INITIAL STUDY

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).

I. PROJECT INFORMATION

Project Name: Dow-Pittsburg Chemical Company RCRA Hazardous Waste Storage Permit Renewal, Block 560 Drum Storage Area.

Site Address: Pittsburg Plant, Foot of Loveridge Road

City: Pittsburg State: CA Zip Code: 94568-0398 County: Contra Costa

Company Contact Person: Greg Dubitsky

Address: P.O. Box 1398

City: Pittsburg State: CA Zip Code: 94565-0398 Phone Number: (925) 432-5154

Project Description:

The Dow Chemical Company (Dow) facility is located in a developed, industrialized setting, with substantial areas of natural habitat displaced by industrial, commercial or residential development. The Dow site was originally operated for chemical manufacturing between 1916 and 1939 by the Great Western Electro Chemical Company which produced chlorinated hydrocarbons and mining chemicals. Dow purchased the plant in 1939 and has since acquired surrounding property that has been used for other industrial purposes.

The Dow Chemical Co. Pittsburg facility currently operates 24-hours per day, seven days per week. Operations include research and development and the manufacture of products for agricultural operations, pest control services, paper manufacturers, carpet mills, and biocides. During the manufacture of chemical products at the facility, specific liquid and solid hazardous waste by-products are solid and liquid wastes which are placed in containers varying in size and transferred to the Block 560 Drum Storage Area before shipment to authorized offsite treatment or disposal facilities. The Hazardous Waste permit allows drums of hazardous wastes to be stored up to one year in the Block 560 Drum Storage Area.

The following plants and processes, all of which are located at the Dow Pittsburg facility, generate liquid hazardous wastes ,which if not processed in the onsite Halogen Acid Furnaces, are stored in the 560 Drum Storage Area. The manufacturing operations at Dow that generate these liquid wastes consist of the following:

Symtet Process: A variety of chlorinated pyridine products are produced by the chlorination of picolines.

Dowicil Plant: The Dowicil plant manufactures antimicrobial products by reaction of a chlorinated alkene and an amine in a methylene chloride solvent.

Manufacturing Services: Manufacturing Services (MS) provide a variety of services such as, operation of utilities, process water, groundwater treatment, distillation systems, and an acid production process. Liquid hazardous wastes are generated as part of these processes.

Site Logistics: Site Logistics is responsible for site product storage tanks and for shipping and receiving facilities associated with these products. Liquid hazardous wastes are generated as part of these operations.

Vikane Plant: The Vikane plant produces a fumigant for dry wood termite control. Liquid hazardous wastes are generated as part of these operations

Trifluoro Plant: The Trifluoro plant produces agricultural chemical intermediates used to make a commercial agricultural chemical, which is manufactured at a different Dow facility, not this Pittsburg facility. Liquid hazardous wastes are generated as part of these operations

For information regarding location of the Dow facility with regards to the city of Pittsburg, California please refer to the maps attached.

Project Activities:

The Project will conduct the following activities:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

☐ Initial Permit Issuance	☐ Closure Plan	☐ Removal Action Workplan
☒ Permit Renewal	☐ Regulations	☐ Interim Removal
☐ Permit Modification	☐ Remedial Action Plan	☐ Other (Specify)

Program/ Region Approving Project: DTSC/ Hazardous Waste Management Program/ Standardized Permitting and Corrective Action Branch

DTSC Contact Person: Alejandro Galdamez, Project Manager

Address: 700 Heinz Ave Suite 200

City: Berkeley State: Ca Zip Code: 94710 Phone Number: (510) 540-3933

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

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

☒ None Identified	☐ Aesthetics	☐ Agricultural Resources
☐ Air Quality	☐ Biological Resources	☐ Cultural Resources
☐ Geology And Soils	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	

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.

1. Aesthetics

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

Dow's Pittsburg facility is located in an industrial corridor along the south side of New York Slough and the San Joaquin River. To the south of the Pittsburg facility is undeveloped land owned by Dow, bordered on the south by a band of commercial and light industrial activity. The area has been characterized by extensive industrial and transportation-related activities. Because the landscape in the vicinity of the project is primarily industrial, visual sensitivity to the project is considered low. The existing Block 560 Drum Storage Area is located in the interior of the Pittsburg facility and is surrounded on all sides by process units. The Block 560 Drum Storage area is lower in height when compare to other process (manufacturing) units at the Dow facility and as a result the Block 560 Drum storage area is indistinguishable and so small in comparison that it is not noticed. Night lighting for the Block 560 Drum Storage Area is of the same intensity as that of the other process units at Dow. No scenic highways are located near the facility and the facility does not impair scenic resources or pose a substantial adverse effect on a scenic vista. The proposed renewal of this project will not change the existing visual character or aesthetics of the site therefore no further analysis is necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

2. Agricultural Resources

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

The Pittsburg Facility is not located on or in proximity to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Pittsburg facility is zoned by the City of Pittsburg and Contra Costa County general Plans. No agricultural activity takes place within one mile of the Pittsburg facility and there are no lands under Williamson Act contract in the vicinity of the project site. This project does not involve activities in proximity of Prime Farmland therefore no further analysis will be necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

3. Air Quality

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

Temperatures in the Pittsburg-Antioch area are generally mild, with average annual precipitation of 12.5 inches. The prevailing winds are westerly. The region around the Pittsburg facility is in attainment for federal particulate matter (PM10) standards, state and federal sulfur dioxide standards, nitrogen dioxide (NOx), carbon monoxide, lead, and state sulfate standards. The region around the Pittsburg facility is in non-attainment for the state PM10 standard and for state and federal ozone standards. However, the Bay Area Air Quality management District (BAAQMD), in conjunction with the California Air Resources board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) is actively engaged in implementing region-wide programs intended to move the area into attainment with these standards.

There are 304 sources that are permitted by the Bay Area Air Quality Management District (BAAQMD) regulating emissions from various operations at the Dow Chemical Co. (Plant #31), including tank vents, fume hoods, and the halogen industrial furnaces. As of October 1999, there are 191 permitted sources and 113 exempt sources for manufacturing operations at the Dow Pittsburg site. The Dow Pittsburg site is designated as Plant #31 by BAAQMD. The Block 560 Drum Storage Area is not a point source for air emissions and is not subject to a permit from the BAAQMD.

The Dow Pittsburg site is also subject to the Toxic Hot Spots legislation. Dow submitted an inventory and risk assessment associated with this legislation to the BAAQMD in January 1991. It should be noted that over the past ten years since Dow performed its original risk assessment pursuant to AB-2588 (the Air Toxics “Hot Spots” Information and Assessment Act) Dow has reduced such emissions from its Pittsburg facility. The block 560 Drum Storage Area is not a “hot spot”.

The Dow Pittsburg site is also subject to BAAQMD fugitive emission control rules which include Regulation 8 rule 18 (Valves and Connectors) and Regulation 8 Rule 25 (Pump and Compressor Seals at Petroleum Refineries and Chemical Plants). The Block 560 Drum Storage Area contains no equipment needed to comply with the two previous rules and therefore is not subjected to these rules.

