposed at the ground surface are not planned for remediation because contaminant concentrations are lower than the site-specific soil cleanup levels calculated for the industrial/commercial worker. However, these SWMUs are potential sources of soil particulates if suspended by wind erosion or volatilization of vapors into ambient air that could theoretically transport contaminants off-site to the nearby residents. Off-site residential inhalation exposure from dust or vapors from these SWMUs with shallow

exposed soils were also evaluated in Exponent's report. Based on the residential inhalation exposure evaluation, no adverse off-site residential inhalation exposure is anticipated from SWMUs not planned for remediation.

Truck transport of soils is expected to occur as follows, but is dependent on soil sampling results:

1. Material/soil from the remediation of the following SWMUs to be placed in the Unit I CAMU for disposal:

No. 3: Former Caustic Neutralization Area;  
No. 24.1: Site L-A – Dried Sludge Disposal Areas;  
No. 24.3: Site L-A – Lead Scale Disposal Area (East);  
No. 24.5: Site L-A – Oil Disposal Areas (ODA #3); and  
No. 24.8: Site L-A – Lead Impacted Area.

The remediation traffic associated with the above SWMUs will be confined to the USS-POSCO plant. These SWMUs will generate approximately 94,420 cubic yards of remediation material/soil. Assuming each truck trip to the Unit I CAMU carries 15 cubic yards, 6,350 truck trips will occur. Covered trucks will be used.

2. Remediation material/soil from the following SWMUs will be directed to off-site regulated treatment/disposal facilities: No. 17.1: Former Power Substation #1 Area; and No. 24.5: Site L-A – Oil Disposal Areas (ODA #1 and #4). These SWMUs will generate approximately 1,441 cubic yards of remediation material/soil. Assuming each truck trip to the off-site regulated treatment/disposal facilities carries 15 cubic yards, 96 truck trips will occur. The off-site transport of hazardous waste will be regulated by standards related to hazardous materials and waste transportation. The U.S. Department of Transportation (DOT) regulates transportation of hazardous materials between states and to foreign countries. DOT regulations are contained in the Code of Federal Regulations, Title 49 (49 CFR). The State of California adopted these regulations for the intrastate movement of hazardous materials. State regulations are contained in California Code of Regulations (CCR), Title 22. This waste will be transported in enclosed trucks.

Impacts on nearby residents and site construction workers remedial activity will be reduced to a level that is less-than-significant through USS-POSCO's application of mitigation measures detailed below which have been derived from the Bay Area Air Quality Management District's CEQA Guidelines 1996, Table 2, Feasible Control Measures for Construction Emissions of PM-10. The mitigation measures below are contained within the proposed Part Permit B.

**Mitigation Measures During Remedial Activity:** USS-POSCO shall perform the following mitigation measures:

- Regularly water all active construction areas and at access and haul roads least twice daily;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard in all trucks, or employ other equivalent means (such as watering the top layer of materials exposed to short on-site haul distances) as may be approved by the BAAQMD;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at the project site;
- Sweep daily (with water sweepers) all paved access roads, paved parking areas and paved staging areas at the project site;

- Sweep southbound lanes of Loveridge Road (from Site L-A entrance/exit point on Loveridge Road to the Pittsburg-Antioch Highway) at the end of each day (with water sweepers) during the off-haul of remediation soils;
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously disturbed areas inactive for ten days or more), or employ other equivalent means (such as watering disturbed areas to maintain adequate moisture content) as may be approved by the BAAQMD;
- Enclose, cover water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 miles per hour;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation (hydroseed) in disturbed areas as quickly as possible (i.e., at least twice during Site L-A remediation activity and at the completion of the closure activity at the Unit I CAMU);
- Install wheel washers for all trucks, or manually wash off the tires or tracks of all trucks and equipment traveling between Site L-A and the Unit I CAMU on paved access roads;
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour or operate in a manner such that visible dust emissions from all excavation and grading activity does not exceed 0.5 on the Ringelmann chart, for a period or periods aggregating more than 3 minutes in any hour;
- Limit the area subject to excavation, grading, and other construction activity at any one time;
- Enforce a speed limit of not more than 15 miles per hour on unpaved roads and 30 miles per hour on paved roads within the UPI facility;
- Have on-site at all times, a site safety officer who is responsible for implementing the specific project construction SSHSP (signed by a Certified Industrial Hygienist and reviewed by UPI and/or its consultants for completeness) and implementing dust mitigation measures;
- Install appropriate air monitoring equipment as may be required by the BAAQMD;
- Limit personnel entrances into excavations;
- Limit the number of construction areas as well as limit access to those areas to approved personnel with adequate protective equipment; and
- Post signs to warn the public and non-construction employees of hazardous activities at the project sites.

**Mitigation Measures for Heavy Equipment:** USS-POSCO shall, to the extent possible, implement the following mitigation measures to minimize the impacts of heavy equipment use:

- Use alternative fueled construction equipment;
- Minimize idling time, for example, 5-minute maximum;
- Maintain properly tuned equipment;
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

d. Expose sensitive receptors to substantial pollutant concentrations.

Please refer to response in Item c. above.

*References:*

1. Application for a Part B Permit, May 22, 2001

3. Exponent, Evaluation of Offsite Residential Inhalation Exposures, July 31, 2000
4. Ambient Air Quality Standards & Bay Area Attainment Status (January 2002)
6. Bay Area Air Quality Management District's CEQA Guidelines 1996, Table 2, Feasible Control Measures for Construction Emissions of PM-10

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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#### **4. Biological Resources**

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during construction activities by vehicles;
- Wind erosion over exposed earth surfaces;
- Soil excavation/construction activities; and
- Hauling over unpaved roads, grading, and compacting activities.

*Description of Environmental Setting:*

The wildlife presently seen at the project areas containing weedy vegetation are those species that are either tolerant of or have been subject to human disturbance. Mammals witnessed at or expected to occur within the project areas include jackrabbits, house mice, and black Norway rats. Birds expected to inhabit the project areas include Brewer's Blackbird, house finch, and house sparrow.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.  
  
No identified species dwell on the project site.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.  
  
No identified species dwell on the project site.
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.  
  
No identified wetlands areas occur on the project sites L-A or L-B.

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

There are no identified migratory species dwelling at the sites that would be affected.

Implementation of the proposed project will result in the loss of all vegetation in the project areas due to the soil removal activities. The majority of the project areas have already been disturbed; the remaining project work is not likely to have a significant impact. No change in the diversity or numbers of any animal species is likely with the implementation of the proposed project, since few animals presently dwell on the site. The site is not presently the point of nesting for any specific species.

- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The project site is an industrial landfill and is zoned industrial.

- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The site is not within a Habitat Conservation Plan, or other conservation plan.

*References:*

1. Application for a Part B Permit, May 22, 200
3. Initial Study and Proposed Mitigated Negative Declaration, Lamphier and Associates, October 1993
7. Application for Certification, Pittsburg District Energy Facility, June 1998

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**5. Cultural Resources**

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*Project activities likely to create an impact:*

- Soil excavation/construction activities; and
- Hauling over unpaved roads, grading, and compacting activities.

*Description of Environmental Setting:*

The proposed project is located in the northeastern portion of Contra Costa County within the city of Pittsburg incorporated area, immediately south of the New York Slough and Brown's Island. Prehistoric archaeological sites in this portion of Contra Costa County, are situated adjacent to historical marsh margins and watercourses.

The project site is not adjacent to areas known to contain prehistoric cultural/paleontological sites. Consequently, it is unlikely that prehistoric cultural

resources would be encountered during the project work. However, in the event cultural/paleontological resources are encountered, mitigation measures will be employed as detailed below. The mitigation measures below are contained within the proposed Part Permit B.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

No cultural/paleontological resources are known to occur in this area of Contra Costa County. However, in the event cultural resources are found, USS-POSCO will conduct a field study to determine the materials and their context. The project site shall not be altered until a cultural or paleontological resources consultant has evaluated the situation. Project personnel shall not collect cultural/paleontological resources. Cultural/paleontological resources would include but not be limited to the following:

- Chert or obsidian flakes,
- Mortars and pestles,
- Soil containing shell and bone fragments;
- Heat-impacted rock;
- Human burials;
- Stone or adobe foundations or walls and other types of building materials; and
- Identified resources will be recorded on appropriate Department of Resources forms.

- b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

See response to item a. for items b., c., and d.

- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

- d. Disturb any human remains, including those interred outside of formal cemeteries.

