

3.11 HAZARDS AND HAZARDOUS MATERIALS

A. Setting

Hazardous materials are substances with certain physical and chemical properties that could pose a substantial present and future hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. The categories that apply to hazardous materials are toxicity, ignitability, corrosivity, or reactivity.

ENSR conducted a database search of hazardous materials using EnviroStor, a program that identifies properties in California that have known contamination or properties for which there may be reasons for further investigation. It includes sites listed under the federal Superfund, state response, and state voluntary cleanup programs. It provides a brief history of cleanup activities, contaminants of concern, and scheduled future cleanup properties regulated by the California Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program where extensive investigation and/or cleanup actions are planned or have been completed. EnviroStor provides a map identifying these regulated sites, which was used to determine whether any of the listed sites occur within the study area. Based on the EnviroStor map, the study area is not located on any of the sites identified in the database. As such, the project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The site is vacant land in the floodplain of the Russian River. As such, it is devoid of areas that currently involve hazardous materials. No evidence of hazardous material storage, manufacturing, or use occurs within the study area.

B. Regulatory Framework

Numerous federal, state, and local laws and regulations regulate the use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater. The U.S. Environmental Protection Agency (EPA) is the federal agency that administers hazardous materials and waste regulations. State agencies include the California Environmental Protection Agency, which includes DTSC, the North Coast Regional Water Quality Control Board (North Coast RWQCB), the California Air Resources Board (ARB), and other offices. The Northern Sonoma County Air Pollution Control District (NSCAPCD) has jurisdiction over the air basin, which includes this area of Sonoma County. Local regulatory agencies include the Sonoma County Departments of Health Services and Emergency Services. A description of agency jurisdiction and involvement in management of hazardous materials is provided below.

FEDERAL REGULATORY ISSUES

EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. The legislation includes the Resource Conservation and Recovery Act of 1986, the Superfund Amendments and Reauthorization Acts of 1986, and the Comprehensive Environmental Response, Compensation and Liability Act of 1980. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations. EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes.

STATE REGULATORY ISSUES

California Department of Toxic Substances Control

DTSC works in conjunction with EPA to enforce and implement specific laws and regulations pertaining to hazardous wastes. The California legislation, for which DTSC has primary enforcement authority, includes the Hazardous Waste Control Act and the Hazardous Substance Account Act. Most state hazardous waste regulations are contained in Title 22 of the California Code of Regulations. DTSC generally acts as the lead agency for soil and groundwater cleanup projects, and establishes cleanup and action levels for subsurface contamination that are equal to, or more restrictive than, federal levels.

California Air Resources Board and the Northern Sonoma Air Pollution Control District

The study area is in the North Coast Air Basin. ARB and NSCAPCD have joint responsibility for developing and enforcing regulations to achieve and maintain federal and state ambient air quality standards in the district. ARB is responsible for enforcing the Clean Air Act and California ambient air quality standards. NSCAPCD is responsible for regulation of air emissions from stationary sources, monitoring air quality, and reviewing air quality issues in environmental documents. Section 3.7, "Air Quality," further describes the responsibilities of ARB and NSCAPCD, air quality conditions in the North Coast Air Basin, and potential air quality impact associated with the project.

California Department of Industrial Relations, Division of Occupational Safety and Health

Worker health and safety, which is regulated at the federal level by the U.S. Department of Industrial Relations, is regulated in California by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA). California standards for workers dealing with hazardous materials are contained in Title 8 of the California Code of Regulations, and include practices for all industries (General Industry Safety Orders), and specific practices for construction and hazardous waste operations and emergency response. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

LOCAL REGULATORY ISSUES

North Coast Regional Water Quality Control Board

The study area is located in the jurisdiction of the North Coast RWQCB. The RWQCB is authorized by the California Porter-Cologne Water Quality Act of 1969 to implement water quality protection laws. The RWQCB provides oversight for sites where the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions.

Local Hazardous Materials Management

The primary agencies responsible for local enforcement of federal and state laws controlling hazardous materials management include the Hazardous Materials Division of the Sonoma County Department of Emergency Services (SCDES) and the Environmental Health Division of the Sonoma County Department of Health Services (SCDHS). SCDES is a certified unified program agency, the local agency responsible for coordination of hazardous waste generator programs, underground fuel tank management, tiered permitting process for waste treatment,

and administering the Hazardous Materials Business Plan program. SCDHS is responsible for management of leaking underground storage tank site investigation and cleanup.

