

CHAPTER 15.0

HAZARDOUS MATERIALS AND HAZARDS

This section addresses the potential for the proposed project to create impacts associated with the use, storage, and/or release of hazardous materials. Following an overview of hazardous materials use in the vicinity of the project site, project-related impacts and recommended mitigation measures are presented.

15.1 ENVIRONMENTAL SETTING

A hazardous material is a substance that, because of physical, chemical, or biological characteristics, quantity, or concentration poses a considerable present or potential hazard to human health or safety or the environment when improperly treated, stored, transported or disposed of, or managed. Hazardous materials refer generally to hazardous chemicals, radioactive materials, and biohazardous materials.

15.1.1 REGIONAL SETTING

As shown in **Figure 4-4**, the areas surrounding Thunder Valley Casino and the offsite improvement area include undeveloped open space, Orchard Creek Conservation Bank, Union Pacific Railroad (UPRR), State Route (SR) 65, and the Rio Bravo Biomass Power Plant. Major facilities in the Sunset Industrial Area (SIA) include the Western Placer Waste Management Authority Materials Recovery Facility, Western Regional Sanitary Landfill, Reynolds Aluminum, Doorcraft, and Federal Express. Some of the industries in the SIA use hazardous materials during the course of daily operations for industrial processes, and during maintenance of buildings, grounds, and fleet vehicles. Types of hazardous materials found in businesses within the SIA include acids, bases, solvents, and petroleum products.

Portions of western Placer County near Sunset Avenue and Cincinnati Avenue have been used for industrial activities since they were initially developed in the early 1960s. Several industries located within the SIA are identified as large- and small-quantity generators of hazardous waste under the Resource Conservation and Recovery Act (RCRA). A small-quantity generator generates between 100 kilograms (kg) and 1,000 kg of hazardous waste per month. Large-quantity generators generate over 1,000 kg of hazardous wastes, or over 1 kg of acutely hazardous waste per month. Under RCRA, generators of hazardous wastes are required to track their hazardous wastes from the point of generation to the disposal site using their federal identification number. Also known as the “cradle-to-grave” law, generators are required to maintain hazardous waste manifests that track the origin of the wastes, amount generated, the individual and/or company who transports wastes, and the facility that accepts the wastes

for treatment, disposal, and/or recycling. The information within the manifests is recorded in a database that is maintained by California Department of Toxic Substances Control (DTSC).

15.1.2 EXISTING SITE CONDITIONS

The casino site was undeveloped prior to casino construction and had never been occupied by a company that uses, stores, or generates hazardous materials (Environmental Science Associates, 2000). Prior to development of the temporary overflow parking lot, the site was an undeveloped grassy field. The Mitigated Negative Declaration prepared by Placer County for expansion of the parking lot identified no significant issues related to hazardous materials (Placer County, 2007b). Vegetated roadside ditches dominate the offsite improvement area along Athens Avenue. No signs of gross contamination on the casino property or adjacent areas that would affect the environmental quality of the proposed project site have been identified. Current hazardous materials database searches (**Appendix K**) identified no hazardous materials releases or open environmental cases on adjacent properties that would affect the proposed project site (EDR, 2007).

The existing Thunder Valley Casino does not generate significant quantities of hazardous materials. Currently, waste generation at the casino results primarily from the operation of food and service facilities. The casino maintenance crew uses and stores small amounts of fuel, motor oil, and waste oil for landscaping or other maintenance equipment and machinery. These materials are stored on a cement slab within a secured locker that is marked “Flammable” as required by the Placer County Fire Department, the Occupational Health and Safety Administration (OSHA), and the casino’s fire insurance policy. Gasoline and diesel fuel are stored in clearly labeled regulation five-gallon cans. The motor oil is purchased and kept in plastic one-quart sealed containers until needed. All waste oils are stored in covered plastic containers and removed from the site soon after they are generated. Due to the relatively small amounts used or stored on the casino property at any time, no permits or RCRA tracking of these materials are required. Cleaning supplies are stored in secured janitorial closets or lockers, accessible only to authorized personnel. Biological wastes, including potential biohazardous materials from “sharps” receptacles provided in casino restrooms, are stored within a secured locker and removed from the site on a weekly basis through a licensed medical waste removal contractor (Howard, 2007).