The Block 560 Drum Storage Area currently does not emit any hazardous vapors to the atmosphere and therefore does not contribute in a negative aspect to the Air Quality in Pittsburg-Antioch. The 560 Block RCRA Drum Storage Area does not contain any equipment or process that would be stationary or mobile source of air emissions or odors. All drums located in the 560 Drum Storage Area contain solidified waste materials and are sealed closed and do not vent any vapors to the atmosphere. The renewal of this permit will not pose or cause a negative impact to the air quality of Pittsburg-Antioch area.

Analysis of Potential Impacts. Describe to what extent project activities would:

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

The renewal of the Hazardous Waste Storage permit for the Block 560 Drum Storage Area located in the Dow Chemical in Pittsburg will not conflict and/or obstruct implementation applicable to the air quality plan for the Pittsburg-Antioch area. Currently the BAAQMD permit monitors and regulates 304 sources at the facility. The BAAQMD currently monitors the equipment that could be a risk of leakage in accordance to the BAAQMD regulations and defined in permit A0031 by the BAAQMD. Although the activities within the Block 560 Drum Storage Area are not being monitored by the A0031 BAAQMD permit, the Block 560 Drum Storage area will not conflict with or obstruct with such permit and its regulations.

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

The renewal of the permit for the Block 560 Drum Storage Area for The Dow Chemical Company in Pittsburg will not violate any air quality standard or contribute substantially to the existing regulations already implemented by the Bay Area air Quality Management District (BAAQMD). As noted in subsection (a.), above, the Dow Chemical company in currently in compliance with permit A0031 of the BAAQMD. The Block 560 Drum Storage Area and the activities of transportation of the drums will not violate any air quality standards that are already included in the regulations implemented by the BAAQMD on The Dow Chemical Company.

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 renewal of the permit for the Block 560 Drum Storage Area for The Dow Chemical Company in Pittsburg will not result in a cumulative considerable net increase for PM-10 and Ozone levels which are currently in a non-attainment in state and/or federal standards. The Block 560 Drum Storage Area will not increase such standards since it is a holding area of sealed drums that prevent venting to the atmosphere. The activities with the transportation of drums to the facility and from the facility will not result in a cumulative considerable net increase in PM-10 emissions.

d. Expose sensitive receptors to substantial pollutant concentrations.

The renewal of the permit for the Block 560 Drum Storage Area is for the storage of sealed drums that contain Hazardous wastes. The drums are design in order to prevent any venting of hazardous vapors into the environment; therefore, preventing any exposure to sensitive receptors. The nearest sensitive receptor would be the students of The Martin Luther King Preschool located 0.95 miles away from the site at 950 El Pueblo Ave, Pittsburg CA. The Dow chemical company is also regulated and in compliance as mention in sections (a.) and (b.) above.

e. Create objectionable odors affecting a substantial number of people.

The renewal of the permit for the Block 560 Drum Storage Area is for the storage of sealed drums that contain Hazardous waste. The drums are design to prevent any odors or gases from being released to the atmosphere.

f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).

The renewal of the permit for the Block 560 Drum Storage Area is for a pre-existing storage area in which sealed drums that contain Hazardous wastes will be stored. The Block 560 Drum Storage Area is an existing facility that will not undergo any construction and expose persons to any naturally occurring asbestos.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- Bay Area Air Quality Management District, *Major Facility Review Permit issued to Dow Chemical Company A0031*, California, October 28, 2004. http://www.baaqmd.gov/pmt/title_v/permits/A0031_2004-10_reopening_02.pdf
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

4. Biological Resources

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

The Block 560 Drum Storage Area is currently part of and is surrounded by an industrial manufacturing facility. This site has no vegetative cover and does not contain any wildlife habitat. Habitat in the vicinity of this Dow facility includes open water areas to the north in New York Slough and the San Joaquin River, wetlands associated with Browns Island and Winter Island approximately 1,000 feet offshore and undeveloped uplands containing non-native grass cover to the east and south of the facility. Other industrial facilities are dispersed throughout these grassland areas.

Wildlife use of the Pittsburg facility is limited to very rare resting use by songbirds, ravens, and gulls. Because the Block 560 Drum Storage Area is located in the middle of the Dow facility, it is unlikely that even resting birds or small rodents significantly utilize these areas. The wetlands area to the north and east of the facility are utilized by several species of resident water bird, winter migrants such as mallards and grebes, songbirds, muskrats, raccoons, and several small species of rodents. The upland area provides habitat for small rodents and jackrabbits. The aquatic environment in the New York Slough and the San Joaquin River supports a number of fish species and a diverse assemblage of invertebrates. These undeveloped habitats support some sensitive plant and animal life. There are no wildlife habitat areas within the plant itself and industrial activities such as the Block 560 Drum Storage Area does not physically displace habitat areas.

The 560 Block Drum Storage Area is an existing structure located in the middle of the Pittsburg facility. It provides containment for hazardous wastes. There is no riparian habitat or sensitive natural community present at the site of the 560 block Drum Storage Area or in close proximity that would be affected either by a spill at the drum storage area or by operation of the drum storage area.

There are no wetlands, native resident, migratory fish, wildlife species, nursery sites, or corridors present at the site of the 560 Block Drum Storage Area or in close proximity that would be affected.

Based on the current information available and taking in consideration that the project is a permit renewal DTSC has determined that the proposed project would not pose any threat to the biological resources; therefore, no further analysis is deemed necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

5. Cultural Resources

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

Dow's Pittsburg facility is located on the edge of New York Slough in close proximity to the San Joaquin River. Although the California Office of Historic Preservation has not yet evaluated the site of the Pittsburg facility, no known cultural resource sites are located within the plant site. In addition, there are no planned excavation activities that could potentially affect cultural resources, if such resources existed.

The Pittsburg facility is located in a developed, industrialized setting, with substantial areas of natural habitat displaced by industrial, commercial or residential development. The Pittsburg site was originally operated for chemical manufacturing between 1916 and 1939 by the Great Western Electro Chemical Company which produced chlorinated hydrocarbons and mining chemicals. Dow purchased the plant in 1939 and has since acquired surrounding property that has been used for other industrial purposes. The eastern portion of the Dow Pittsburg property was previously occupied by the Ethyl Corporation that manufactured tetraethyl lead. The extreme northwest section of the plant was formerly occupied by the H.K. Porter Company, and electrical motor refurbishing plant, and Pioneer Rubber, a synthetic rubber manufacturing plant.

The Pittsburg facility is excessively developed. The process areas have been disturbed, and most areas are graded and paved. The Block 560 Drum Storage Area is located in the interior of the Dow facility. There is no remaining natural habitat or unaltered land in the Block 560 Drum Storage Area process block. It is possible that subterranean disturbance associated with construction activities could reveal previously unknown cultural resource sites. However, since the current project is the renewal of an existing permit, no construction activity will take place and there will be no impact on cultural resources; therefore, no further analysis is necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

6. Geology and Soils

Project activities likely to create an impact:

- Transportation of Hazardous Waste drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum capacity of 6000 gallons for a period of 90 day up to and not more than one year.
- Transportation of Hazardous Waste from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal.