*References:*

1. Application for a Part B Permit, May 22, 2001
8. Initial Study and Proposed Mitigated Negative Declaration, USS- POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993
7. Application for Certification, Pittsburg District Energy Facility, June 1998

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**6. Geology and Soils**

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*Project activities likely to create an impact:*

- Unit 1 CAMU: Removal of existing surface vegetative layer;

- Stockpiling of removed soils for later reuse in the Unit I CAMU final cover;
- Removal of the geosynthetics layer on the top deck of Unit I and the geosynthetics layer on the side slopes in the areas of lateral expansion (i.e., south side of Unit I). (These layers will be removed and disposed at an off-site Class III landfill.);
- Scarification of subgrade materials and re-compaction of subgrade materials;
- Placement of remediation material/soil into Unit 1, the CAMU;
- Remediation material/soil placement expansion of the footprint of Unit I, followed by compacting onto the existing Unit I side slopes and top deck;
- Excavation and consolidation of soils.

*Description of Environmental Setting:*

The ground surface across the USS-POSCO plant is part of a larger alluvial plain that slopes gently from a topographic divide about two miles south of the property. Most of the plant lies between the shore to the north and the Burlington Northern and Santa Fe Railroad (BNSF) right-of-way about 3,000 feet south of the shoreline. One portion of the plant property lies south of the railroad. The main portion of the plant property north of the railroad tracks slopes gently to the slough with elevations ranging from about 23 feet to about seven feet relative to the National Geodetic Vertical Datum (NGVD). The USS-POSCO plant is located in the Coast Ranges geomorphic and tectonic province of northern California, and, more specifically, within the greater San Francisco Bay region.

Sediments beneath the plant have evolved from alluvial outwash of the Coastal Range hills to the south. Sediment deposition was primarily controlled by the fluvial system of the ancestral Sacramento and San Joaquin Rivers, and is characterized by discontinuous, lenticular, sandy clays with subordinate clayey and silty sands. These units are highly variable in horizontal and vertical extent.

Data from soil borings and monitoring wells at the USS-POSCO plant indicate that groundwater occurs in the following two general hydraulic zones:

- An unconfined upper groundwater-bearing zone, extending from an average 10 feet to 80 feet bgs, and consisting primarily of silts and silty clay interbedded with laterally discontinuous silty to clayey sand lenses; and
- A confined lower groundwater-bearing zone comprising the main aquifer in the area, consisting of sand and gravel averaging 70 feet in thickness, the top of which occurs at an approximate depth of 90 to 100 feet bgs.

The upper and lower groundwater-bearing zones are separated by a silty-clay aquitard that ranges in thickness from about 24 to 36 feet. Based on a pumping test conducted about 800 feet east of Unit II, there appears to be little hydraulic connection between the two zones at the western end of the USS-POSCO plant. However, evidence of historic salt-water intrusion as a result of over pumping in the lower groundwater-bearing zone indicates there is a hydraulic connection with the New York Slough.

A thick section of hard clay lies below the main aquifer and is considered old bay mud deposits. Depth to bedrock is estimated to be between 400 and 800 feet below ground surface. Bedrock is the Tahama formation that consists of tertiary-aged shales, sandstones, and conglomerates, which dips steeply to the north.

The Unit I CAMU project site is located within a seismically active region. Regional seismic sources could generate strong to moderate earthquakes that could cause significant ground shaking at the Unit 1. An analysis of potential geological hazards, such as earthquakes, landslides, liquefaction, and related hazards was performed by Lamphier and Associates for the

City of Pittsburg in 1993 for the initial closure of Unit 1 in 1995. This study concluded that no active faults exist under Unit I and stated that ground surface fault rupture and creep are not expected to occur at the Unit I Site. However, ground shaking would be expected to occur. The site may be affected by large-magnitude earthquakes on the San Andreas and Hayward faults and by earthquakes of lesser magnitude from nearby faults, including the Concord, Antioch, Clayton/Greenville, and Pittsburg faults.

This report further concludes that the sediments underlying the site generally have a high liquefaction potential. However, the subsurface investigation at the project site indicated that primarily fine-grained cohesive sediments to 20 feet underlie the site, and these materials have a low susceptibility for liquefaction. Silts and clays at the upper layer of the Unit I could have a moderate liquefaction potential.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42)
  - Strong seismic ground shaking
  - Seismic-related ground failure, including liquefaction
  - Landslides

USS-POSCO secured a fatal flaw analysis evaluation from URS Geiner Woodward Clyde (URS) consultants on September 21, 1999. In this analysis, URS focused on two constraints that could prove to be fatal-flaws in the Unit I CAMU expansion project related to capacity and stability. URS made a recommendation for construction based on the most desirable construction for the Unit I expansion, designated as Alternative 2. This configuration was projected to be able to accommodate 140 percent of the sludge known to be existing at Site L-A (the area from which most of the waste will be transferred). This alternative was determined by URS consultants to be stable under both static and seismic conditions.

The Unit I CAMU will be designed and constructed to resist seismic shaking in accordance with current standards of practice and the applicable requirements of the California Code of Regulations pertaining to hazardous waste facilities. The proposed project includes a Contingency Plan, prepared to address unlikely events at that Unit I CAMU such as fire, slope failure or breach of the cover materials. USS-POSCO will activate the Contingency Plan if any of the following events occur as a result of a fire, slope failure or breach of the cover materials:

- USS-POSCO calls upon the assistance of any outside emergency service agency;
- Hazardous waste or hazardous waste chemicals are released to the environment in excess of any reportable quantity levels established by 40 CFR Part 302; and/or
- A person or persons seek on-site or off-site medical attention.

The Unit I CAMU design requirements, and the project Contingency Plan will reduce the impact of potential exposure of people or property to seismic hazards to a level that is less than significant. The flat design of the slopes included in the design plan for the Unit I should also retain the low potential for landsliding.

c. Result in substantial soil erosion or the loss of topsoil.

- Placement of the Remediation Material/Soil at the Unit I CAMU

After the Unit I geosynthetics layer is removed, subgrade materials will be scarified and re-compacted before the placement of remediation material/soil into the CAMU. The material will be placed in nominal eight-inch loose layers and will be compacted in-place in accordance with American Society of Testing and Materials (ASTM) Method 1557 (a minimum compaction of 85 percent of the maximum dry density of the remediation material/soil). Remediation material/soil placement will begin by expanding the footprint of Unit I, followed by compacting onto the existing Unit I side slopes and top deck.

It is anticipated that most of the material will be sufficiently moist upon excavation to require minimal moisture conditioning before placement and compaction. Water trucks, however, will be available to add water and to control dust generation, if necessary. Wetter remediation material/soil (such as that from SWMU No. 24.5, Oil Disposal Areas) will be mixed with dryer remediation material/soil during remediation material/soil placement at the CAMU to avoid pockets of wetter remediation material/soil that could adversely impact CAMU stability.

In areas that will receive remediation material/soil, the surface vegetative layer in the existing Unit I final cover will be removed and stockpiled for later reuse in the Unit I CAMU final cover. The geosynthetics layer on the top deck of Unit I and the geosynthetics layer on the side slopes in the areas of lateral expansion (i.e., south side of Unit I) will be removed and disposed at an off-site Class III landfill.

- Closure of the Unit I CAMU

Following completion of anticipated remediation material/soil consolidation activities, the CAMU will be closed in general conformance with the Unit I Closure and Post-Closure Maintenance Plan. Should the volumes of remediation material/soil planned for disposal in the Unit I CAMU actually be placed in the Unit I CAMU, then at closure, the Unit I CAMU will contain the types and quantities of wastes as shown in Exhibit C.

Removal of the existing cap at Unit 1 and scarifying the surface will result in change and loss of vegetation. However, the soils excavated will be mixed with the soils transferred from Sites L-A and SWMU No. 3 and placed back into the Unit 1, and there will be no resulting loss of topsoil, but there may be some erosion until new vegetation growth occurs.

During removal/remediation activities, is anticipated that most of the material will be sufficiently moist upon excavation to require minimal moisture conditioning before placement and compaction. Water trucks, however, will be available to add water and to control dust generation, where necessary. Wetter remediation material/soil (such as that from SWMU No. 24.5, Oil Disposal Areas) will be mixed with dryer remediation material/soil during remediation material/soil placement at the CAMU to avoid pockets of wetter remediation material/soil that could adversely impact CAMU stability.

Following completion of remediation material/soil consolidation activities, remediation

material/soil placed in the Unit I CAMU will be closed in place via construction of an engineered final cover consisting of, from bottom to top: a foundation layer (compacted dried sludge), a geosynthetic clay layer, a geosynthetic drainage layer, a filter fabric, and a vegetation/soil layer. The new geosynthetics layer will overlap, in a shingle effect, the remaining Unit I geosynthetics layer (in areas not receiving remediation material/soil) by a minimum of three feet.

- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Please refer to above responses.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

The engineered cap precludes any possible negative effects due to the presence of expansive soils at the site. Based on the findings of the URS field investigation of September 2001, soil samples collected from native soils underlying the CAMU and landfill soils used as fill ranged from low to moderately high expansion potential relative to empirical correlations to plasticity index. The engineering controls incorporated into the final cover, including the geosynthetic clay liner, storm water infiltration collection and removal system (synthetic drainage layer), and concrete lined storm water conveyance channels, serve to reduce potential exposure of expansive soils to moisture below the final cover by (1) minimizing surface water infiltration into the fill material, and (2) conveying surface water away from the CAMU.