The onsite wastewater treatment plant (WWTP) requires the delivery, storage, and use of hazardous materials, particularly sodium hypochlorite, sodium hydroxide, and sodium bisulfite (Brown, 2007). Sodium hypochlorite (chlorine bleach) is used in wastewater treatment, in household laundry detergents, and in photochemical and pulp and paper industries. Sodium hypochlorite ingestion can cause severe gastrointestinal corrosion and inhalation can cause pulmonary edema. Sodium hydroxide is very corrosive and can cause severe burns in all tissues that come in contact with it. Inhalation of low levels of sodium hydroxide or sodium bisulfate may cause irritation of the nose, throat, and respiratory airways.

A weak (5-percent strength) solution of sodium hypochlorite is used to clean or inhibit biogrowth in the immersed membranes used to filter out solids in the initial stages of wastewater treatment, and to disinfect reclaimed water for onsite landscaping irrigation and other non-potable uses. Sodium hydroxide is used for pH adjustment and sodium bisulfite is used for dechlorination in WWTP operations. All of the WWTP chemicals are stored in sealed 55-gallon drums within secondary containment. The WWTP maintains less than 30 days' supply of chemicals onsite at any given time. Empty containers are stored in designated areas until sufficient quantities are accumulated for recycling.

The hazardous materials associated with the WWTP are included in a hazardous materials business plan that was developed prior to the opening of the existing casino. The hazardous materials business plan includes an inventory of hazardous materials stored and used onsite, maintains an emergency response plan for accidental release, and contains provisions specifying employee training in safety and emergency response procedures.

15.2 REGULATORY SETTING

The following section provides a brief overview of laws and regulations applicable to the use, storage, and disposal of hazardous materials.

15.2.1 HEALTH AND SAFETY LAWS AND REGULATIONS

MANAGEMENT OF HAZARDOUS CHEMICALS

State and federal laws require detailed planning to ensure that hazardous chemicals are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to public health or the environment. These laws require hazardous chemical users to prepare written plans, such as Hazard Communication Plans and Chemical Hygiene Plans. Laws and regulations require hazardous chemical users to store these materials appropriately and to train employees to manage them safely. The California Accidental Release Program (CARP) requires facilities to prepare Risk Management Plans for handling acutely hazardous, explosive, or flammable material.

HAZARDOUS MATERIALS TRANSPORTATION

The U.S. Department of Transportation regulates hazardous materials transportation between states. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, federal and state agencies determine driver-training requirements; load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

HAZARDOUS CHEMICAL WASTE HANDLING

The California DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous chemical waste. These laws impose “cradle-to-grave” regulatory systems that require generators of hazardous chemical waste to handle it in a manner that protects human health and the environment to the extent possible. Persons who generate, transport or offer for transport, treat, store, or dispose of hazardous waste generally must have an Identification Number, which is used to identify the hazardous waste handler and to track the waste from its point of origin to its final disposal.

Most hazardous waste falls into two types in California: waste regulated by the federal government under RCRA waste; waste regulated by California law alone is known as “non-RCRA” or “California-only” waste. All hazardous waste (RCRA and non-RCRA) in California is regulated under state statutes and regulations.

The Placer County Department of Health enforces onsite waste management requirements applicable to hazardous chemical waste generators, such as requirements for secondary containment around stored wastes to prevent environmental contamination from a spill. The California DTSC permits and oversees hazardous chemical waste treatment, long-term storage, and disposal facilities.