Description of Environmental Setting:

The Dow Chemical Company in Pittsburg site is located in a seismically active area of Northern California. The known significant active faults and seismic sources within 50 miles of the site include the An Andreas, Hayward, Green-Valley-Concord, Calaveras, Healdsburg-Rodgers Creek faults, and the Coastal Ranges-Sierra Block boundary zone. Pertinent information with regards to their seismic potential is given below:

FAULT	DISTANCE	MAX. CREDIBLE MAGNITUDE
San Andreas	42 Miles	8.3
Healdsburg-Rodgers Creek	31 Miles	7.1
Hayward	23 Miles	7.3
Calaveras	17 Miles	7.3
Green Valley-Concord	9 Miles	6.5
Coastal Ranges Sierra Block Boundary Zone	Boundary not defined	7

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).

  There are no known active faults that traverse the site. As such, surface fault rupture is not expected at the site.

- Strong seismic ground shaking.

  As a result of proximity to several faults in the region the site is expected to experience strong ground motion as a result of moderate size earthquake in the vicinity or a major strong motion earthquake with an epicenter located some distance away. There are no known faults that traverse the site. As such, strong ground shaking is not expected, nor could it impact storage in drums.

- Seismic-related ground failure, including liquefaction.

  Liquefaction is a temporary loss of strength in saturated granular soils caused by the buildup and maintenance of high pore-water pressure as a result of cycle ground vibrations that occur during earthquake shaking. This phenomenon can occur in saturated, loosed to medium dense sands which are relatively clean. Potential for liquefaction of sands within the bay deposit exists at a few locations, within the Dow site but is not expected at the Block 560 Drum Storage Area.

- Landslides.

  The Pittsburg facility site has some areas not associated with Risk Management Plan (RMP) and California Air Resources Board (CARB) regulated processes, which are close to the water front and are susceptible to land sliding. Dow keeps a close watch and remedial actions are taken on a proactive basis. However, since the Block 560 Drum storage area unit is not located in these areas that are susceptible to land sliding, the proposed renewal permit for this project will have no impacts in connection with this potential landslide hazard.

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

The Pittsburg facility site has some areas not associated with regulated processes which are close to the water front and are susceptible to soil erosion or the loss of topsoil. However, since the Block 560 Drum storage area unit is not located in these areas that are susceptible to soil erosion or loss of topsoil. The proposed renewal permit for this project will have no impacts in connection with this geotechnical hazard.

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.

Based on previous soil investigations at the Dow Chemical Facility in Pittsburg, there appear to be only a low to moderate potential for liquefaction and a low potential for a lateral spreading landslide at the site. The facility is located in a flat terrain of Pittsburg which will make a flow landslide very unlikely. The proposed renewal permit for Block 560 Drum Storage Area will have no impacts with this geotechnical hazard.

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 proposed project is for a permit renewal of an operational drum storage area. The location of the Block 560 Drum Storage area is not located on expansive soil as defined in Table 18-1-B of uniform building code (1994)

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

Waste water and storm water are collected and treated onsite. The project will not increase the amount of waste water or storm water. Any increases in the volume of waste water or storm water are absorbed by Dow's capacity. As a result, no expansion of public treatment facilities, storm drainage systems, or other collection facilities will be required.

f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).

The renewal of the permit for the Block 560 Drum Storage Area is for an existing facility that will not undergo any construction and/or expose any naturally occurring asbestos.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.
- Department of Toxic Substances Control, *Halogen Acid Furnaces Initial Study*, California, 2001.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

7. Hazards and Hazardous Materials

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

The project involves storage of hazardous waste, including transportation of hazardous waste from other parts of the Dow facility to the project site. The renewal of the permit for the Block 560 Drum Storage Area is to allow Dow to store hazardous waste materials in sealed drums for a period greater than 90 days but no longer than 1 year. The Dow Pittsburg facility produces 28 types of listed wastes which could be stored in the Block 560 Drum Storage Area unit. The listed wastes are of types D, F, and U as defined by USEPA 40 CFR 261.

The listed F wastes that are going to be in the Block 560 Drum Storage Area are F002, F003, and F005. The listed U wastes are: U008, U080, U084, U210, U211, U226, and U 228. The D listed wastes are: D001, D002, D004, D005, D006, D007, D008, D009, D010, D019, D022, D028, D032, D033, D034, D035, D039, and D040. In addition the facility will be also store non-RCRA listed wastes: 181, 351, 352, 741, and 751.

Reference to the mentioned wastes above can found in Section C of the Block 560 Drum Storage Area RCRA Hazardous Waste Permit Application pages 6 through 10.

The proposed renewal of the Block 560 Hazardous Waste Facility Storage Permit would ensure that these operations will be conducted in a manner protective of human health and the environment. There will be process controls and emergency procedures in effect. There are mechanisms identified in toe Operation Plan that ensures that the facility will operate within parameters of its Operation Plan. The mechanisms include Training Plan, Contingency Plan, and onsite emergency response. The Permit requires schedule inspections of the facility equipment and operation. DTSC conducts both periodic and unannounced inspections to ensure the compliance with current standards.

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.

The proposed permit renewal for the Block 560 Drum Storage Area permit will ensure that the routine transport from and to this facility will be conducted in a manner protective of human health and the environment. However, in case of a spill during transportation within the facility, the Dow Chemical Company has emergency procedures that would prevent and control any significant hazard to the public or the environment. In addition to the emergency procedures, the Dow chemical company is currently under two mitigation orders headed by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in order to mitigate the groundwater throughout the facility which would prevent any hazard to the public or the environment, in case of an accidental spill. All transportation of hazardous wastes out from the Dow Chemical company are done by permitted transportation contractors that will take all the necessary precautions to prevent any spill that could be of significant hazard to the public or the environment.

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.

There are no expected hazards to the public of the environment for an upset condition at Block 560 Drum Storage Area. The Drum Storage Area has a secondary containment system consisting of a concrete floor and 6 inch

berms coated with an impermeable coating. Therefore a spill from drums place in the drum storage area would not result in hazardous waste impacting surrounding soil or storm sewers. It is also known that there are transport trucks going in and out of the facility. Dow has in place an emergency recovery plan in case of an upset and/or accident condition. All workers are trained in their emergency plan in order to handle hazardous waste that could create a hazard to human health and the environment.

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

The Martin Luther King Preschool located at 950 El Pueblo Ave, Pittsburg, CA is the closest school located 0.95 miles away. The Block 560 Drum Storage Area is design to have a secondary containment system consisting of a concrete floor and 6 inch berms with a protective coating covering all of the secondary area of the project. The design of the Block 560 Drum Storage Area will prevent any discharge of hazardous waste. All activity or the handling of hazardous wastes will be done at the Block 560 Drum Storage area or farther away from the property line.

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 public or the environment.

The Block 560 Drum Storage area is a Hazardous waste facility permitted by the Department of Toxic Substances Control. It is subjected to all the applicable regulations provided by Title 22 California Code of Regulations (CCR). Although The Dow Chemical Company is currently listed as a hazardous material site it is believed by DTSC that the Block 560 Drum Storage Area permit renewal does not create a significant hazard to the public or the environment.

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

The Dow chemical company has an adopted emergency plan as well as an evacuation plan. The emergency and evacuation plan include in it the Block 560 Drum Storage Area since it is located within the Dow chemical company and it will not impair the exercise of this plans that Dow has adopted.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.
- Department of Toxic Substances Control, *Halogen Acid Furnaces Initial Study*, California, 2001.
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0007*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0007.doc
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0014*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0014.doc
- Google maps. http://maps.google.com/maps?oi=map&q=901+Loveridge+Road,+Pittsburg,+CA

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

8. Hydrology and Water Quality

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

The Dow Pittsburg facility is located in the Pittsburg groundwater basin that extends from the hills south of the facility to the western portion of the Sacramento-San Joaquin River delta in the north, and from the vicinity of Bay Point in the west to the City of Antioch in the east. The basin is filled with unconsolidated fluvial and alluvial sediments deposited in the Sacramento-San Joaquin River delta and in alluvial fans formed by streams draining the hills south of the facility. Groundwater at the Dow facility is encountered at depths varying from approximately 2 to 13 feet below ground surface (bgs).