Because the moisture contents of native and existing fill soils are not expected to deviate significantly from pre-construction and post-construction levels, changes in volume are anticipated to be minor. These minor volume changes will be offset by the weight of the overlying soils.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of water.

Septic tanks and alternative wastewater disposal systems will not be part of this project now or in the future. This project site currently contains a stormwater retention basin (SWRB) which collects rainwater runoff, and it will continue to do so. Enlargement of the CAMU footprint will require some modifications to the SWRB. Most of the water collected in the SWRB is diverted to the New York Slough. Please refer to the Hydrology and Water Quality section of this document for a detailed discussion of the SWRB relative to this project.

*References:*

1. Application for a Part B Permit, May 22, 2001
3. Lamphier and Associates, Initial Study and Proposed Mitigated Negative Declaration, USS-POSCO Industries, October 1993
7. Application for Certification, Pittsburg District Energy Facility, June 1998
8. URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit I CMS Workplan USS-POSCO Industries, September 21, 1999

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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## 7. Hazards and Hazardous Materials

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during construction activities by vehicles;
- Wind erosion over exposed earth surfaces;
- Soil excavation/construction activities; and
- Hauling over unpaved roads, grading, and compacting activities.

*Description of Environmental Setting:*

The identified project areas within the USS-POSCO plant are the Unit 1, the proposed CAMU, Sites L-A and L-B. Most of the remediation material/soil that will be generated during the RCRA corrective action at the USS-POSCO plant will originate from the SWMU identified as Site L-A, the dried sludge disposal areas. Approximately 95,000 cubic yards of dried sludge and underlying soil require remediation. The Site L-A dried sludge was generated from former sludge drying beds and was deposited on Site L-A from 1972 to 1978. Exhibit D contains a list of the SWMUs identified for remedial action within Sites L-A and SWMU No. 3 and the types and quantities of wastes expected to be encountered and remediated. Note that some wastes are planned for transfer to Unit 1, the CAMU, or for disposal at a hazardous waste treatment, storage and disposal facility, depending on soil sampling results.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

Remedial activities may result in the handling of hazardous wastes or remediation material/soil with contaminants at concentrations exceeding the RFI construction worker screening criteria. Workers performing remedial activities could be exposed to health hazards associated with these materials. A site-specific health and safety plan (SSHSP) shall be developed in accordance with State and Federal hazardous waste operation and emergency response regulations for the planned remedial activities. The plan must be submitted to DTSC for approval.

Workers performing future construction activities within the footprint of SWMU 24.2 could be exposed to health hazards associated with SWMU material/soil. As a precautionary measure, deed restrictions shall stipulate that SSHSPs be prepared before any future grading or excavation at SWMUs with a significant potential for contaminant concentrations exceeding RFI construction worker screening criteria. Exposures to construction workers would then be controlled using personal protective equipment and other control measures (e.g., the use of wetting agents) as specified in the SSHSPs.

USS-POSCO will implement a special program to track the SSHSP requirement. Similar to its existing Confined Space Permit Program, USS-POSCO shall implement a Grading/Excavation Permit Program. A permit from the plant Safety Officer shall be

required for any plant grading and/or excavation. Before issuing the permit, the plant Safety Officer shall compare the proposed area of grading and/or excavation with SWMU locations with chemical concentrations in soil exceeding RFI construction worker criteria. For grading and/or excavation work planned within the footprints of SWMUs with contaminant concentrations exceeding RFI construction worker screening criteria, a SSHSP will be required to be submitted (approved by a certified industrial hygienist) prior to a permit being issued. The existing USS-POSCO employee training program and the outside contractor orientation program shall be modified to incorporate the new Grading/Excavation Permit Program.

Material/soil from the remediation of the following SWMUs will be placed in the Unit I CAMU for disposal:

- No. 3: Former Caustic Neutralization Area;
- No. 24.1: Site L-A – Dried Sludge Disposal Areas;
- No. 24.3: Site L-A – Lead Scale Disposal Area (East portion only);
- No. 24.5: Site L-A – Oil Disposal Areas (ODA #3) and
- No. 24.8: Site L-A – Lead Impacted Area.

The remediation traffic associated with these SWMUs will be confined to the USS-POSCO plant. These SWMUs will generate approximately 94,420 cubic yards of remediation material/soil. Assuming each truck trip to the Unit I CAMU carries 15 cubic yards, 6,350 truck trips will occur. Personnel will be provided at points crossing pedestrian walkways and tracks associated with the Burlington Northern and Santa Fe Railroad to monitor project traffic.

Remediation material/soil from the following SWMUs will be directed to off-site regulated treatment/disposal facilities: No. 17.1: Former Power Substation #1 Area; and No. 24.5: Site L-A – Oil Disposal Areas (ODA #1 and #4). These SWMUs will generate approximately 1,441 cubic yards of remediation material/soil. Assuming each truck trip to the off-site regulated treatment/disposal facilities carries 15 cubic yards, 96 truck trips will occur.

The off-site transport of hazardous waste will be regulated by standards related to hazardous materials and waste transportation. The U.S. Department of Transportation (DOT) regulates transportation of hazardous materials between states and to foreign countries. DOT regulations are contained in the Code of Federal Regulations, Title 49 (49 CFR). The State of California adopted these regulations for the intrastate movement of hazardous materials. State regulations are contained in California Code of Regulations (CCR), Title 22. Under RCRA, the USEPA sets standards for transporters of hazardous waste. In addition, the State of California has adopted regulations for transportation of hazardous waste originating in the state, or passing through the state. California regulations concerning hazardous materials and waste transportation are contained in CCR, Title 22.

In addition, please refer to the Air Resources section of this document for a full discussion of air impacts. In the report of USS-POSCO's contractor, Exponent, July 31, 2000, it was determined that the emissions from the excavation activities would not adversely affect the surrounding residential communities. Staff of the Bay Area Air Quality Management District has indicated that a permit will be required to undertake the removal/remedial activities included under this project. USS-POSCO will procure all permits necessary to complete the work under this project and perform all air sampling necessary as the contaminated soils/materials are excavated from Sites L-A and SWMU No. 3 to ensure worker safety and the safety of residents surrounding the USS-POSCO facility.

Soil sampling will be undertaken as described under the Description of Environmental Setting.

- Mitigation controls, as described under the Air Resources section of this document, will be employed to control hazardous emissions and ensure public and employee health and safety.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The proposed project includes a Contingency Plan, prepared to address unlikely post-closure events at that Unit I CAMU such as fire, slope failure or breach of the cover materials. USS-POSCO will activate the Contingency Plan if any of the following events occur as a result of a fire, slope failure or breach of the cover materials:

- USS-POSCO calls upon the assistance of any outside emergency service agency;
- Hazardous waste or hazardous waste chemicals are released to the environment in excess of any reportable quantity levels established by 40 CFR Part 302; and/or
- A person or persons seek on-site or off-site medical attention.

With the implementation of appropriate mitigation and required emergency contingency plans in place, hazardous releases should be minimized. Mitigation measures are listed under item a.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

With the implementation of the above mitigation measures, there will be no emissions within one-quarter mile of an existing or proposed school.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or to the environment.

See discussion under items a., b., and c. above.

- e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

USS-POSCO staff shall provide access to all emergency personnel from all public agencies during the project and shall implement its DTSC-approved contingency plan. A draft plan is described in the Part B Permit Application.

#### References:

1. Application for a Part B Permit, May 22, 2001
3. Lamphier and Associates, Initial Study and Proposed Mitigated Negative Declaration, USS-POSCO Industries, October 1993
7. Application for Certification, Pittsburg District Energy Facility, June 1998

8. URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit I  
CMS Workplan USS-POSCO Industries, September 21, 1999

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**8. Hydrology and Water Quality**

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during construction activities by vehicles;
- Wind erosion over exposed water surfaces;
- Soil excavation/construction activities; and
- Grading, and compacting activities.

*Description of Environmental Setting:*

The closest surface water bodies to the USS-POSCO plant are the New York Slough and Kirker Creek.

The New York Slough is the most prominent feature within this area. The slough and associated marshy regions are located adjacent to and north of the USS-POSCO plant.

The water quality of the slough varies on a seasonal basis and is related to the net flow through the Delta. During the winter and spring, good water quality in the slough is prevalent due to the large volume of fresh water flow in the rivers feeding the slough, which minimizes the intrusion of salt water from the San Francisco Bay. During the summer and fall, however, the water quality is poor because low outflow allows salt-water intrusion.

