

1 3.8 HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 3.8.1 Environmental Setting

3 The Project site is located approximately 90 feet from the southern shore of the San
 4 Joaquin River and about 2 miles downstream from the Antioch Bridge. The wharf has
 5 been in active use for 50 years for offloading raw gypsum material for a wallboard
 6 manufacturing plant. As gypsum is unloaded from an arriving ship, it is transported via
 7 covered conveyors to the large storage barn at the eastern end of the Plant site until
 8 removed for processing. The covers on the conveyors and dust control features on the

1 hopper limit the risk of spill of gypsum materials or generation of hazardous levels of
 2 dust. The wharf site is at approximately sea level (with water level about 32 feet above
 3 the soil/mudline), with surrounding uplands rising quickly from 3 to 5 feet at the
 4 shoreline to about 30 to 40 feet above sea level on the surrounding, mostly flat upland
 5 properties.

6 The land uses in the area of the Plant are predominantly heavy industrial, with the
 7 exception of the wildlife preserves adjacent to the Plant, with surrounding commercial
 8 facilities and a bus storage and maintenance garage nearby. Land use within 0.25 to
 9 0.5 mile of the Project site consists of mixed-use commercial facilities and some older
 10 residential developments south of Wilbur Avenue running along the south border of the
 11 Plant. The Plant has an adopted emergency response and evacuation plan that
 12 includes the wharf area.

13 Sediment sampling at the wharf aimed at providing data necessary to generate a
 14 preliminary assessment of substrate composition and the level of potential sediment
 15 contamination in the Project area was conducted in 2009 (Weston 2011). A single
 16 composite sediment sample (GP-COMP) was prepared using a number of surface
 17 sediment samples along the dockline (<2 feet below mudline) and analyzed for physical
 18 properties, concentrations of pollutants of environmental concern, and leaching
 19 potential. Results of this preliminary investigation showed that contaminants were not
 20 present in surface sediments at concentrations of concern. The site is not on or
 21 adjacent to any property listed under the state Cortese List compiled according to
 22 Government Code section 65962.5.²¹ Two remediation sites are listed as located in
 23 upland areas on the northeast corner of the GP property; however, the Project would
 24 have no effect on these sites or their cleanup.²²

25 **3.8.2 Regulatory Setting**

26 Federal and State laws and regulations pertaining to this issue area and relevant to the
 27 Project are identified in Table 3.8-1.

Table 3.8-1. Laws, Regulations, and Policies (Hazards and Hazardous Materials)

U.S.	Clean Water Act (CWA) (33 USC 1251 et seq.)	The CWA is comprehensive legislation (it generally includes reference to the Federal Water Pollution Control Act of 1972, its supplementation by the CWA of 1977, and amendments in 1981, 1987, and 1993) that seeks to protect the nation’s water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. (see <i>below and in Section 3.9, Hydrology and Water Quality</i>).
U.S.	California Toxics Rule (40 CFR 131)	In 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. USEPA promulgated this rule based on the

²¹ envirostor.dtsc.ca.gov/public; geotracker.waterboards.ca.gov/map/?global_id=L10001309503#