The subsurface has been divided into three aquifer intervals generally composed of sand and silty sand. The aquifer intervals are referred to as the water interval (2 to 25 feet bgs), the mind-depth interval (30 to 75 feet bgs), and the deep interval (80 to 130 feet bgs) regionally and at the site, a clay interval is found from 130 feet to 800 feet bgs. In the southern portion of the facility, the deep and mid intervals are not separated by a clay layer and are composed of mostly sand. North of 2nd Street, along New York Slough, aquifer intervals are separated by clay-layers. The aquifer intervals in the north are thinner and consistently finer-grained than those in the southern part of the facility. There is some evidence that there is some vertical groundwater flow between the aquifers. Groundwater in the area is of the sodium-chloride-sulfate chemical type and becomes brackish to saline in the vicinity of New York Slough. There is not contiguity between underlying groundwater and storm water falling on 560 Block RCRA Drum Storage Area. Thus, there is no significant threat of impact on existing groundwater through discharge or recharge.

Analysis of Potential Impacts. Describe to what extent project activities would:

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

The Pittsburg Facility is located in the jurisdiction of the San Francisco Bay Regional Water Quality control Board. There are three board orders that apply to the Pittsburg Facility: Order No. R2-2002-007, Order No. R2-2002-014, and Order 01-142. These orders apply only to historical sources of contamination and the discharge of pollutants to surface water and are not related to the permit renewal. These orders direct Dow to recycle and treat all of its surface water as well as the groundwater. Therefore the proposed project will not violate any water quality standards.

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).

The Pittsburg Facility is located in the jurisdiction of the San Francisco Bay Regional Water Quality Control Board. There are three board orders that apply to the Pittsburg Facility: Order No. R2-2002-007, Order No. R2-2002-014, and Order 01-142. These orders apply only to historical sources of contamination and the discharge of pollutants to surface water, which are not related to this permit renewal, and direct the Dow Chemical company to treat both surface and groundwater; therefore, the Dow Chemical will not deplete groundwater supplies nor interfere substantially with groundwater recharge since it is currently following a mitigation plan.

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 560 Block Drum Storage Area is located within the main process area of the facility, which is graded and paved. Operation of the 560 Block Drum Storage Area does not substantially affect the drainage patterns in the facility.

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.

The 560 Block Drum Storage Area is located within the main process area of the facility, which is graded and paved. Operation of the 560 Block Drum Storage Area does not substantially affect the drainage patterns in the facility.

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.

The Pittsburg Facility is located in the jurisdiction of the San Francisco Bay Regional Water Quality control Board. There are three board orders that apply to the Pittsburg Facility: Order No. R2-2002-007, Order No. R2-2002-014, and Order 01-142. These orders apply only to historical sources of contamination and the discharge of pollutants to surface water and direct the Dow Chemical company to treat both surface and groundwater; therefore, the Dow Chemical company will not produce any polluted runoff.

f. Otherwise substantially degrade water quality.

The Block 560 Drum Storage Area is composed of two concrete areas with secondary containment. Both areas have a sump which is pumped and the water collected from the sumps is tested and treated within the Dow Chemical Company. Any possible degradation of water quality is therefore minimized and treated within the facility.

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

Based upon a study done by the Mark group in 1987, the Block 560 Drum storage is not located in the 100-year floodplain.

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.

Based upon a study done by the Mark group in 1987, the Block 560 Drum storage is not located in the 100-year floodplain and does not expose people or structures to significant risk loss, injury or death involving flooding.

i. Inundation by seiche, tsunami or mudflow.

The Dow chemical company is located south of the New York Slough not close to any seismic faults and it is really improbably for a seiche to produce an inundation within the facility. Although the information is not available the location of the Dow chemical company is in a graded considerable flat area to prevent any flooding from a mudflow. The location of the facility is sufficiently inland that if a tsunami was to occur it would probably not affect the facility.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0007*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0007.doc
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0014*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0014.doc

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

9. Land Use and Planning

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

The Pittsburg facility is zoned by the City of Pittsburg for industrial use, which is consistent with both the City of Pittsburg and Contra Costa county General Plans. No zoning or planning changes are required in connection with the proposed project, and the project will not conflict with existing general plan designations, zoning, or any other applicable environmental plans of policies of the City of Pittsburg or of Contra Costa County. Thus, the proposed project will have no impact on existing land use or planning.

There is a draft Habitat Conservation Plan/Natural Community Conservation Plan for East Contra Costa County (June 2005) that has not yet been adopted or approved; therefore, no further analysis is deemed necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

10. Mineral Resources

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

The Contra Costa General Plan identifies areas of mineral resources of value to the region or to residents of the State. No areas of mineral resources are identified in the Pittsburg-Antioch area. California Division of Minerals and Geology (CDMG) classify the site of the Pittsburg facility within Mineral Resources Zone 1 (MRZ-1), indicating the adequate information suggests that no significant mineral deposits are present and there is little likelihood for their presence; therefore, no further analysis is deemed necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

11. Noise

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

The Dow Chemical company in the Pittsburg area is bisected by the Burlington and Santa Fe Railroad right-of-way, which runs along the south side of the Pittsburg facility. The railroad is a major source of intermittent noise. Intermittent noises tent to mask the effect on the receptor of continuous noises, such as background ambient noise from industrial plants. South of the railroad lies several hundred acres of undeveloped industrial land owned by Dow. The land serves as a buffer that reduces the impact of onsite noise on nearby residential areas. No aspect of the 560 Block RCRA Storage Area will generate noise, excessive groundbourne vibration or groundbourne noise levels, because the purpose of this area is only to store drums of Hazardous Waste material.

Noise can be evaluated from the perspective of two different of receptors, plant workers and nearby residents. Different noise limitations are applicable to each category of receptor and are discuss separately. Noise levels are commonly measured in decibels (dB), with an “A”-weighted filter applied (dBA). An Onsite noise limit for occupational exposure is regulated at 90 dBA over eight hours. Dow’s standard procedures is to issue vendor specifications for each major piece of equipment ensuring that the noise rating for the equipment does not exceed 85 dBA at a point of generation. Sound attenuation control mechanisms are installed as necessary to meet this standard. The typical noise exposure in the Pittsburg site ranges from about 70 to 85 dBA, depending upon the location inside the facility. The only source of noise at the Drum storage Area would be a forklift truck that would load and unload drums. The noise associated with the operation of this forklift truck would not exceed 85 dBA at point of generation. Thus, the proposed project will have no impact on any noise receptors.

Ambient noise in the residential areas can be described in terms of a Dan-Night Average Noise Level (Ldn) which represents noise levels over 24-hour period adjusted by a time-weighted factor designed to overemphasis noise occurring during sensitive evening and nighttime hours. Ambient noise levels for industrial and residential land uses in the City of Pittsburg are established in the Noise Element of the City's General Plan.