Kirker Creek is located approximately 0.5 miles southeast of Site L-B (location of the planned Unit I CAMU) at its closest point. Kirker Creek flows in a northeasterly direction towards the Delta until it encounters the southern boundary of the USS-POSCO plant. At this point, the creek is diverted to the east in an aligned channel along the north side of the Pittsburg-Antioch Highway, which is located hydraulically upgradient and diagonal to Site L-B. Flow in Kirker Creek generally occurs only during the wet season; however, irrigation overflow from small tributary channels may contribute some water to the channel during the dry season. Being an unlined ditch at a higher elevation than groundwater, it most likely acts to recharge the groundwater to some extent; little surface run-off from the creek reaches the New York Slough.

Portions of the USS-POSCO plant fall within the 100-year flood plain, but the location of the planned Unit I CAMU will not be within the 100-year flood plain. The topography in the vicinity of the planned Unit I CAMU location ranges from about 10 feet NGVD to 39 feet NGVD. The 100-year flood plain in the Site L-B vicinity has been estimated at an elevation of about 7 feet NGVD.

Surface water drainage from developed areas (including parking lots and roof tops) of the USS-POSCO plant south of the railroad is intercepted by storm drains. Remaining drainage is retained within the area. Surface water drainage from the main plant area north of the railroad is generally north toward the shore, but storm drains along roadways and depressions south of the shoreline intercept most of the run-off.

The waste management area within Site L-B, which includes the planned CAMU, drains generally

to the north and westward to the SWRB. The remaining area of Site L-B drains to the north, northwest with drainage eventually reaching the New York Slough. Most of the drainage intercepted by storm drains is combined with process wastewater and cooling waters and treated at USS-POSCO's Terminal Wastewater Treatment Plant (TWTP). TWTP treatment includes oil separation, lime addition, suspended sediment reduction and neutralization before discharge to the New York Slough (outfall structure #001) under a National Pollutant Discharge Elimination System (NPDES) permit. Stormwater intercepted from the most western portion of the main plant area, in excess of Terminal Wastewater Treatment Plant (TWTP) capacity (which occurs during rainfall intensities greater than a 2-year, 24-hour storm event), is kept separate from process wastewater and cooling waters and is discharged without treatment to the New York Slough (outfall structure #002) under the same NPDES permit.

Data from soil borings and monitoring wells at the USS-POSCO plant indicate that groundwater occurs in the following two general hydraulic zones:

- An unconfined upper groundwater-bearing zone, extending from an average 10 feet to 80 feet bgs, and consisting primarily of silts and silty clay interbedded with laterally discontinuous silty to clayey sand lenses; and
- A confined lower groundwater-bearing zone comprising the main aquifer in the area, consisting of sand and gravel averaging 70 feet in thickness, the top of which occurs at an approximate depth of 90 to 100 feet bgs.

The upper and lower groundwater-bearing zones are separated by a silty-clay aquitard that ranges in thickness from about 24 to 36 feet. Groundwater flow is generally toward the north to northwest.

#### *Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Violate any water quality standards or waste discharge requirements.

As stated above, the proposed Unit 1 CAMU currently operates under a NPDES permit. Detailed plans for the final surface water drainage system for the proposed Unit I CAMU monitoring plans under the project are listed below:

The final surface water drainage system for the Unit I CAMU will perform three major functions: (1) facilitate the removal of precipitation on the closed Unit I CAMU so as to minimize infiltration and erosion of the final cover; (2) collect runoff from the Unit I CAMU in the existing SWRB to prevent the runoff from leaving the area; and (3) divert drainage from adjacent areas to prevent run-on onto the Unit I CAMU.

The existing SWRB has a holding capacity of approximately 138 percent (368,000 cubic feet) of the run-off calculated from the waste management area encompassing the Unit I CAMU, Unit II and the SWRB for the required 1,000-year, 24-hour storm (266,000 cubic feet). Thus, it will not be necessary to remove the water from the basin after minor storm events to restore the required capacity. Water from the SWRB will be removed with portable pumping equipment using one of the options below when necessary to restore the required capacity. Before pumping, a water sample will be collected from the surface of the SWRB and analyzed by a State-certified laboratory for Unit I and II groundwater monitoring chemicals.

- Option 1: Water will be pumped through a portable pipeline to an existing pump station located to the northeast of Site L-B. This pump station will then pump the water to the USS-POSCO TWTP as addressed in the plant NPDES permit; and

- Option 2: Water will be pumped over the top of the north end of the containment berm into the low-lying area, which contains a railroad spur, if analytical results demonstrate that the stormwater meets water quality objectives listed in the RWQCB, San Francisco Bay Region's Basin Plan.

Grading will provide for drainage from the closed Unit I CAMU by natural gravity flow toward the north and west, into the SWRB. Stormwater will be collected on the closed Unit I CAMU in concrete-lined culverts and conveyed down the side slopes of the Unit I CAMU in downdrains. Stormwater run-off from the top deck and side slopes will be collected by a perimeter drainage channel located at the toe of the unit and will drain to the northwest, and from there into the SWRB. An access road constructed parallel to this drainage channel will be provided.

Run-on will be controlled by small earthen berms and by the natural slope of the area. The slope prevents run-on from the west and from most of the north side. Berms will control run-on at the northeast corner and along the south side. The area immediately east of the Unit I CAMU consists of a plateau at a slightly higher elevation that is sloped to drain away from the Unit I CAMU.

Migration of contaminants to groundwater is considered a potential exposure pathway. However, groundwater monitoring since closure of Unit I has demonstrated that a release of contaminants to the upper groundwater-bearing zone at statistically significant concentrations (based on statistical comparisons of upgradient to downgradient concentrations) has not occurred.

In a memorandum authored by the Geological Services Unit (GSU) of DTSC (dated August 7, 2001), modifications to the existing Unit I groundwater monitoring program were recommended to accommodate the planned Unit I CAMU. USS-POSCO has made the following modifications to the satisfaction of DTSC:

- A new well (M-04S) was installed at the monitoring well M-04 and M-04D cluster location to monitor the shallow-depth interval of the upper-groundwater-bearing zone;
- The monitoring well cluster (M-01, M-01B, and M-01D) was destroyed and sealed because it is located in the expansion area. Well abandonment was carried out in compliance with the requirements in the *Final Draft of California Well Standards, Bulletin 74-90* (California Well Standards) and Chapter 414-1.224, *Abandonment of Wells* of the Ordinance Code of Contra Costa County;
- Monitoring well M-01D, a lower groundwater-bearing zone monitoring well, was relocated (this new well is identified as M-01DR) in the vicinity of the M-01F and M-01G well cluster;
- Because of a submerged well screen in monitoring well M-01G, monitoring well M-01G was destroyed and sealed, and a new well (M-01GR) installed with the top of the well screen above historical groundwater depths.

Current monitoring parameters for Unit I have been selected based on in-place waste characteristics and historical groundwater chemical data. Current monitoring parameters are divided into field and laboratory parameters as follows:

Field Parameters

Groundwater elevation;  
pH;  
Specific Conductance; and  
Temperature.

Laboratory Parameters

Metals (arsenic, chromium, copper, lead, manganese, and zinc);  
TDS; TOC; TPH-d; TPH-g  
O&G; and VOCs.

Placement in the Unit I CAMU of remediation material/soil from the following SWMUs will

warrant expansion of the current list of groundwater monitoring parameters:

- No. 24.1: Dried Sludge Disposal Areas (none)
- No. 24.3: Lead Scale Disposal Area, East (none)
- No. 24.5: Oil Disposal Areas (priority pollutant metals)
- No. 24.8: Lead Impacted Area (none).

The list of groundwater monitoring parameters will remain unchanged for the first two years of the Unit I CAMU post-closure period. After the second year, the list will be reduced if evaluation of the data justifies a shorter list of monitoring parameters. Should the list of groundwater monitoring parameters be reduced in the future, the original list of will be analyzed every five years.

The addition of remediation material/soil to Unit I could cause an increase in the pressure head within the landfill and create a greater potential for downward migration of fluids containing hazardous chemicals. Loading of existing material (both native soils above the water table and existing Unit I waste) reduces the void space of these materials. At a constant water content, the degree of saturation ( $S$ ) of these materials increases. Should the existing Unit I waste become fully saturated ( $S = 100$  percent), there would be increased potential for chemicals to migrate from the existing Unit I waste into the underlying native soils.

The increase in the degree of saturation of the existing Unit I waste resulting from the addition of remediation material/soil was evaluated by determining the change in the void ratio of these materials during settlement, assuming that the water content remained constant. This analysis was only performed near the center of the planned Unit I CAMU, where the effect would be the greatest.

Based on the analysis performed, the increase in the degree of saturation of the existing Unit I waste was found insufficient to fully saturate the waste under the existing and planned loads. The initial degree of saturation was estimated to be 79 percent and after loading, the final degree of saturation was computed to vary between 79 and 80 percent. Therefore, full saturation would not have been achieved, and pore fluid in the existing Unit I waste would not be expected to migrate downward as a result of placement of the additional remediation material/soil.