OCCUPATIONAL SAFETY

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the work place. The California Division of Occupational Safety and Health (Cal/OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices in California. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. Cal/OSHA also sets standards for fume hood operations (fume hoods are cabinets connected to overhead exhaust fans that draw air from inside the cabinet and expel it from the building through rooftop stacks).

MEDICAL WASTE MANAGEMENT

The California Medical Waste Management Act applies to the generation, transportation, treatment, storage, and disposal of medical waste, and imposes a “cradle-to-grave” tracking system. Facilities that treat medical wastes must obtain a permit and are subject to oversight by the California Department of Health Services.

SOIL AND GROUNDWATER CONTAMINATION

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated Superfund Amendments provide the U.S. Environmental Protection Agency (EPA) with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. The DTSC is the agency primarily responsible for implementing these laws.

STRUCTURAL AND BUILDING COMPONENTS

Federal and state laws and regulations address building materials containing asbestos, which is regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal/OSHA. Federal and state laws, implemented by the U.S. Department of Housing and Urban Development, also apply to lead-based paint in residential housing. These laws address abatement and worker protection. Federal and state laws and regulations relating to underground storage tanks (USTs) include permitting, monitoring, closure, and cleanup requirements. Regulations set forth construction and monitoring standards, monitoring standards for existing tanks, release reporting requirements, and closure requirements. The Placer County Department of Health is designated to permit and inspect USTs and to implement related regulations.

EMERGENCY RESPONSE

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies, including the California EPA, the California Highway Patrol, the Department of Fish and Game, the Regional Water Quality Control Boards, and local fire departments. The Placer County Fire Department provides first response capabilities, if needed, for hazardous materials emergencies.

15.2.2 PLACER COUNTY GENERAL PLAN

The Placer County General Plan addresses issues of hazardous materials by issuing goals, policies and implementation measures outlined in the Health and Safety Section of the County General Plan Policy Document. The County maintains a County Hazardous Waste Management Plan and a Hazardous Materials Emergency Response Plan to implement the General Plan's goal of minimizing risk to humans and the environment due to hazardous materials and hazardous waste. Policies designed to meet this goal include compliance with local, state, and federal regulations regarding the use, transport, storage, and disposal of hazardous materials and wastes; construction and operations standards for all facilities which could use or store hazardous materials; and implementation of emergency response plans, in coordination with fire protection and other agencies, for any accidental release or threatened release of a hazardous

material. Complete text of the relevant Placer County General Plan goals and policies regarding hazardous materials and wastes can be found in **Table 4-2** of this TEIR.

15.3 IMPACTS

SIGNIFICANCE CRITERIA

A project would be considered to pose a significant impact if it would:

- Pose public health and safety hazards through release or threatened release of hazardous materials or waste;
- Result in unsafe conditions for employees or surrounding land uses;
- Not comply with all applicable laws regarding the handling of hazardous materials;
- Involve the use, production, or disposal of materials in a manner that poses a hazard to people, or to animal or plant populations in the area affected;
- Interfere with emergency response plans or emergency evacuation plans; or
- Result in an increased fire hazard in areas with flammable brush, grass, or trees.

CONSTRUCTION IMPACTS

IMPACT 15.1:	Use and storage of hazardous materials during construction.
SIGNIFICANCE:	Potentially Significant
MITIGATION:	Mitigation Measures 15.1 and 15.2
RESIDUAL SIGNIFICANCE:	Less than Significant

During construction, it is anticipated that limited quantities of miscellaneous hazardous substances such as fuels, solvents, oils, and paint might be used and stored at the project site. Various contractors could use temporary bulk above-ground storage tanks as well as storage sheds/trailers for fueling and maintenance purposes. If properly used, stored, and disposed of, these materials would not be a hazard to people or the environment. However, if these materials are not properly used, stored, or disposed of, spills or leaks could pose a hazard to construction employees, casino patrons and employees, and the environment. This is a potentially significant impact.