Ambient noise limits for industrial land uses are less than 70 dBA Ldn for normally acceptable noise levels and between 70 dBA Ldn and 80 dBA Ldn for conditionally acceptable noise levels. Residential noise levels are measured at the residence. The nearest residential area is located west of Pittsburg facility in the City of Pittsburg. This area is bounded by the Pittsburg Antioch highway to the south, Harbor Street to the west, the Burlington Northern and Santa Fe Railroad to the north, and Columbia Street to the east. No noise data is available for this area; however, a noise survey was conducted in 1998 of the residential area located south of SR4 and east of Somersville Road in connection with an unrelated proposed project. The results of this survey showed that the primary sources of noise in this residential area are attributable to highway noise from SR4 and the Pittsburg Antioch Highway. The survey also showed that the noise level at these residences generally meets the City of Pittsburg limits and the instances where noise levels exceed were attributable to sources other than the Pittsburg facility, such as traffic or isolated activities within the neighborhood itself.

Analysis of Potential Impacts. Describe to what extent project activities would:

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.

The exposure of noise generation that a person in the Dow Chemical company facility is subjected to is within the limits that Occupational Safety and Health Administration (OSHA) specifies. Dow's standard procedures is to issue vendor specifications for each major piece of equipment ensuring that the noise rating for the equipment does not exceed 85 dBA at a point of generation. Sound attenuation control mechanisms are installed as necessary to meet this standard. The typical noise exposure in the Pittsburg site ranges from about 70 to 85 dBA, depending upon the location inside the facility; therefore preventing exposure to persons on noise levels higher to the standard level.

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

The Block 560 Drum storage area is an open area made of two concrete areas with 6 inch berms. The Block 560 Drum Storage Area nor the transportation of wastes by forklift generate any groundbourne vibration or groundbourne noise and because of this no person will be exposed to such at the proposed project.

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

The Block 560 Drum storage area is an open area made of two concrete areas with 6 inch berms. The Block 560 Drum Storage Area operation will not produce an increase in ambient noise levels in the facility since its current operation is only that of storing drums containing hazardous waste.

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

The Block 560 Drum storage area is an open area made of two concrete areas with 6 inch berms. The Block 560 Drum Storage Area operations will not produce and increase in ambient noise levels temporarily or periodically since to the specifications already permitted.

Specific References (a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.

- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.

- Occupational Safety & Health Administration, *Occupational Noise Exposure*, U.S. Department of Labor. http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9735&p_table=STANDARDS

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

12. Population and Housing

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

The project does not include new business or infrastructure development or provide the type of product that might induce growth in the region directly or indirectly. It will therefore have no impact on population or housing and no further analysis is deemed necessary.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

13. Public Services

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

Dow's Pittsburg facility maintains onsite emergency response and security staff capable of responding to fires or other hazards at the facility. As a result, the project will not impact response times of local fire or police departments, nor will the project require expansion of current fire and police facilities or construction of new facilities.

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

  The Pittsburg facility currently operates and has it own internal onsite emergency team. The facility also coordinates with the local fire department to provide training and drills as to simulate a fire hazard within Dow Chemical. The project will not increase the number of firemen needed in the local fire department and will not alter this service.

- Police protection

  The Pittsburg facility currently operates and has it own internal onsite security. The facility is surrounded by a barbed wired fence, security cameras, and in some areas of the fence it has motion detectors. The facility also coordinates with the local Sheriff department regarding this security activities and reinforcement if needed. The project will not increase the number of Policemen needed in the local Sheriff department and will not alter this service.

- Schools

  The Block 560 Drum Storage Area is an existing project that is applying to renew their permit. The approval of this project will not increase population; therefore, it will not increase the need of more schools within Pittsburg.

- Parks

  The Block 560 Drum Storage Area is an existing project that is applying to renew their permit. The approval of this project will not increase population; therefore, it will not increase the need for more parks and recreation areas in Pittsburg California.

- Other public facilities

  The Block 560 Drum Storage Area is an existing project that is applying to renew their permit. The approval of this project will not increase population; therefore, it will not increase the need for other public facilities to be increased or created in order to accommodate more people within Pittsburg California.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.

- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.

- Department of Toxic Substances Control, *Halogen Acid Furnaces Initial Study*, California, 2001.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

14. Recreation

Project activities likely to create an impact:

NONE

Description of Environmental Setting:

Because the operating parameters and conditions of the Block 560 Drum Storage Area will not change, the project will not require an increase in employees and will not directly or indirectly induce growth in the surrounding communities. As a result, the project will not affect schools, parks, and recreational facilities or other public facilities associated with residential growth; therefore it will have no impact to recreational facilities and no further investigation 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.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☒ No Impact

15. Transportation and Traffic

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

The proposed project is for the renewal of an existing Hazardous Waste Storage Area Permit.

Access for trailer trucks bringing drums of hazardous wastes out of the Pittsburg facility is provided via State Route 4 (SR4), a four-lane divided freeway, to Loveridge Road, a paved four-lane industrial road which leads directly into the facility. Both SR4 and Loveridge Road carry existing traffic volumes below their maximum capacity. Truck traffic volume along SR4 in the project area and along Loveridge Road constitutes approximately

7% to 9% of the total volume. It is estimated that there will be approximately 8 to 10 truck trips per year carrying drummed hazardous wastes out of the Dow facility for treatment or disposal to authorized offsite facilities.

The level of service standard for State Route 4 between Loveridge Road and Bailey Road established by the Contra Costa Transportation Authority is LOS F.

Evacuation from the Block 560 Drum Storage Area because of a release of hazardous waste is extremely unlikely. However, escape routes from each existing storage area are based on prevailing wind direction and the location of the hazardous waste units in relation to the production units. The escape routes from the Block 560 Drum Storage Area in the event of a spill or gas release are to go out any gate and then go south to building 563.

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).

The renewal of the Block 560 Drum Storage Area is currently using approximately 8 to 10 trucks per year that would transport the hazardous waste out of the Dow facility for treatment or disposal. The renewal permit for the continued operation of this facility will not increase traffic in the area that might substantially be related to the load capacity of the street system.

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

The Block 560 Drum Storage Area currently does not exceed any level of service standard established by the country congestion management agency; therefore, the renewal of the permit for the Block 560 Drum storage area will not exceed these same standards for congestion.

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

There are no known hazards due to design features or incompatible uses of roads or highways in the vicinity of the site. There is a railroad crossing on Loveridge Road south of the Pittsburg site entrance. However, there are visual warnings and gates to prevent traffic from crossing the street when Railroad traffic is passing through.

d. Result in inadequate emergency access.

The Block 560 Drum Storage Area currently has adequate emergency access. The approval of this projects renewal application will not result in an inadequate emergency access.

e. Result in inadequate parking capacity.

The Block 560 Drum Storage Area is located in a process area, and there is no current parking in the immediate vicinity. The renewal of this permit will not result in the addition of parking in the immediate facility of the Block 560 Drum Storage Area.