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

This project is not anticipated to negatively impact the aquifer. Migration of contaminants to groundwater is considered a potential exposure pathway. However, groundwater in the New York Slough is not considered a drinking water source due to brackish water intrusion from the river system that was caused by the historical over-draft pumping of groundwater. Groundwater monitoring since the closure of Unit 1 has not indicated that a release of contaminants to the upper groundwater bearing zone has occurred.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

The plan has been engineered to avoid such impacts. Please refer to Unit 1 CAMU site plans in above responses.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

See responses to items a., b., and d. for items e. through g and i.

- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

A SWRB now exists. Please refer to site plans for the Unit 1 CAMU in above responses.

- f. Otherwise substantially degrade water quality.

The proposed project will include grading activities in areas of soil known to contain heavy metals and petroleum hydrocarbons. Transport of soil particles containing these chemicals by wind or water could result in spreading of these chemicals and possible degradation of water quality if these sediments were transported to surface water bodies, including the New York Slough.

Following completion of remedial activities, the potential for erosion and sedimentation effects will be appropriately mitigated by the remediated SWMUs final grading, which will conform to surrounding grades and by the design and required maintenance of the closed Unit I CAMU. The estimated average soil loss (erosion) depth on the Unit I CAMU side slopes, after construction and vegetation of the final cover, will be 0.042 inches per year. The sediment generated by erosion will be transported through the stormwater collection system and deposited in the SWRB.

A SWPPP shall be submitted to the City of Pittsburg for review and approval before the issuance of City grading permit. The SWPPP shall be required to identify potential chemicals (other than uncontaminated sediment) that are likely to be present in runoff from the construction sites and present appropriate control measures. The plan shall also describe the method of disposal of sediment transported by the runoff and collected by the control methods.

In addition to the self-inspection and certification (reporting) requirements stipulated in the Unit I CAMU post-closure maintenance permit, project areas shall be inspected by the City during construction once prior to the rainy season (November through April) and following the first major storm. The purpose of the inspection will be to verify that erosion and sediment control measures presented in the SWPPP were effectively implemented.

- g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

The construction of the Unit I CAMU and the excavation of 9 SWMUs, one of which has material/soil above surrounding grades (No. 24.1: Site L-A – Dried Sludge Disposal Areas) will result in changes in the topography of the relatively flat project areas (i.e. within the footprints of the Unit I CAMU and the SWMUs to be remediated). The changes in topography will not result in significant impacts to site slope stability, drainage, or flooding hazards.

The waste management unit structures will not be constructed within a flood hazard zone and will not affect the flow of floodwaters. The runoff from the waste management units

will be controlled by a drainage system that will capture runoff and direct it into the stormwater retention basin. The topographic changes will be localized and will not result in potential changes or damage to topographic features outside of the designed project components.

The proposed project will involve grading of approximately 21 acres (13 acres at SWMU No. 24.1, two acres at the south side of Unit I, which will be used to expand the Unit I footprint, five acres at the stormwater retention basin, which will be used as a project soil borrow source, and one additional acre at the other SWMUs from which remediation/soil will be placed in the Unit I CAMU). During remedial activities, the disturbance and exposure of soil during grading could increase the potential for wind and water erosion of exposed soil and waste management unit materials.

All construction activities resulting in the disturbance of soil at a site are required to comply with the terms of the Waste Discharge Requirements (WDRs) for Discharges of Storm Water Associated with Construction Activity. WDRs are enforced by the State Water Resources Control Board through the Regional Water Quality Control Board (RWQCB) under the statewide General Permit for Storm Water Discharges Associated with Construction Activity to comply with the National Pollutant Discharge Elimination System (NPDES) requirements for non-point source pollutant control. The terms for coverage under the General Permit require that a Storm Water Pollution Prevention Plan (SWPPP) be developed and implemented during construction to reduce the potential for adverse effects of erosion and sedimentation.

The project applicant will be responsible for permitting requirements, including the development and implementation of the SWPPP. The SWPPP is required to identify any potential pollutant sources that may affect the quality of the runoff and identify, construct, and implement stormwater pollution prevention measures to reduce pollutants in stormwater discharges from a construction site. Control measures could include the construction of detention structures, installation of siltation fencing, and appropriate grading practices. The WDRs also stipulate that a monitoring program be implemented to ensure compliance with the requirements of the general permit and the SWPPP. In general, dischargers are self-regulated under the WDRs. The dischargers are not required to submit inspection reports to any regulatory agency, unless self-inspection determines that the construction activity *is* not in compliance with the provisions of the SWPPP.

- h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

There are no dam structures within the project vicinity.

- i. Inundation by sieche, tsunami or mudflow.

See above responses.

*References:*

1. Application for a Part B Permit, May 22, 2001
7. Application for Certification, Pittsburg District Energy Facility, June 1998

*Findings of Significance:*

- Potentially Significant Impact

- Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 9. Land Use and Planning

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*Project activities likely to create an impact:*

- Increase of Unit 1, proposed CAMU; and
- Grading, and compacting activities at Unit 1, SWMUs at Sites L-A and L-B.

*Description of Environmental Setting:*

The USS-POSCO plant is an existing facility located in an industrially zoned area. A number of industrial facilities are located near the USS-POSCO plant. East of the USS-POSCO plant are the DOW facilities and a municipal waste transfer station operated by Contra Costa Waste Service. To the southeast is the Delta Diablo Sanitation District Plant. The Los Medanos Energy Center is on 12 areas within Site L-B just south of Third Street. GWF Power Systems Company operates two petroleum coke-burning electrical power plants nearby. One is located along the shoreline directly north of Site L-B. The other is located east of the USS-POSCO plant on Loveridge Road. The Schuller Manville Roofing Systems plant, a manufacturer of roofing and insulation materials, is located across Harbor Street, about 1/4 mile northwest. Marine terminals (Diablo Services Corporation, Ultramar, Inc., and Koch Carbon, Inc.) specializing in dry bulk cargoes and liquid bulk carriers are located along the shoreline across Third Street north of Site L-B. A cluster of mechanical repair shops, Atlas Pallet Corporation and an auto wrecking yard are located immediately outside the northwest corner of Site L-B, beginning about 800 feet northwest of Unit 1.

Unit I is part of an approximate 21-acre waste management area. The footprint of Unit I covers about eight acres. The remaining area consists of Unit II (a non-hazardous waste management unit receiving wastewater treatment sludge generated by the TWTP and the OSS) and the SWRB, which are located immediately north of Unit I and the vacant land immediately south of Unit I, which will be used to laterally expand Unit I. Access to Unit I and II is provided by a graveled road and restricted to USS-POSCO personnel and USS-POSCO contractors.

The area immediately south of Site L-B across the railroad right-of-way, beginning at Sante Fe Avenue, is a low-density single-family residential area. This residential area is isolated from truck traffic, railroad operations, and Site L-B activities by a sound wall recently constructed as part of a truck bypass road (Route 9). The area west of the planned Unit I CAMU expansion, across Harbor Street, consists of a combination of commercial, light industry, and residential uses.

Schools in the area include, the Martin Luther King preschool, about 3/4 miles to the south on California Avenue, Delta High School, about one mile to the west, and Central Junior High School about one mile to the south of the USS-POSCO plant. A tri-school complex consisting of Pittsburg High School, Riverside High School, and Village Elementary School is located about one-mile southwest of the USS-POSCO plant. Los Medanos Community College is about two miles to the south.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

As set forth in the City of Pittsburg General Plan, the project will be consistent with the existing and planned industrial land use for the USS-POSCO plant area. Planned land uses for the USS-POSCO plant will not significantly change. The proposed project will be compatible with existing land uses south and west of the USS-POSCO plant.

- b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

There are no habitat conservation plans existing within the project sites.

*References:*

1. Application for a Part B Permit, May 22, 2001
3. Lamphier and Associates, Initial Study and Proposed Mitigated Negative Declaration, USS-POSCO Industries, October 1993

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**10. Mineral Resources**

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*Project activities likely to create an impact:*

- Excavation activities at Sites L-A and L-B.

*Description of Environmental Setting:*

Geological reports to date have not revealed the existence of any mineral resources. As such, no further analysis of Mineral Resources is deemed necessary.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

*References:*

1. Application for a Part B Permit, May 22, 2001

*Findings of Significance:*

- Potentially Significant Impact

- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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## 11. Noise

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Soil excavation/construction activities; and
- Grading, and compacting activities.

*Description of Environmental Setting:*

The City of Pittsburg has established noise levels that are considered to be compatible with various types of land use, and the degree of noise level increase that is considered significant. The City has also enacted policies and regulations to achieve noise levels that are consistent with land use types within the City. The planning levels of compatible noise are contained in the Noise Element of the City's General Plan.