²² *ibid*

		Administrator's determination that the numeric criteria are necessary in the State of California to protect human health and the environment. Under CWA section 303(c)(2)(B), the USEPA requires states to adopt numeric water quality criteria for priority toxic pollutants for which the USEPA has issued criteria guidance, and the presence or discharge of which could reasonably be expected to interfere with maintaining designated uses. These Federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries.
U.S.	Hazardous Materials Transportation Act (HMTA) (49 USC 5901)	The HMTA delegates authority to the U.S. Department of Transportation (DOT) to develop and implement regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. Additionally, the USEPA's Hazardous Waste Manifest System is a set of forms, reports, and procedures for tracking hazardous waste from a generator's site to the disposal site. Applicable Federal regulations are contained primarily in CFR Titles 40 and 49.
U.S.	National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)	Authorized under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC 9605, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99 through 499; and by CWA section 311(d), as amended by the Oil Pollution Act of 1990 (OPA), Pub. L. 101 through 380. The NCP outlines requirements for responding to both oil spills and releases of hazardous substances. It specifies compliance, but does not require the preparation of a written plan. It also provides a comprehensive system for reporting, spill containment, and cleanup. The U.S. Coast Guard (USCG) and USEPA co-chair the National Response Team. In accordance with 40 CFR 300.175, the USCG has responsibility for oversight of regional response for oil spills in "coastal zones," as described in 40 CFR 300.120.
U.S.	Oil Pollution Act (OPA) (33 USC 2712)	The OPA requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances. The passage of the OPA motivated California to pass a more stringent spill response and recovery regulation and the creation of the Office of Spill Prevention and Response (OSPR) to review and regulate oil spill plans and contracts.
U.S.	Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.)	The RCRA authorizes the USEPA to control hazardous waste from "cradle-to-grave," which encompasses its generation, transportation, treatment, storage, and disposal. RCRA's Federal Hazardous and Solid Waste Amendments from 1984 include waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. The Department of Toxic Substances Control is the lead State agency for corrective action associated with RCRA facility investigations and remediation.
U.S.	Toxic Substances Control Act (TSCA) (15 USC 2601–2692)	The TSCA authorizes the USEPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.
U.S.	Other	<ul style="list-style-type: none"> • Act of 1980 to Prevent Pollution from Ships requires ships in U.S. waters, and U.S. ships wherever located, to comply with International Convention for the Prevention of Pollution from Ships (MARPOL). • Convention on the International Regulations for Preventing Collisions at Sea (COLREGS). These regulations establish "rules of the road" such as rights-of-way, safe speed, actions to avoid collision, and procedures to observe in narrow channels and restricted visibility. • Inspection and Regulation of Vessels (46 USC Subtitle II Part B). Federal

		<p>regulations for marine vessel shipping are codified in 46 CFR parts 1 through 599 and are implemented by the USCG, Maritime Administration, and Federal Maritime Commission. These regulations provide that all vessels operating offshore, including those under foreign registration, are subject to requirements applicable to vessel construction, condition, and operation. All vessels (including motorboats) operating in commercial service (e.g., passengers for hire, transport of cargoes, hazardous materials, and bulk solids) on specified routes (inland, near coastal, and oceans) are subject to requirements applicable to vessel construction, condition, and operation. These regulations also allow for inspections to verify that vessels comply with applicable international conventions and U.S. laws and regulations.</p> <ul style="list-style-type: none"> • Navigation and Navigable Waters regulations (33 CFR) include requirements pertaining to prevention and control of releases of materials (including oil spills) from vessels, traffic control, and restricted areas, and general ports and waterways safety.
CA	Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Gov. Code, § 8574.1 et seq.; Pub. Resources Code, § 8750 et seq.)	<p>This Act and its implementing regulations seek to protect State waters from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill. The Act requires vessel and marine facilities to have marine oil spill contingency plans and to demonstrate financial responsibility, and requires immediate cleanup of spills, following the approved contingency plans, and fully mitigating impacts on wildlife. The Act assigns primary authority to the Office of Spill Prevention and Response (OSPR) division within the CDFW to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the State. The CSLC assists OSPR with spill investigations and response.</p>
CA	Other	<ul style="list-style-type: none"> • California Clean Coast Act (SB 771) establishes limitations for shipboard incinerators, and the discharge of hazardous material—including oily bilgewater, graywater, and sewage—into State waters or a marine sanctuary. It also provides direction for submitting information on visiting vessels to the CSLC and reporting of discharges to the State water quality agencies. • California Harbors and Navigation Code specifies a State policy to “promote safety for persons and property in and connected with the use and equipment of vessels,” and includes laws concerning marine navigation that are implemented by local city and county governments. This Code also regulates discharges from vessels within territorial waters of the State of California to prevent adverse impacts on the marine environment. This Code regulates oil discharges and imposes civil penalties and liability for cleanup costs when oil is intentionally or negligently discharged to the State waters. • California Seismic Hazards Mapping Act (Pub. Resources Code, § 2690) and Seismic Hazards Mapping Regulations (Cal. Code Regs., tit. 14, Div. 2, Ch. 8, Art. 10) (See Section 3.6, <i>Geology and Soils</i>). • Hazardous Waste Control Act (Cal. Code Regs., tit. 26) defines requirements for proper management of hazardous materials. • Porter-Cologne Water Quality Control Act (Cal. Water Code, § 13000 et seq.) (See Section 3.9, <i>Hydrology and Water Quality</i>).