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

The Block 560 Drum Storage Area currently has no bicycle racks, bus turnouts, etc…. in the immediate vicinity to the project. However, the Dow Facility does utilize bicycles for transportation inside of the facility gates. Bicycle

racks are located in various locations across the Dow Chemical site and will not conflict with adopted policies, plans or programs that support alternative transportation.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.
- Department of Toxic Substances Control, *Halogen Acid Furnaces Initial Study*, California, 2001.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

16. Utilities and Service Systems

Project activities likely to create an impact:

- Transportation of solid and liquid hazardous waste in drums from Internal Plants to Block 560 Drum Storage area by means of forklift.
- Storage of different size containers of hazardous waste with a maximum permitted capacity of 6000 gallons for a period of up to and not more than one year.
- Transportation of solid and liquid hazardous waste in drums from Block 560 Drum Storage Area by an authorized DTSC hauler to an authorized facility for treatment and/or disposal. The Drums are taken offsite in tractor trailer trucks.

Description of Environmental Setting:

The Utility requirements of the Block 560 Drum Storage Area will not change as a result of the proposed project. Electricity for lighting and the sump pump is the only utility required for Block 560 Drum Storage Area. The existing capacity of electricity being supplied to Dow is sufficient to meet the operating requirements for the Block 560 Drum Storage Area. An onsite power plant owned and operated by a non-Dow entity is fueled by an onsite natural gas system. The project will not increase the amount of wastewater or storm water generated by the Block 560 Drum Storage Area. As a result, no expansion of public treatment facilities, storm drainage systems, or other collection facilities will be required.

This project will not require disposal of materials at a landfill. The Dow facility is fully compliant with local, state, federal laws and regulations related to solid waste. Municipal waste (refuse and non-hazardous) is sent to county landfill; Diablo Sanitation also collects refuse. Solid hazardous wastes are incinerated, or recycled.

Analysis of Potential Impacts. Describe to what extent project activities would:

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

The Dow chemical company is currently under three different mitigation orders from the San Francisco Bay Regional Water Quality Control Board. The facility currently treats groundwater as well as surface water. The Block 560 Drum Storage Area facility does not contribute to the local water treatment units.

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 current project is to renew an existing permit for the Block 560 Drum Storage Area. The Block 560 Drum Storage area currently uses no new water. In addition the facility currently treats all the surface and groundwater within the Dow chemical company; therefore, the approval for the renewal of this permit will not result in the required construction of new water or wastewater treatment facilities.

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.

The current project is to renew an existing permit for the Block 560 Drum Storage Area. The Block 560 does not drain to a storm water drainage system; instead the water is collected in a sump. The water collected is then pumped out to be recycled within the Dow Facility as process water. Therefore, the approval of this renewal will not result in the construction of new storm water drainage facilities or the expansion of existing ones.

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

The Block 560 Drum Storage Area has sufficient water supplies to serve the project. It currently does not use any waster as a way to store waste and will not need additional supplies of water if the project is approved.

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.

The Dow chemical company is currently under three different mitigation orders from the San Francisco Bay Regional Water Quality Control Board. The facility currently treats the facilities groundwater as well as surface water within the Dow Chemical company. The Block 560 Drum Storage Area will not contribute to the local water treatment units.

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

The Block 560 Drum Storage Area is currently a storage area for RCRA hazardous wastes to be hold and store for a period no longer than 1 year. The RCRA waste is then transported to an authorized Federal facility for either treatment or disposal of the waste.

g. Comply with federal, state, and local statutes and regulations related to solid waste.

The Block 560 Drum Storage area currently complies with federals, state, and local statues and regulations which are reflected in it current permit. The renewal of this permit will ensure that the facility stays in compliance with such statues and regulations.

Specific References (list a, b, c, etc):

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.

- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005.

- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0007*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0007.doc

- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0014*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0014.doc

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

17. Mandatory Findings of Significance

Analysis of Potential Impacts. Describe to what extent project activities 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.

The Block 560 Drum Storage Area is currently part of and is surrounded by an industrial manufacturing facility. This site has no vegetative cover and does not contain any wildlife habitat. Habitat in the vicinity of this Dow facility includes open water areas to the north in New York Slough and the San Joaquin River, wetlands associated with Browns Island and Winter Island approximately 1,000 feet offshore and undeveloped uplands containing non-native grass cover to the east and south of the facility. Other industrial facilities are dispersed throughout these grassland areas.

Wildlife use of the Pittsburg facility is limited to very rare resting use by songbirds, ravens, and gulls. Because the Block 560 Drum Storage Area is located in the middle of the Dow facility, it is unlikely that even resting birds or small rodents significantly utilize these areas. The wetlands area to the north and east of the facility are utilized by several species of resident water bird, winter migrants such as mallards and grebes, songbirds, muskrats, raccoons, and several small species of rodents. The upland area provides habitat for small rodents and jackrabbits. The aquatic environment in the New York Slough and the San Joaquin River supports a number of fish species and a diverse assemblage of invertebrates. These undeveloped habitats support some sensitive plant and animal life. There are no wildlife habitat areas within the plant itself and industrial activities such as the Block 560 Drum Storage Area does not physically displace habitat areas.

b. Have impacts that are individually limited but 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.

The proposed project is for a permit renewal for the Block 560 Drum Storage Area. The Pittsburg facility is zoned by the City of Pittsburg for industrial use, which is consistent with both the City of Pittsburg and Contra Costa county General Plans. No zoning or planning changes are required in connection with the proposed project, and the project will not conflict with existing general plan designations, zoning, or any other applicable environmental plans of policies of the City of Pittsburg or of Contra Costa County. Thus, the proposed project will have no impact on existing land use or planning.

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

The region around the Pittsburg facility is in attainment for federal particulate matter (PM10) standards, state and federal sulfur dioxide standards, nitrogen dioxide (NOx), carbon monoxide, and lead standards, and state sulfate

standards. The region around the Pittsburg facility is in non-attainment for the state PM10 standard and for state and federal ozone standards. However, the Bay Area Air Quality management District (BAAQMD), in conjunction with the California Air Resources board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) is actively engaged in implementing region-wide programs intended to move the area into attainment with these standards.

There are 304 sources that are permitted by the Bay Area Air Quality Management District (BAAQMD) regulating emissions from various operations at the Dow Chemical Co. (Plant #31), including tank vents, fume hoods, and the halogen industrial furnaces. As of October 1999, there are 191 permitted sources and 113 exempt sources for manufacturing operations at the Dow Pittsburg site.

The Block 560 Drum Storage Area currently does not emit any hazardous vapors to the atmosphere and therefore does not contribute in a negative aspect to the Air Quality in Pittsburg-Antioch. The 560 Block RCRA Drum Storage Area does not contain any equipment or process that would be stationary or mobile source of air emissions or odors. All drums located in the 560 Drum Storage Area contain solidified waste materials and are sealed closed and do not vent any vapors to the atmosphere. The renewal of this permit will not pose or cause a negative impact to the air quality of Pittsburg-Antioch area.

The project involves storage of hazardous waste, including transportation of hazardous waste from other parts of the Dow facility to the project site. The renewal of the permit for the Block 560 Drum Storage Area is to allow Dow to store hazardous waste materials in sealed drums for a period no longer than 1 year. The Dow Pittsburg facility produces 28 types of U.S. EPA listed wastes which could be stored in the Block 560 Drum Storage Area unit. The listed wastes are of types D, F, and U as defined by USEPA 40 CFR 261.