Development and implementation of a hazardous materials business plan (Mitigation Measure 15.1), in conjunction with appropriate containment and cleanup of any inadvertent hazardous material releases (Mitigation Measure 15.2) would reduce any associated impacts to less than significant levels.

IMPACT 15.2:	Fire hazard associated with construction activities.
SIGNIFICANCE:	Potentially Significant
MITIGATION:	Mitigation Measures 15.3 and 15.4
RESIDUAL SIGNIFICANCE:	Less than Significant

The dry grasses along the roadway shoulders that are part of the offsite improvement project area can be especially dry during the summer seasons. Equipment used during grading and construction activities may create sparks that could ignite dry grasses and weeds on the project sites. During construction, the use of power tools and acetylene torches may also increase the risk of fire hazard. This risk, which is similar to that found at other construction sites, would be considered potentially significant. Implementation of Mitigation Measures 15.3 and 15.4 would reduce any construction-related fire impacts to less than significant levels.

IMPACT 15.3: Disturbance of contaminated soil and/or groundwater.
SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15.5
RESIDUAL SIGNIFICANCE: Less than Significant

Soil and groundwater contamination has not been identified on the project site or within two miles of the site (AES, 2004). However, construction activity at the project site could result in the disturbance of previously unidentified contaminated soil and/or groundwater. This is a potentially significant impact. Implementation of Mitigation Measure 15.5 would reduce any impacts to less than significant levels.

IMPACT 15.4: Damage to underground utilities in the offsite improvement area.
SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15.6
RESIDUAL SIGNIFICANCE: Less than Significant

During project construction, underground utilities within the offsite improvement area could be encountered. Digging in areas with underground utilities could damage those utilities and cause a risk of explosion, release of untreated wastewater, or disruption of essential public services. This is a potentially significant impact. Implementation of Mitigation Measure 15.6 would reduce any impacts to less than significant levels.

OPERATIONAL IMPACTS

IMPACT 15.5: Use and storage of hazardous materials at the WWTP and for casino maintenance operations.
SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measures 15.7 and 15.8
RESIDUAL SIGNIFICANCE: Less than Significant

If expansion of the onsite WWTP is selected as the preferred option for treatment of wastewater, the plant would continue to use hazardous materials such as sodium hypochlorite (bleach), sodium hydroxide, and sodium bisulfate, as described previously. The casino maintenance department uses and stores small

quantities of hazardous materials including cleaning supplies, motor oil, and gasoline. The use and storage of hazardous materials is considered a potentially significant impact. Implementation of Mitigation Measures 15.7 and 15.8 would reduce potential impacts to less than significant.

IMPACT 15.6: Fire hazards associated with operation of the proposed project.
SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measures 15.9 and 15.10
RESIDUAL SIGNIFICANCE: Less than Significant

Although not anticipated, possible fire hazards associated with operation of a commercial facility, including restaurants, could create a potential threat to the public. Smoking in gaming areas and the hotel could exacerbate the risk of operational fires. Mitigation Measures 15.9 and 15.10 would reduce impacts associated with fire risk to less than significant levels.

IMPACT 15.7: Hazardous materials release by future industrial land uses or transportation accidents.
SIGNIFICANCE: Potentially Significant
MITIGATION: Mitigation Measure 15.11
RESIDUAL SIGNIFICANCE: Less than Significant

Although no known hazardous material or waste sites were identified within one mile of the proposed project, future industrial land uses within the SIA may release air contaminants that could potentially result in the exposure of casino patrons and employees to hazardous materials. Transportation of hazardous materials or wastes via rail (UPRR) or truck (SR 65) includes the risk of release of such materials in an accident, which could potentially involve exposure of casino patrons and employees to hazardous materials. Although such an event is unlikely, this risk represents a potentially significant impact. Implementation of a casino emergency response plan (Mitigation Measure 15.11) would reduce project-related impacts to less than significant levels.