The noise environment in the project area is dominated by traffic on the Pittsburg-Antioch Highway, Harbor Street and Santa Fe Avenue, train activity on the Burlington Northern and Santa Fe Railroad tracks and switch yard on the north side of Santa Fe Avenue, and industrial noise emanating from the USS-POSCO plant, the Los Medanos Energy Center and neighboring industrial facilities. Transportation activities, including trains and heavy trucks associated with the industrial business activities in the area, are major contributors to the noise environment. Other noise is generated from commercial businesses, trucks, and local automobile traffic.

Unit I is currently, at its closest point, about 510 feet from the houses along Santa Fe Avenue and about 375 feet from the closest houses on Harbor Street. The SWMU closest to houses along the Pittsburg-Antioch Highway is No. 24.1: Site L-A – Dried Sludge Disposal Areas. One of the dried sludge disposal areas (DSS) is currently, at its closest point, about 325 feet from the houses along the Pittsburg-Antioch Highway.

Please refer to the Project Description under Section I and the Land Use Planning Section of this document for details of the project description.

*Analysis of Potential Impacts:*

Describe to what extent project activities would result in:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

According to the City of Pittsburg's General Plan, a maximum noise level of 60 dB is considered "normally acceptable" for unshielded residential development. Noise levels from 60 to 70 dB fall within the "conditionally unacceptable" for unshielded range, and those in the 70 to 75 dB range are considered "normally unacceptable."

There would be short-term (four to five months) noise impacts associated with the remedial activities. Remedial activities will include the use of heavy construction equipment, such as excavators, rubber tire loaders, haul vehicles (e.g., dump trucks), bulldozers, and graders. Heavy equipment used will be 50 horsepower and above. The noise generated by site construction activities is expected to be reduced to a degree through attenuation of sound by distance.

Remedial activities will be scheduled to conform to the City of Pittsburgh's General Plan noise policies regarding construction during non-noise sensitive time periods (i.e., 8 a.m. to 5 p.m., Monday through Saturday).

The disposal of waste consists of hauling materials from Sites L-A and L-B either to Unit 1 or off-site to an appropriate waste treatment, storage, and disposal facility. Dump trucks, 15-yard-size, will be used to haul contaminated soils off-site and to Unit 1. For off-site disposal, it is estimated that 10 ten working days will be used to transport 1,441 cubic yards of soils. For soils destined for Unit 1, it is estimated that 40 working days will be used to transport 94,260 yards of contaminated soils.

Evaluations of the noise impacts on the residential areas were conducted in 1991 for the truck bypass road project (Pittsburg Waterfront Truck Route and Assessment District, Environmental Impact Report), in 1993 for the Unit I closure project (USS-POSCO Industries Pittsburg Facility Project, Initial Study and Proposed Mitigated Negative Declaration) and in 1998 for the Los Medanos Energy Center project (Pittsburg District Energy Facility, Application for Certification). All three projects required the use of heavy construction equipment. In each evaluation, construction noise impacts were found to be less than significant because of their short duration.

The residential area immediately south of Site L-B across the railroad right-of-way, beginning at Sante Fe Avenue (along Route 9), is isolated from truck traffic, railroad operations, and Site L-B activities by a sound wall, approximately 10 feet in height that effectively reduces sound by an estimated 10 dB.

Construction workers shall be equipped with personal protective equipment to prevent hearing damage as necessary and as indicated in the site-specific health and safety plan.

- b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

Construction activities will be above ground and will not generate groundbourne noise or substantial vibration.

- c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

All activities conducted under the project should be completed within five months. There will be no permanent increase in noise levels. In addition, the residential area immediately south of Site L-B across the railroad right-of-way, beginning at Santa Fe Avenue (along Route 9), is isolated from truck traffic, railroad operations, and Site L-B activities by a sound wall as mentioned previously.

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The noise element of the City of Pittsburgh's General Plan states that "A 5 dB change is often considered a significant impact; and a 10 dB change is subjectively heard as an approximate doubling in loudness and almost always causes an adverse community response." This project is not expected to increase beyond the 5 dB maximum level. However, in the event 5 dBA is exceeded during the project, USS-POSCO will undertake mitigation measures in the form of sound barriers, or other effective means, to protect affected residents, employees, and businesses. This mitigation measure will be included within the proposed Part Permit B.

*References:*

1. Application for a Part B Permit, May 22, 2001
1. Lamphier and Associates, Initial Study and Proposed Mitigated Negative Declaration, USS-POSCO Industries, October 1993
7. Application for Certification, Pittsburg District Energy Facility, June 1998

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**12. Population and Housing**


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*Project activities likely to create an impact:* None.

*Description of Environmental Setting:*

Please also refer to the Land Use Planning section for a detailed description of the community surrounding the project site. The proposed project is of approximately five months duration. It will not displace any residents, employees or recreational facilities. The proposed project will not result in an increase in employment and, therefore, will not create a substantial new demand for new housing or recreational facilities. As such, no further analysis of Population and Housing is deemed necessary.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

*References:*

1. Application for a Part B Permit, May 22, 2001

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**13. Public Services**

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*Project activities likely to create an impact:*

None

*Description of Environmental Setting:*

Please also refer to the Land Use Planning section for a detailed description of the community surrounding the project site. The proposed project is of approximately five months duration. It will not require the use of public services beyond what is required under the plant's ordinary operations. Therefore, it will not create a substantial new demand for new or additional facilities or personnel. In the event an emergency takes place, the plant operations contingency plan is in place. As such, no further analysis of Public Services is deemed necessary.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
- Fire protection
  - Police protection
  - Schools
  - Parks
  - Other public facilities

*References:*

1. Application for a Part B Permit, May 22, 2001

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**14. Recreation**

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*Project activities likely to create an impact:*

None

*Description of Environmental Setting:*

Please also refer to the Land Use Planning section for a detailed description of the community

surrounding the project site. The proposed project is of approximately five months duration. The proposed project will not affect or otherwise result in an increase in demand for recreational facilities. Therefore, it will not have an effect on recreational facilities. As such, no further analysis of Recreation Resources is deemed necessary.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

*References:*

1. Application for a Part B Permit, May 22, 2001

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**15. Transportation and Traffic**

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during transportation activities by vehicles; and
- Trucks hauling soils over unpaved roads
- Grading, and compacting activities.

*Description of Environmental Setting:*

Regional access to the USS-POSCO plant is provided by State Route 4 (SR 4) via Interstate 680, about ten miles west of USS-POSCO. SR 4 is the main corridor linking the USS-POSCO plant and surrounding communities with the rest of the Bay Area. SR 4 is an east-west divided freeway with two lanes in each direction in the area near the USS-POSCO plant.

Local access to the USS-POSCO plant is provided by three four-lane roads: Loveridge Road, Railroad Avenue and Harbor Street, and three two-lane roads: County Road, the Pittsburg-Antioch Highway, and Third Street.

Vehicular and pedestrian entrance into the plant is limited to three gates. The Main Gate and the Truck Gate have guard gates and are staffed 24-hours per day. The gate off Loveridge Road is electronically controlled to allow security-cardholder entrance only. The remaining gates are kept locked during normal operations.

The USS-POSCO plant has internal primary and secondary roads. Primary roads are surfaced with either asphalt or concrete over a 16-inch thick layer of crushed aggregate and have a single axle load bearing capacity of 18,000 pounds. Secondary roads have an 8-inch thick layer of

crushed aggregate and have a single axle load bearing capacity of 8,000 pounds. Both road types have proven adequate for vehicles using the USS-POSCO plant. The posted maximum speed limit on these roads varies from 10 to 20 miles per hour. In addition to these roads, unimproved roads exist in the undeveloped areas of the USS-POSCO plant (e.g., Site L-A and Site L-B).

Traffic control on USS-POSCO property is consistent with the procedures on urban streets. Intersections are marked with standard traffic control signs (stop signs, etc.) and security guards enforce speed limits.

The USS-POSCO plant is bounded on land by security fencing with a minimum height of six feet. Access to the USS-POSCO plant is restricted to the gate entrances described above. Security guards monitor the gates and patrol the plant on a 24-hour basis.

The New York Slough to the north of the USS-POSCO plant provides a natural barrier to unauthorized entry onto USS-POSCO property. Material/soil from the remediation of the following SWMUs will be placed in the Unit I CAMU for disposal:

No. 3: Former Caustic Neutralization Area;  
No. 24.1: Site L-A – Dried Sludge Disposal Areas;  
No. 24.3: Site L-A – Lead Scale Disposal Area (East only);  
No. 24.5: Site L-A – Oil Disposal Areas (ODA #3); and  
No. 24.8: Site L-A – Lead Impacted Area.

The remediation traffic associated with these SWMUs will be confined to the USS-POSCO plant. These SWMUs will generate approximately 94,420 cubic yards of remediation material/soil. Assuming each truck trip to the Unit I CAMU carries 15 cubic yards, 6,350 truck trips will occur. Personnel will be provided at points crossing pedestrian walkways and tracks associated with the Burlington Northern and Santa Fe Railroad to monitor project traffic. Approximately 157 trips per day are anticipated.