- 1 Local goals, policies, and/or regulations applicable to this issue area are listed below.
- 2 The Project site is within an area of Contra Costa County that was annexed by the city
- 3 of Antioch in 2013; however, Contra Costa County information is provided in the
- 4 absence of specific City policies for this issue area.

1 The following goals and policies regarding hazardous materials uses from the Contra
2 Costa County General Plan 2005-2020 (Contra Costa County 2005) were considered in
3 this analysis.

4 Chapter 7: Public Facilities/Services Element - Section 7.12, Hazardous Waste
5 Management

- 6 • Goal 7-AM: To eliminate the generation and disposal of hazardous waste
7 materials to the maximum extent feasible by:
 - 8 ○ Reducing the use of hazardous substances and the generation of
9 hazardous wastes at their source;
 - 10 ○ Recovering and recycling the remaining waste for reuse;
 - 11 ○ Treating those waste not amenable to source reduction or recycling so that
12 the environment and community health are not threatened by their ultimate
13 disposal;
 - 14 ○ Incinerating those wastes amenable to this technology; and
 - 15 ○ Properly disposing of treated residuals in approved residual repositories.

16 Chapter 10: Safety Element

- 17 • Goal 10-I: To provide public protection from hazards associated with use,
18 transport, treatment, and disposal of hazardous substances.
 - 19 ○ Policy 10-61: Hazardous waste releases from both private companies and
20 from public agencies shall be identified and eliminated.
 - 21 ○ Policy 10-62: Storage of hazardous materials and wastes shall be strictly
22 regulated.
 - 23 ○ Policy 10-63: Secondary containment and periodic examination shall be
24 required for all storage of toxic materials.
 - 25 ○ Policy 10-68: When an emergency occurs in the transportation of hazardous
26 materials, the County Office of Emergency Services shall be notified as
27 soon as possible.

28 **3.8.3 Impact Analysis**

29 ***a) Create a significant hazard to the public or the environment through the routine***
30 ***transport, use, or disposal of hazardous materials?***

31 **Less than Significant with Mitigation.** Following Project construction, the wharf facility
32 would operate in the same manner as under current conditions and there would be no
33 increase in the hazards to the public or environment. The only potential for such
34 hazards would be during Project construction. The Project includes the routine
35 transport, use, and disposal of hazardous materials that could create a significant
36 hazard to the public or environment absent measures to avoid or reduce this potential

1 impact. Specifically, Project-related removal, installation, and repair activities could
2 generate debris from pilings and associated construction materials, some of which may
3 be hazardous. Additionally, the Project would use a barge and marine construction
4 equipment, which would require the routine use of hazardous materials including fuel
5 (diesel and gasoline) and marking paint.

6 The Harbor Tugboats that would transport the material and work barges from the
7 contractor's yard to the wharf site must be certified under the 1990 California Oil Spill
8 Prevention and Response Act (OSPRA)'s San Francisco Bay Harbor Safety Plan to
9 operate in compliance with both state laws and with the U.S. Coast Guard under the
10 Code of Federal Regulations (CFR) Title 33 *Navigation and Navigable Waters*. Part 151
11 of the federal law requires compliance with International Convention for the Prevention
12 of Pollution from Ships (MARPOL): the international convention for pollution prevention
13 from ships. MARPOL includes having an Oil Pollution Emergency Plan that outlines
14 steps to control operational spills (removal and containment) and to properly dispose of
15 oil spill cleanup materials onshore.