Businesses that store, handle, or dispose of hazardous materials must submit a Hazardous Materials Business Plan (business plan) in accordance with Section 25504 of the California Health and Safety Code. The business plans must be updated every 2 years or within 30 days after a substantial change in site operations. The business plan must:

- list all the hazardous materials stored at a site,
- identify emergency response procedures for spills and personnel,
- identify evacuation plans and procedures, and
- identify training records for personnel to substantiate annual refresher training.

If hazardous materials are used or stored at a site, all employees are also required to receive hazard communication training. The purpose of the training is to ensure that employees understand the nature of the hazardous materials that they handle and can safely use, store, and dispose of the materials in accordance with Title 8 of the California Code of Regulations. The hazard communication standard requires that employers must:

- prepare an inventory of hazardous materials,
- make Material Safety Data Sheets available to employees,
- conduct employee training on chemical hazards and safe handling of materials, and
- ensure that hazardous material containers are properly stored and labeled.

Inspections of businesses that store hazardous materials are performed by SCDES. The hazard communication requirements are enforced by Cal/OSHA.

Sonoma County General Plan

The goals, objectives, and policies from the *Sonoma County General Plan* are not applicable to the project for this issue area.

C. Potential Impacts and Mitigation Measures

CRITERIA USED FOR DETERMINING IMPACT SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project would typically have a significant impact if it would:

- create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment;
- result in a safety hazard for people residing or working in the study area (for a project located within the vicinity of a private airstrip or 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); or
- impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

PROJECT IMPACTS

Findings in the ARM Plan PEIR

The potential impact of hazardous materials releases at mining sites was evaluated in Section 8.16, "Public Health and Safety," of the Aggregate Resource Management Plan (ARM Plan) PEIR. The impact analysis determined that adherence to existing federal, state, and local laws and regulations would reduce the potential impact of releases of hazardous materials to a less-than-significant level. The mitigation measure specifically referenced adherence to the requirement that a spill prevention control and countermeasures plan be prepared for mining operations.

Project Impacts

Syar would use a mobile fuel truck to fuel mining equipment on the terraces away from the high banks of the river channel. Haul truck fueling would take place off-site at the Syar-owned aggregate processing plant in Healdsburg or at off-site fueling stations. Major repairs would occur at the aggregate processing plant in Healdsburg, while regular equipment maintenance would occur within terrace areas. Hazardous wastes generated by the mining operations would consist primarily of waste oils, spent lubricants and antifreeze. These wastes would be managed at the aggregate processing plant at Healdsburg.

The project is not located within one-quarter mile of an existing or proposed school, in the vicinity of a private airstrip, or within 2 miles of a public airport. As such, health and safety impacts on schoolchildren, and people residing or working in the study area would not occur. The project is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, nor would it impair implementation of or interfere with any adopted emergency response plans or emergency evacuation plans.

Impact 3.11-1 Transport, storage, and use of hazardous materials during mining or river enhancement plan activities (i.e., petroleum products) could be spilled or otherwise released through improper handling or storage, or through unforeseen and accidental conditions.

Proposed mining or river enhancement plan activities would involve the use of certain hazardous materials (e.g., fuels, lubricants, and antifreeze for operation of machinery and haul trucks). Inadvertent release of these materials could result in adverse impacts on soil, surface water, and/or groundwater. The on-site storage and/or use of large amounts of these materials would not be required at the mining and reclamation sites, since equipment fueling would be performed by a mobile fuel truck on terraces above the riverbanks, and haul truck fueling would take place off-site at fueling stations already covered by existing permits. Minor maintenance of

equipment may occur on the terraces but major maintenance activities would occur at the processing plant. The Sonoma County ARM Plan specifically requires the preparation and adherence to a spill prevention plan for mining operations. Appendix E shows the basic framework of a Spill Prevention Fueling and Lubrication Plan prepared for the project. However, the current plan does not provide all the necessary detailed information required by federal, state, and local laws. To ensure that mining and reclamation activities would not result in an accidental release that would affect soil, surface water, or groundwater, a fully developed plan with detailed procedures must be available on-site for staff implementation in the event of an accidental release. Without the required details in the plan, potential impacts associated with the accidental release of hazardous materials would be significant.