IMPACT 15.8: Transmission of food- and water-borne illnesses through dining facilities.
SIGNIFICANCE: Less than Significant
MITIGATION: None Warranted

If unregulated, food and beverage services provided within the expanded casino and hotel could contribute to the transmission of diseases through improper handling, preparation or storage of food, or contamination of water supplies. Section 10.2 of the Tribal-State Compact (1999, amended 2004), states:

For the purposes of this Gaming Compact, the Tribal Gaming Operation shall:

(a) Adopt and comply with standards no less stringent than state public health standards for food and beverage handling. The Gaming Operation will allow inspection of food and beverage services by state or county health inspectors, during normal hours of operation, to assess compliance with these standards, unless inspections are routinely made by an agency of the United States Public Health Service. Nothing herein shall be construed as submission of the Tribe to the jurisdiction of those state or county health inspectors, but any alleged violations of the standards shall be treated as alleged violations of this compact.

(b) Adopt and comply with standards no less stringent than federal water quality and safe drinking water standards applicable in California; the Gaming Operation will allow for inspection and testing of water quality by state and county health inspectors, as applicable, during normal hours of operation, to assess compliance with these standards, unless inspections and testing are made by an agency of the United States pursuant to, or by the Tribe under express authorization of, federal law, to ensure compliance with federal water quality and safe drinking water standards. Nothing herein shall be construed to submission of the Tribe to the jurisdiction of those state or county health inspectors, but any alleged violations of the standards shall be treated as alleged violations of this Compact.

Per the terms of the Compact, an agency of the United States Public Health Service would routinely inspect water quality in addition to food and beverage handling. The specific federal inspecting agency would be Indian Health Services (IHS), Office of Environmental Health Services and Engineering, Environmental Health Services Division. The IHS California regional office is located in Sacramento. If necessary, IHS would work with the Tribe to update its Tribal Health Ordinance, which would contain policies and procedures for both normal operating conditions and emergencies. The Tribal Health Ordinance would also outline enforcement provisions, in compliance with the Compact. Compliance with the Tribal-State Compact will reduce any project-related impacts to less than significant levels; no additional mitigation measures are required.

15.4 MITIGATION MEASURES

Mitigation Measure 15.1: Properly store, handle, and transport hazardous materials and fuels during construction.

Mitigation Measure 15.1 applies to Impact 15.1.

Any hazardous materials or fuels used on the project site will be properly containerized and stored in hazardous material cabinets. The Tribe shall ensure, through the enforcement of contractual obligations,

that all contractors prepare a hazardous materials business plan and transport, store and handle construction related hazardous materials in a manner consistent with applicable regulations and guidelines. Recommendations may include, but are not limited to, transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials in accordance with the applicable federal, state and/or local regulatory agency protocols. In addition, all precautions required by the U.S. EPA and/or Regional Water Quality Control Board (RWQCB) General Permit for construction activity will be taken to ensure that hazardous materials, including visible (sediment) and non-visible pollutants, do not enter any nearby waterways or that significant erosion does not occur that could impact surface water quality either onsite or offsite.

Mitigation Measure 15.2: Ensure that all contractors appropriately control any hazardous material leak or spill.

Mitigation Measure 15.2 applies to Impact 15.1.

The Tribe shall ensure through the enforcement of contractual obligations that all contractors immediately control the source of any hazardous material leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. If necessary, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media.

Mitigation Measure 15.3: Remove dried vegetation and other combustible materials during construction.

Mitigation Measure 15.3 applies to Impact 15.2.

During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep surrounding areas clear of combustible materials in order to maintain a firebreak.

Mitigation Measure 15.4: Ensure that spark arresters are in good working order.

Mitigation Measure 15.4 applies to Impact 15.2.

Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

Mitigation Measure 15.5: Halt work in the event of contamination discovery.

Mitigation Measure 15.5 applies to Impact 15.3.