16 The routine transport, use, or disposal of hazardous materials described above could
17 have a potentially significant impact to the public or the environment. However,
18 implementation of **MM BIO-6** and **MM BIO-8**, including turbidity monitoring, availability
19 of a floating boom, and use of drip pans to contain any leaks of hazardous materials
20 from the barge, will reduce impacts to less than significant.

21 **MM BIO-6: In-Water Turbidity Protections.** During pile removal activities,
22 turbidity monitoring shall be monitored daily during an ebb tide, at 31 meters (100
23 feet) upstream and 92 meters (300 feet) downstream of the work site. If
24 downstream turbidity measures are more than 15 Nephelometric Turbidity Units
25 (NTU) above the upstream level, activities shall cease until turbidity levels drop
26 below 15 NTUs above the upstream measurement. All incidents of exceedance
27 of the turbidity standard shall be reported to the California Department of Fish
28 and Wildlife (CDFW) within 24 hours. A turbidity-monitoring log shall be
29 maintained and provided to the CDFW and the State Lands Commission staffs
30 within 5 days from the completion of work.

31 **MM BIO-8: Toxic Substances Protections.** To ensure toxic substances are not
32 released into the aquatic environment, the following measures shall be followed:

- 33 a) all engine-powered equipment shall be well-maintained and free of leaks of
34 fuel, oil, hydraulic fluid or any other potential contaminant;
- 35 b) all engine-powered equipment used and operated from the decks of barges,
36 boats or the wharf shall be positioned over drip-pans;
- 37 c) a spill prevention and response plan shall be prepared in advance of the
38 commencement of work; a spill kit with appropriate clean-up supplies shall

- 1 be kept on hand during operations. The kit shall include a floating oil-
2 absorbent sock that could be immediately deployed and maintained around
3 the work barges in the event of a spill or any accidental leakage of fuel or
4 hydraulic fluids;
- 5 d) refueling and maintenance of mobile equipment shall not be performed
6 directly over the waters of the River. Only approved and certified fuel cans
7 with “no-spill” spring-loaded nozzles shall be used; and
- 8 e) All spill cleanup materials or other liquid or solid wastes shall be securely
9 containerized and labeled in the field during transport by barge to the
10 contractor’s yard.

11 ***b) Create a significant hazard to the public or the environment through***
12 ***reasonably foreseeable upset and accident conditions involving the release of***
13 ***hazardous materials into the environment?***

14 **Less than Significant with Mitigation.** The work barges and transporting tugboats
15 associated with the Project are expected to be traveling on familiar routes, according to
16 an approved travel plan, and carrying less than 200 gallons of fuel and lubricants. They
17 would be operating under the San Francisco Bay Harbor Safety Plan for marine vessel
18 traffic as well as USCG requirements.

19 The largest Project waste stream expected to be generated would be composed of
20 treated-wood piles and fragments resulting from demolition activities. The treated wood
21 waste would be collected and contained on an attendant material barge and transported
22 back to the contractor’s yard, from where it would be transported to the Potrero Hills
23 Landfill in Suisun City, CA. The contractor would be subject to requirements of the
24 County Hazardous Materials Storage Ordinance. Aside from wood waste, all other liquid
25 and solid waste (e.g., excess grout, metals, motor oils and filters, solvents, antifreeze,
26 and batteries) would be collected in covered and secured containers on the material
27 barges and transported to the contractor’s yard for subsequent disposal or recycling.
28 Any wastes that can be recycled would be processed according to Contra Costa County
29 rules and recordkeeping requirements. These measures would be included in project
30 standard operating procedures and would provide protection and preservation of the
31 existing land and water uses in the area.