The transport of diesel and other petroleum products used by machinery for mining would not pose any more significant problem than typical transport of such materials in the area and elsewhere in the county. These hazardous materials would be stored off-site, although some maintenance-related materials may be stored on-site. Potential health risks from diesel and other oils and grease leaking into groundwater aquifers or to surface waters would be remote, given the required compliance with the existing plan.

Mitigation Measures

- 3.11-1 **Update the Spill Prevention Fueling and Lubrication (SPFL) Plan.** Before initiation of mining activities, Syar shall update its SPFL plan in conformance with all federal, state, and local requirements and the ARM Plan. The SPFL plan shall be reviewed and approved by the Sonoma County Department of Emergency Services. The SPFL plan shall describe in detail the safety procedures followed by Syar (e.g., weekly visual inspections of any tanks and storage containers, spill prevention procedures, employee training regarding the use of equipment, spill prevention and response training, risk management), disposition of spill response equipment, as well as the procedure for response and notification in case a spill occurs. Additionally, the SPFL plan shall address the following issues:
- Vehicle and mining machinery equipment fueling and maintenance procedures and practices shall be designed to minimize or eliminate the discharge of hazardous material spills and leaks to the ground or to watercourses. These procedures shall be applied on all sites where vehicle and equipment fueling and maintenance take place.
 - On-site vehicle and equipment and machinery fueling and maintenance shall only be used where it is impractical to send vehicles and equipment off-site for fueling and maintenance. Any stationary equipment on-site shall be placed on a bermed containment pad covered by a minimum 10-millimeter liner that is impervious to petroleum products.
 - Drip pans or absorbent pads shall be used during vehicle and equipment fueling and maintenance, unless the fueling or maintenance is performed over an impermeable surface in a dedicated fueling area.
 - Dedicated fueling and maintenance areas shall be protected from storm water run-on and runoff, and shall be located at least 15 meters (50 feet) from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.

- Fueling nozzles used in vehicle and equipment fueling shall be equipped with automatic shut-off capabilities to prevent the overflowing of fuel tanks and to control drips. Equipment fueling operations shall not be left unattended.
- Where required by NSCAPCD, vapor recovery nozzles shall be used to help control drips and air pollution. Nozzles shall be secured upright when not in use.
- Fuel tanks shall not be topped off. Allowances shall be made to account for fuel expansion, particularly during hot weather. Fuel tanks shall be filled to a maximum of 85% full.
- Vehicles, machinery, and equipment shall be inspected each day before use for engine oil, hydraulic oil, and coolant system leaks. Leaks shall be repaired immediately or problem vehicles or equipment shall be removed from the study area. Hoses and hydraulic lines shall be inspected for abrasions and cracking. If a hose or hydraulic line is damaged or in obvious need of repair, it shall be replaced before the equipment starts work for the day. Hydraulic system pressure relief valves shall be tested periodically to ensure the equipment hydraulic system does not overpressurize and cause hydraulic hose or fitting failure.
- Absorbent spill cleanup materials and spill kits shall be available in fueling and maintenance areas and on fueling trucks and shall be disposed of properly after use. Absorbent spill cleanup materials shall be used on small spills instead of hosing down or burying techniques. The spent absorbent material shall be contained, removed promptly, and disposed of properly.
- Mobile fueling of equipment shall occur at designated fueling areas on the terraces away from the high banks of the river channel.
- Fueling and maintenance areas shall be protected with berms and/or dikes, where practical, to prevent run-on and runoff¹ and to contain spills.
- Fueling areas and storage tanks shall be inspected regularly.
- An ample supply of spill cleanup material shall be kept on the site.
- Syar shall immediately clean up spills and properly dispose of contaminated soil and cleanup materials.

Syar shall implement the measures in the plan in the event of an accidental release of hazardous materials as required in the Sonoma County ARM Plan. A copy of the final documentation of the cleanup/spill incident report following an accidental release of hazardous materials shall be submitted to the Sonoma County Department of Emergency Services to demonstrate the completion of the mitigation.

Impact Significance after Mitigation

Compliance with the ARM Plan and Mitigation Measure 3.11-1 would reduce all impacts related to the transport, storage, and use of fuels and other chemicals to a less than significant level.

¹ Run-on refers to surface flowing water from the surrounding vicinity that flows onto the fueling and maintenance areas during rain events. Runoff refers to surface flowing water that flows off the site during rain events. Both may be of concern should they become commingled with any spilled fuel/maintenance materials.