The proposed renewal of the Block 560 Hazardous Waste Facility Storage Permit would ensure that these operations will be conducted in a manner protective of human health and the environment. There will be process controls and emergency procedures in effect. There are mechanisms identified in toe Operation Plan that ensures that the facility will operate within parameters of its Operation Plan. The mechanisms include Training Plan, Contingency Plan, and onsite emergency response. The Permit requires schedule inspections of the facility equipment and operation. DTSC conducts both periodic and unannounced inspections to ensure the compliance with current standards.

Specific References (list a, b, c, etc):

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☒ Less Than Significant Impact
☐ No Impact

V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT ***(Optional)***

Prepared only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code.

Instructions

A finding of "no potential adverse effect" must be made to satisfy the requirements for the Finding of De Minimis Impact as required by title 14, California Code of Regulations, section 753.5. "No potential adverse effect" is a higher standard than "no significant impact" and the information requested to provide substantial evidence in support of a "no potential adverse effect" is not identical in either its standard or content to that in other parts of the Initial Study.

In the *Explanation and Supporting Evidence* section below, provide substantial evidence as to how the project will have **no potential adverse effect** on the following resources:

a) Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction.

b) Native and non-native plant life and the soil required to sustain habitat for fish and wildlife.

c) Rare and unique plant life and ecological community's dependent on plant life.

d) Listed threatened and endangered plant and animals and the habitat in which they are believed to reside.

e) All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under.

f) All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

g) All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

Explanation and Supporting Evidence

(Note: *Relevant portions of the Initial Study may be referenced where appropriate)*

Finding

Based on the explanation and supporting evidence provided above, DTSC finds that the project will have no potential for adverse effect, either individually or cumulatively on fish and wildlife, or the habitat on which it depends, as defined by section 711.2 of the Fish and Game Code.

VI. 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, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED DECLARATION will be prepared.

☐ I find that the proposed project MAY HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

DTSC Project Manager Signature		Date
Alejandro Galdamez	Hazardous Substance Engineer	(510) 540-3933
DTSC Project Manager Name	DTSC Project Manager Title	Phone #

DTSC Branch/Unit Chief Signature		Date
Salvatore Ciriello	Supervising HSE 1	(510) 540-3972
DTSC Branch/Unit Chief Name	DTSC Branch/Unit Chief Title	Phone #

ATTACHMENT A

INITIAL STUDY REFERENCE LIST

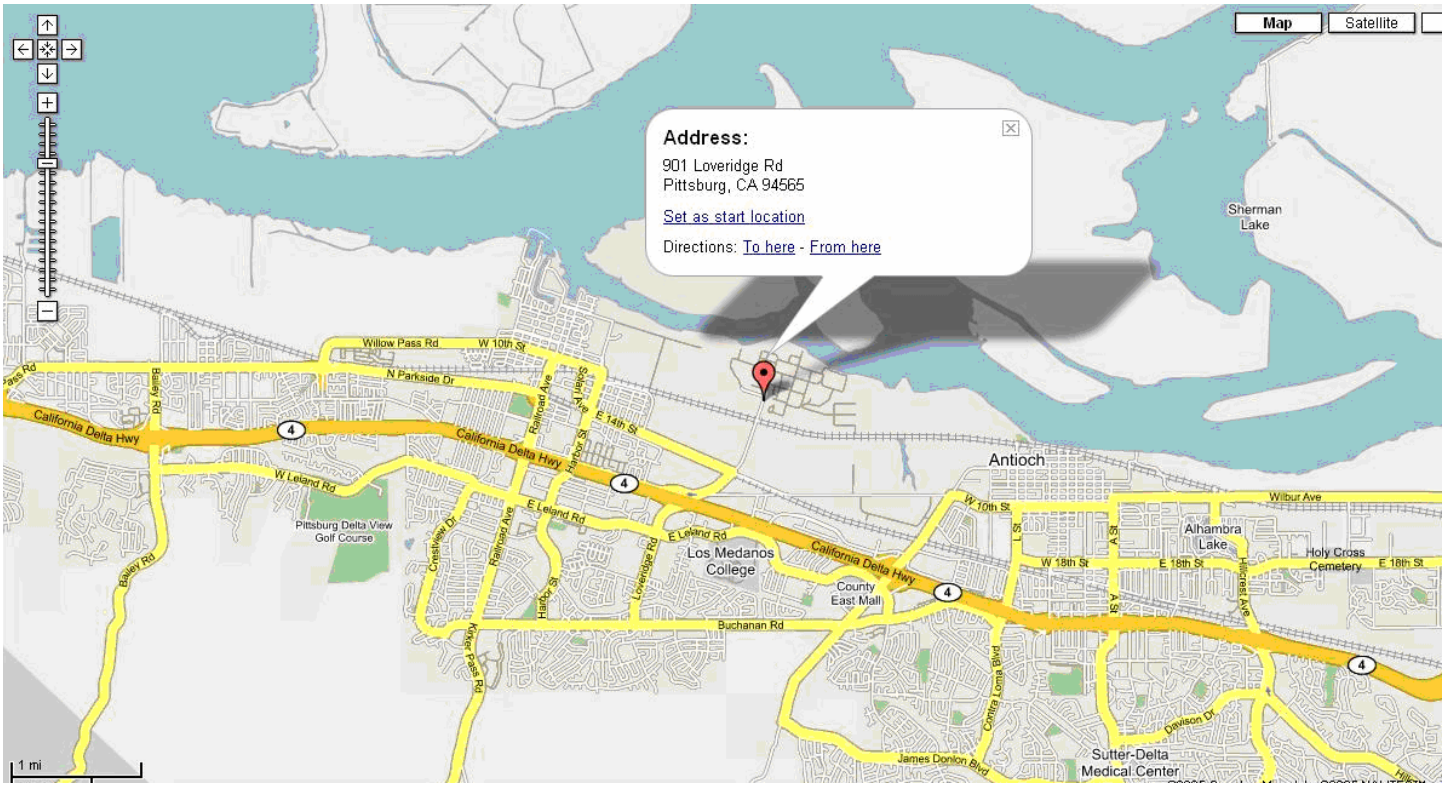
For

Dow-Pittsburg Chemical Company RCRA Hazardous Waste Storage Permit Renewal, Block 560 Drum Storage Area.
(Project Name)

- The Dow Chemical Company, *RCRA Hazardous Waste Permit Application Block 560 Drum Storage Area,* California, CH2MHILL, June 2005.
- Bay Area Air Quality Management District, *Major Facility Review Permit issued to Dow Chemical Company A0031*, California, October 28, 2004. http://www.baaqmd.gov/pmt/title_v/permits/A0031_2004-10_reopening_02.pdf
- The Dow Chemical Company, *Response to form DTSC 1176 Environmental Information*, California, September 2005
- Department of Toxic Substances Control, *Halogen Acid Furnaces Initial Study*, California, 2001.
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0007*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0007.doc
- California Regional Water Quality Regional Control Board San Francisco Bay Region, *Order No. R2-2002-0014*, California, 2002. http://www.waterboards.ca.gov/sanfranciscobay/Agenda/01-23-02/r2-2002-0014.doc
- Occupational Safety & Health Administration, *Occupational Noise Exposure*, U.S. Department of Labor. http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9735&p_table=STANDARDS
- Google maps. http://maps.google.com/maps?oi=map&q=901+Loveridge+Road,+Pittsburg,+CA