If contaminated soil and/or groundwater is encountered or if suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination

shall be identified. Contaminated soil and groundwater, if discovered, shall be disposed of in accordance with applicable state and federal laws.

Mitigation Measure 15.6: Mark underground utilities along Athens Avenue and Thunder Valley Court. Mitigation Measure 15.6 applies to Impact 15.4.

The project applicant shall ensure, through the enforcement of contractual obligations, that prior to any excavation activities, Underground Service Alert (USA) will be contacted and utility locations within the offsite improvement area on Athens Avenue and Thunder Valley Court will be marked with clearly visible paint. USA provides a free “Dig Alert” service to all excavators (contractors, homeowners and others) in northern California. The excavator’s call to USA will automatically notify all USA Members (utility service providers) who may have underground facilities in the project vicinity. In response, the USA Members will mark or stake the horizontal path of their underground facilities, provide information about the utility location, or give clearance to dig.

Mitigation Measure 15.7: Update the existing hazardous materials business plan for the expanded casino and associated facilities, including the expanded WWTP. Mitigation Measure 15.7 applies to Impact 15.5.

The existing hazardous materials business plan shall be reviewed and updated accordingly. The plan shall contain an inventory of hazardous materials stored and used on site, maintain an emergency response plan in the event of an accidental release, and provide provisions specifying employee training in safety and emergency response procedures.

Mitigation Measure 15.8: Continue to properly store hazardous materials and fuels. Mitigation Measure 15.8 applies to Impact 15.5

As part of the expanded WWTP design, sodium hypochlorite, sodium hydroxide, and sodium bisulfate shall be stored in the chemical room of the operations building. The storage and chemical metering facilities shall be located inside a chemical spill containment area, sized to contain 150 percent of the storage volume in case of an unintentional release. All chemicals shall be stored as dry material in sealed containers, and then in a 50-gallon mixing tank when needed.

Any hazardous materials or fuels used on the project site will be properly containerized and stored in hazardous material cabinets or lockers. The hazardous materials cabinets/lockers shall be labeled accordingly with brightly colored placards that identify flammable contents within the cabinets/lockers.

Mitigation Measure 15.9: Maintain adequate water supply for fire safety. Mitigation Measure 15.9 applies to Impact 15.6.

As stated in **Chapter 14.3**, discussions with the Placer County Fire Department and Placer County Water Agency (PCWA) have confirmed that the proposed water supply infrastructure improvements will ensure adequate fire flows of at least 3,000 gallons per minute (gpm) at 20 pounds per square inch (psi). The existing 1,000,000-gallon water storage tank will be used to buffer peak water demands. Additional details regarding proposed water supply infrastructure improvements and fire protection requirements are provided in **Chapters 3.0** and **14.0** of this TEIR.

Mitigation Measure 15.10: Implement fire prevention practices.

Mitigation Measure 15.10 applies to Impact 15.6.

The project designs include several features to reduce potential fire impacts associated with operation of the expanded casino and hotel (**Chapter 14.0**). In addition to these design-related commitments, the Tribe will continue to collaborate with Placer County regarding fire prevention measures including:

- Regular onsite maintenance and inspection of all fire sprinklers and extinguishers throughout the property.
- Maintenance of the existing firebreak around the perimeter of the casino property.
- In portions of the property where smoking is permitted, ashtrays and receptacles filled with non-combustible material shall be provided and cleaned regularly.

Mitigation Measure 15.11: Develop and implement an emergency response plan.

Mitigation Measure 15.11 applies to Impact 15.7.

The Tribe will coordinate with neighboring industrial facilities, transportation authorities, Placer County, and other emergency service providers to prepare/update an emergency response plan. This plan shall include provisions for notification of hazardous materials releases, a strategy for assessing the risks posed to casino patrons and employees from such a release, and an evacuation plan in the event of an acute hazard. This plan will be updated as needed to account for the opening of new industrial facilities within the SIA.