32 Any liquid, solid or gaseous wastes connected with the Project would be managed by
33 the construction contractor under the oversight of GP Antioch, as specified in the GP
34 Antioch Wharf Project Waste Management Plan. The Project would also have a spill
35 prevention response plan. Wastes would be captured and contained at the time and
36 location at which they are generated. Debris barriers would be routinely used
37 surrounding work areas to capture and contain any unintentional migration of solid
38 material into the River.

1 Because work is proposed on and near the water, an upset or accidental release of
2 these hazardous materials has the potential to adversely affect surface water and
3 nearby ecological receptors. However, implementation of **MM BIO-8**, above, will reduce
4 impacts to less than significant.

5 ***c) Emit hazardous emissions or handle hazardous or acutely hazardous***
6 ***materials, substances, or waste within one-quarter mile of an existing or***
7 ***proposed school?***

8 **No Impact.** The nearest schools to the Project site are Cornerstone Christian School,
9 4,000 feet southeast of the site, and Kimball Elementary School, 4,800 feet to the
10 southwest. Therefore there is no potential for impact on schools located within 0.25 mile
11 of the site.

12 ***d) Be located on a site which is included on a list of hazardous materials sites***
13 ***compiled pursuant to Government Code section 65962.5 and, as a result, would it***
14 ***create a significant hazard to the public or the environment?***

15 **No Impact.** The Project site properties are not listed under the state Cortese List
16 compiled according to Government Code section 65962.5, therefore construction at the
17 wharf site would not create a significant hazard to the public or to the environment
18 (State Water Resources Control Board [SWRCB] 2014, Department of Toxic
19 Substances Control [DTSC] 2014).

20 ***e) For a project located within an airport land use plan or, where such a plan has***
21 ***not been adopted, within 2 miles of a public airport or public use airport, would***
22 ***the project result in a safety hazard for people residing or working in the project***
23 ***area?***

24 **No Impact.** The Project is not located within an airport land use plan, or within 2 miles
25 of a public airport or public use airport. The closest public use airport is Buchanan Field
26 in Concord, approximately 14.5 miles from the Project site. The Project would therefore
27 not result in an airport-related safety hazard for people residing or working in the Project
28 area.

29 ***f) For a project within the vicinity of a private airstrip, result in a safety hazard for***
30 ***people residing or working in the project area?***

31 **No Impact.** There is no known private airstrip in the Project vicinity. Therefore, the
32 Project would not result in an airstrip-related safety hazard for people residing or
33 working in the Project area.

34 ***g) Impair implementation of or physically interfere with an adopted emergency***
35 ***response plan or emergency evacuation plan?***

1 **Less than Significant Impact.** The Plant has an adopted emergency response and
2 evacuation plan that includes the Project area. As part of the Project, the plan would be
3 amended to incorporate the construction activities and workers present during the 8-
4 week construction period. Therefore, the Project would have a less than significant
5 impact on implementation and would not physically interfere with the adopted
6 emergency response plan or emergency evacuation plan of which it would be a part.

7 ***h) Expose people or structures to a significant risk of loss, injury or death***
8 ***involving wildland fires, including where wildlands are adjacent to urbanized***
9 ***areas or where residences are intermixed with wildlands?***

10 **No Impact.** The wharf construction would be conducted entirely on areas permanently
11 under water. There are no wildlands within the Project site. Therefore there would be no
12 impact from the Project that could expose people or structures to a significant risk of
13 loss, injury or death involving wildland fires.

14 **3.8.4 Mitigation Summary**

15 Implementation of the following measure will reduce Project-related impacts associated
16 with Hazards and Hazardous Materials to less than significant.

- 17 • MM BIO-6. In-Water Turbidity Protections.
- 18 • MM BIO-8. Toxic Substances Protections.