ATTACHMENT B

Aerial Photo of Dow Chemical/ Pittsburg and Facility Location Map



ATTACHMENT C

Dow Chemical Co. – Plot Plan Map of Entire Manufacturing Operations

ATTACHMENT D

Map of Nearest Sensitive Receptors to Dow Chemical- Block 560 Drum Storage Area

Search results for **preschools** near **901 Loveridge Rd, Pittsburg, CA 94565**

Categories: School Preschool & Kindergarten, Day Care Centers & Homes

A Pittsburg **Pre-School** & Community Council Inc
1760 Chester Dr, Pittsburg, CA
1.1 mi W - (925) 439-2061

B Wilson Riles **Pre-School** Program
1760 Chester Dr, Pittsburg, CA
1.1 mi W - (925) 439-9111

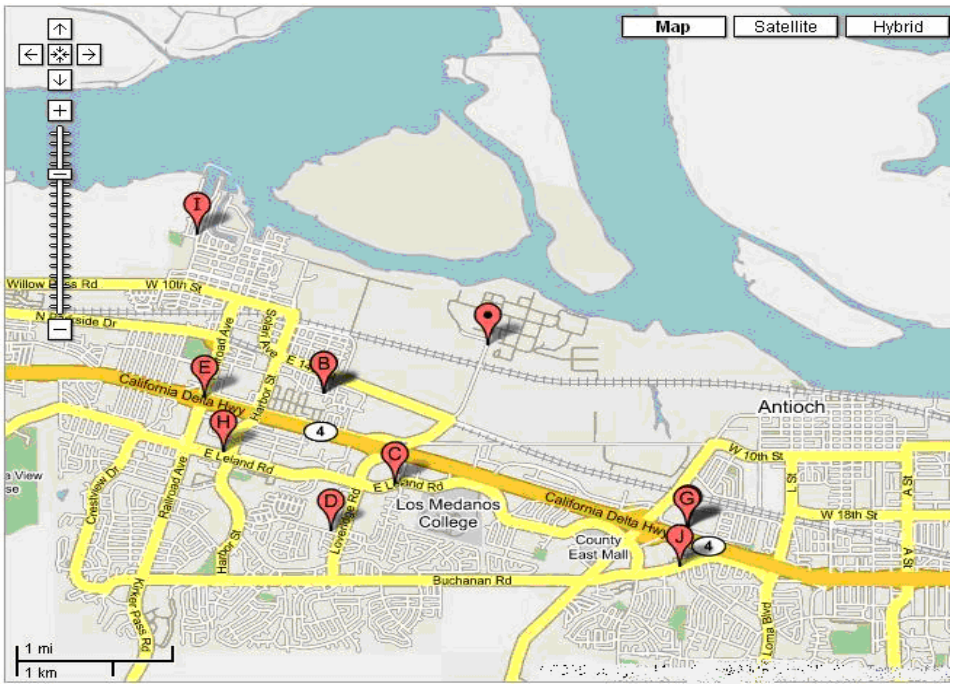
C First Baptist Head Start
2240 Gladstone Dr, Pittsburg, CA
1.2 mi SW - (925) 473-2000

D Little Promises **Preschool**
1210 Stoneman Ave, Pittsburg, CA
1.7 mi SW - (925) 432-3800

E Railroad Junction School
2224 Railroad Ave, Pittsburg, CA
1.9 mi W - (925) 427-2000

F Kindercare Learning Centers: Antioch District Office
2300 Mahogany Way, Antioch, CA
1.9 mi SE - (925) 779-9885

G Kindercare Learning Centers: Antioch
2300 Mahogany Way, Antioch, CA
1.9 mi SE - (925) 778-8888



Search results for **day cares** near **901 Loveridge Rd, Pittsburg, CA 94565**

Did you mean: ***daycares***

Categories: Day Care Centers & Homes, School Preschool & Kindergarten

A Pittsburg Pre-School & Community Council Inc
1760 Chester Dr, Pittsburg, CA
1.1 mi W - (925) 439-2061

B First Baptist Head Start
2240 Gladstone Dr, Pittsburg, CA
1.2 mi SW - (925) 473-2000

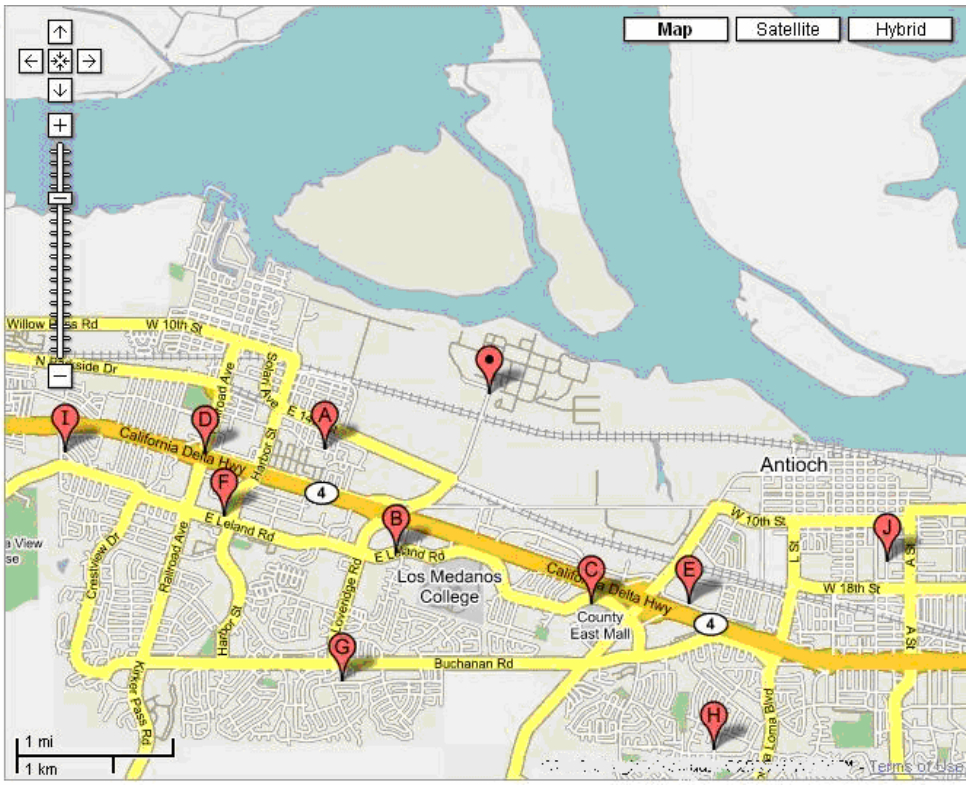
C Social Vocational Svc Inc
3684 Delta Fair Blvd, Antioch, CA
1.5 mi SE - (925) 522-0722

D Railroad Junction School
2224 Railroad Ave, Pittsburg, CA
1.9 mi W - (925) 427-2000

E Kinder **Care** Learning Ctr
2300 Mahogany Way, Antioch, CA
1.9 mi SE - (925) 778-8888

F Kinder **Care** Learning Ctr
150 E Leland Rd, Pittsburg, CA
1.9 mi SW - (925) 432-8800

G Sugar & Spice Family **Daycare**
1345 Jensen Dr, Pittsburg, CA



ATTACHMENT E

Photos of Block 560 Drum Storage Area