Remediation material/soil from the following SWMUs will be directed to off-site regulated treatment/disposal facilities: No. 17.1: Former Power Substation #1 Area; and No. 24.5: Site L-A – Oil Disposal Areas (ODA #1 only). These SWMUs will generate approximately 1,441 cubic yards of remediation material/soil. Assuming each truck trip to the off-site regulated treatment/disposal facilities carries 15 cubic yards, 75 truck trips will occur. Approximately 10 trips per day are anticipated.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

Additional traffic is anticipated from remediation construction workers and deliveries to the USS-POSCO plant of materials needed for the CAMU's engineered final cover.

Off-site truck trips are anticipated at no more than ten trips per day. Deliveries of other materials will be on an as-needed basis. This impact is not expected to be significantly greater than regular facility activity.

- b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highway.

Increased truck traffic from the facility will not be significant. It is estimated that only 10 additional trucks per day will be leaving the facility.

- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Either existing facility access roads for waste soils being transferred to Unit 1 will be used or existing public roads will be used for waste soils being transferred off-site. These roads are currently used by heavy trucks and equipment.

- d. Result in inadequate emergency access.

The USS-POSCO plant has an existing emergency contingency plan. This plan is attached as Appendix I within the Part B permit application. This plan describes complete procedures and protocols for all emergency situations. USS-POSCO staff has assured that access to the plant will be maintained and controlled throughout project implementation.

- e. Result in inadequate parking capacity.

Parking capacity will not be affected. Construction workers will park their vehicles on the USS-POSCO property at Sites L-A and L-B.

- f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Alternative transportation will not be affected by the project because the USS-POSCO site is located in an industrial area where bus turnouts, bicycle racks, etc., are not located.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993
2. Ambient Air Quality Standards & Bay Area Attainment Status (January 2002)
3. Exponent, Evaluation of Offsite Residential Inhalation Exposures, July 31, 2000
4. Bay Area Air Quality Management District's CEQA Guidelines 1996, Table 2, Feasible Control Measures for Construction Emissions of PM-10
7. Application for Certification, Pittsburg District Energy Facility, June 1998

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**16. Utilities and Service Systems**

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*Project activities likely to create an impact:*

- Diesel-powered trucks hauling contaminated soils;
- Fugitive dust generated during construction activities by vehicles;
- Wind erosion over exposed water surfaces;
- Soil excavation/construction activities; and
- Grading, and compacting activities.

*Description of Environmental Setting:*

Please refer to the Hydrology and Water Quality Section of this document for a detailed description of the project and site conditions.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Decontamination wastewater will be generated from cleaning construction equipment. Most often, wastewater will contain oily wastes from washing down trucks and other excavation and related equipment. Wastewater will be tested to determine its constituents. After testing, wastewater will either be taken to the USS-POSCO facility's TWTP or containerized and sent off-site to a hazardous waste treatment, storage and disposal facility if not suitable for discharge to USS-POSCO's TWTP. Please refer to the Hydrology and Water Quality Section for additional discussion of the TWTP if desired.

- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The SWRB will be modified due to the increase in the Unit 1 CAMU footprint. However, this is not expected to adversely or significantly impact the animals that may inhabit the site after project activities are complete, since the Unit 1 CAMU is not a significant habitat. Please refer to the Hydrology and Water Quality Section for additional discussion.

- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Please see response to item b. above and to the Hydrology and Water Quality Section for additional discussion.

- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

According to USS-POSCO staff, municipal water supplies will be sufficient to address the project's needs.

- e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.
- Wastewater will be generated in the course of this project and containerized as described in item a.
- f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- The Kettleman Hills hazardous waste management facility has been selected to receive RCRA and TSCA wastes. USS-POSCO staff has stated that the staff of the Kettleman Hills facility has been contacted and has confirmed that adequate capacity exists to accept the wastes identified under this project. In the event it does not, an alternative RCRA facility will be selected.
- g. Comply with federal, state, and local statutes and regulations related to solid waste.
- USS-POSCO shall secure all permits necessary to carry out the project work and shall comply with all State, federal, and local regulations in carrying out the work under this project. USS-POSCO shall further dispose of all hazardous waste transferred off-site to a RCRA-authorized hazardous waste treatment, storage, and disposal facility.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**17. Cumulative Effects**

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*Project activities likely to create an impact:*

- Excavating and hauling contaminated soils into the Unit 1 CAMU;
- Hauling contaminated soils off-site;
- Expanding Unit 1 CAMU from approximately 39.5 feet in height to approximately 48.5 feet through the addition of approximately 94,420 cubic yards of specified non-RCRA remediation soils/materials; and
- Increasing the Unit 1 CAMU footprint from 8 acres to 10 acres.

*Description of Environmental Setting:*

The USS-POSCO plant occupies 483 acres in the City of Pittsburg. The plant is located at 900 Loveridge Road, north of the Pittsburg-Antioch Highway, south of the New York Slough, and east of Suisun Bay. Residents and light industry border the plant on the west and south. Dow Chemical borders the plant on the northeast corner. The Burlington Northern and Santa Fe (BNSF) railroad bisects the plant in the east-west direction (see Exhibit H).

Kirker Creek runs along the Pittsburg-Antioch Highway on the southern border of the plant. Most surface runoff within the plant is collected and diverted to storm drains. The storm drains direct the flow to the USS-POSCO wastewater treatment plant. Treated water is discharged to the New York Slough in accordance with a National Pollutant Discharge Elimination System permit. The New York Slough, a tributary of the San Joaquin River, abuts the northern border of the plant.

Groundwater at the plant is not used for drinking water and has not been shown to be connected to the City of Pittsburg drinking water aquifer.

Historically, steel was manufactured in open-hearth furnaces and then finished by various processes. Finished steel products included sheet steel, wire rope, nails, and pipe. At present, USS-POSCO operations consist only of steel finishing; no molten steel manufacturing occurs at the plant. USS-POSCO receives coils of hot-rolled steel from off-site sources and produces cold-rolled steel, galvanized steel, and tin- or chromium-plated steel through the processes of cold reduction, annealing, and finishing.

A number of materials and chemicals have been used in manufacturing operations. Hazardous and nonhazardous wastes generated from these operations have been managed in both on-site and off-site treatment, storage, and disposal units.

*Analysis of Potential Impacts:*

Describe to what extent project activities would:

- a. Increase the need for developing new technologies, especially for managing any hazardous or non-hazardous wastes that the project generates.

The development of new technologies will not be necessary for the Unit 1 CAMU expansion/receipt of non-RCRA wastes. Monitoring wells and a new cap will be installed at the Unit 1 CAMU. Groundwater monitoring data does not show contamination at the Unit 1 CAMU site. DTSC performs scheduled reviews of the groundwater monitoring reports.

Projected stability of the Unit 1 CAMU expansion has been verified by a fatal flaw analysis. Please refer to the report of URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit ICMS Workplan USS-POSCO Industries, September 21, 1999.

The RCRA and TSCA wastes will be shipped off-site to a RCRA hazardous waste treatment, storage, and disposal facility. Presently, the Kettleman Hills facility has been selected because the facility has indicated to USS-POSCO staff that it has sufficient capacity to accept the RCRA and TSCA wastes that are included in this project.

- b. Increase the need for developing new technologies for any other aspects of the projects.  
See response to item a. above.
- c. Leads to a larger project or leads to a series of projects, or is a step to additional projects.

The USS-POSCO plant is a 483-acre site. The site currently contains other wastes that will need to be addressed in another removal action document that is not the subject of this document. Those wastes include other areas of the plant and other types of wastes that will need to be dealt with by other technical means and have other environmental cleanup requirements and removal action requirements. Consequently, those projects will

be addressed in a separate document and will not be included in the Unit 1 CAMU expansion.

In addition, a Consent Agreement for implementation of corrective action was entered into by USS-POSCO and DTSC in June 1998. Upon approval of the remedies for the SWMUs addressed by this project, a new consent agreement will be entered into between USS-POSCO and DTSC which will be updated to reflect the conditions and time constraints for implementing those remedies. In addition, the consent agreement will lay out the remaining steps required for remediation of SWMUs not addressed in this project and remediation of groundwater.

- c. Alters the location, distribution, density or growth rate of the human population of an area.

The expansion of the Unit 1 CAMU will not impact the population's growth, distribution or density. Subsequent projects associated with the site may or may not make Pittsburg a more or less desirable community. Subsequent environmental projects submitted to DTSC for review will also be aimed at cleaning up the USS-POSCO property, thus possibly making the property seem more desirable to prospective and current residents.

- d. Affect existing housing, public services, public infrastructure, or creates demands for additional housing.

This project will not affect housing, public services, public infrastructure, or create a demand for additional housing. The project is a hazardous materials/waste cleanup and removal action, which will last for approximately four to five months.

All SWMUs in the remedy will be deed restricted for industrial/commercial use. A deed restriction will be required that limits property usage to industrial/commercial activities only. In addition, no agricultural activities such as raising of livestock or food production, schools, child care centers, hospitals, or residential buildings of any kind will be allowed on the property.

- e. Be cumulatively considerable on the environments with cumulative adverse effects on air, water, habitats, natural resources, etc.

The project will have only short-term impacts on air from possible dust created by the movement of soils by trucks and excavation activities. Mitigation measures for dust control are included in this document.

The habitats of some animals will be temporarily disturbed until the construction activities are completed and the vegetative layer of the Unit 1 CAMU regrows. No long-term impacts to habitats will result from the project. Some animals that may frequent or reside near the site will be temporarily displaced.

The closure cap (i.e., engineered final cover) will prevent the direct contact of rainwater with the underlying remediation material/soil and reduce infiltration of water as well as fugitive dust. Surface runoff systems will be in place to reduce further the amount of water contacting the remediation material/soil in the Unit I CAMU. Post-closure requirements will include groundwater monitoring and maintenance. DTSC performs scheduled reviews of the groundwater monitoring reports.

Based on the information available, including historical data on groundwater throughout the USS-POSCO plant and at the Unit I CAMU, DTSC believes the Unit I CAMU is protective of human health and the environment. To maintain its status as a California-only hazardous waste facility, the Unit I CAMU would be prohibited from receiving remediation material/soil regulated by USEPA (e.g., soils with PCB concentrations

greater or equal to 50 ppm). The Unit I CAMU would also be prohibited from receiving remediation material/soil from SWMUs for which it has been determined that there are no potential groundwater impacts. DTSC is considering issuance of a post-closure permit for long term groundwater monitoring and cap maintenance for the Unit I CAMU.

- f. Be cumulatively considerable on the environments with cumulative adverse effects on air, water, habitats, natural resources, etc.

The project will have only short-term impacts on air from possible dust created by the movement of soils by trucks and excavation activities. Mitigation measures are included to control dust created by project activities.

The habitats of some animals will be temporarily disturbed until the vegetative layer of the Unit 1 CAMU regrows. No long-term impacts to habitats will result from the project.

Please refer to the geology and soils section for detailed discussion of the fatal flaw analysis. The Unit 1 CAMU was found to be stable with the proposed additional load with the selected design.

The remediation material/soil proposed for placement into the Unit 1 CAMU have not been shown to be a threat to groundwater. It anticipated that there will be no adverse affect on water quality as the result of the project.

In addition, please refer to other above responses.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993
5. Exponent, Evaluation of Offsite Residential Inhalation Exposures, July 31, 2000
7. Application for Certification, Pittsburg District Energy Facility, June 1998
8. URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit ICMS Workplan USS-POSCO Industries, September 21, 1999

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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**18. Mandatory Findings of Significance**

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*Project activities likely to create an impact:*

- Expansion of the Unit 1 CAMU.

*Description of Environmental Setting:*

Unit I is proposed to be expanded laterally to the south over an approximate two-acre area, with a 50-foot set back from the fence line. The Unit I CAMU would have a resulting footprint of approximately 10 acres. Unit I would be expanded vertically by approximately 9 feet from 39.5 feet to 48.0 feet with side slopes lengthened by 50 feet above mean sea level on the south slope and by 60 feet on the north slope. In addition, please refer to the description under Cumulative Effects.

*Analysis of Potential Impacts:*

The impacts described have been previously addressed with mitigation measures. Where potentially significant impacts were described, mitigation measures have been reiterated. No new information has been introduced.

Describe to what extent the project would:

- a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

No significant animal resources are endangered at the site locations (L-A or L-B) where remediation, excavation, and compaction activities will be taking place.

Geological studies performed at the USS-POSCO property have revealed that there may be paleontological resources at the site and that if such resources are found, that site activities will be suspended while a cultural evaluation is underway.

- b. Have impacts that are individually limited but cumulatively considerable. As used in the subsection, "cumulatively considerable".

["Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.]

Soils placed in the Unit I CAMU will be compacted to increase structural stability. The engineered final cover will consist of a foundation layer (compacted dried sludge), a geosynthetic clay layer, a geosynthetic drainage layer, a filter fabric, and a vegetation/soil layer. The Unit I CAMU will be fenced as is currently the case with Unit I. No construction will be allowed on the capped Unit I CAMU beyond maintenance activities.

The Unit I CAMU will be capped with an engineered final cover. No liner will be placed under the CAMU; however, none of the contaminants of concern in the SWMU remediation material/soil to be placed in the Unit I CAMU have been shown to have impacted groundwater at statistically significant concentrations. The closure cap (i.e., engineered final cover) will prevent the direct contact of rainwater with the underlying remediation material/soil and reduce infiltration of water as well as fugitive dust. Surface runoff systems will be in place to reduce further the amount of water contacting the remediation material/soil in the Unit I CAMU. Post-closure requirements will include groundwater monitoring and maintenance.

Alternative corrective actions evaluated in the Corrective Measures Study would leave wastes spread over a minimum 13-acre area. The Unit I CAMU will increase the footprint of Unit I by two acres. Therefore, use of the Unit I CAMU will reduce the land area occupied by the SWMU soils by a minimum of 11 acres or 85%.

Based on the information available, including historical data on groundwater throughout the USS-POSCO plant and at the Unit I CAMU, DTSC believes the Unit I CAMU is protective of human health and the environment. To maintain its status as a California-only hazardous waste facility, the Unit I CAMU would be prohibited from receiving remediation material/soil regulated by USEPA. No PCB soils of any kind will be placed into the CAMU. The Unit I CAMU would also be prohibited from receiving remediation material/soil from SWMUs warranting remediation because of potential groundwater impacts (e.g., coal tar pitch product from SWMU No. 8).

- c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

The project will include transferring soils, currently in an unprotected environment and which have been historically shown not to be a threat to groundwater, into the Unit 1 CAMU with an engineered final cover (i.e., closure cap), an extensive groundwater monitoring system and an established post-closure maintenance program. Monitoring reports are reviewed by DTSC on scheduled basis.

Post-closure maintenance, as specified in the Unit I Closure and Post-Closure Maintenance Plan will be maintained throughout the CAMU post-closure period. Systems requiring maintenance will include: monitoring, final cover, drainage, and security. These systems will be inspected monthly. DTSC also inspects the Unit 1 CAMU on a regular basis.

Off-site residential inhalation exposures from remediation excavation and construction activities have been evaluated (Lamphier and Associates, Evaluation of Offsite Residential Inhalation Exposures from Remedial Activities, July 31, 2000). No significant impacts are expected from excavation and construction activities when adequate dust suppression methods are employed. Mitigation measures are included in this document.

*References:*

1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993
5. Exponent, Evaluation of Offsite Residential Inhalation Exposures, July 31, 2000
7. Application for Certification, Pittsburg District Energy Facility, June 1998
8. URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit ICMS Workplan USS-POSCO Industries, September 21, 1999

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

V. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project that would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.
- I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

<b>DTSC Project Manager Signature</b>	<b>Title</b>	<b>Telephone #</b>	<b>Date</b>
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<b>DTSC Branch/ Unit Chief Signature</b>	<b>Title</b>	<b>Telephone #</b>	<b>Date</b>
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ATTACHMENT A

INITIAL STUDY  
REFERENCE LIST  
for  
USS POSCO

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1. Application for a Part B Permit, May 22, 2001
2. CAMU Designation Request, URS Consultants, August 4, 2000
3. Initial Study and Negative Declaration USS-POSCO Industries Pittsburg Facility Project, Lamphier and Associates, October 1993
4. Ambient Air Quality Standards & Bay Area Attainment Status (January 2002)
5. Exponent, Evaluation of Offsite Residential Inhalation Exposures, July 31, 2000
6. Bay Area Air Quality Management District's CEQA Guidelines 1996, Table 2, Feasible Control Measures for Construction Emissions of PM-10
7. Application for Certification, Pittsburg District Energy Facility, June 1998
8. URS Greiner Woodward Clyde, Fatal Flaw Analysis: Lateral and Vertical Expansion of Unit ICMS Workplan USS-POSCO Industries, September 21, 1999

ATTACHMENT B  
INITIAL STUDY  
EXHIBIT LIST  
for  
USS POSCO

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Exhibit A, Facility History

Exhibit B, Approximate Volume of Contaminated Soils from Selected Solid Waste Management Units (SWMUs)

Exhibit C, Estimated Volumes of Remediation Material/Soil Planned for Disposal in Unit 1 CAMU

Exhibit D, SWMUs and Types and Quantities of Wastes Proposed to be Remediated

Exhibit E, Pittsburg City Map

Exhibit F, USS-POSCO Industries Facility Boundary Map

Exhibit G, USS-POSCO Industries Unit 1 Landfill Location Map

Exhibit H, SWMU Location Map