
4.6 - Hazards and Hazardous Materials

4.6.1 - Introduction

This section describes the existing setting regarding hazardous materials and other potential hazards from project implementation on the site and its surrounding area, or that exist onsite or in the surrounding area that may affect implementation of the Proposed Project.

4.6.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic (causes human health effects);
- Ignitable (has the ability to burn);
- Corrosive (causes severed burns or damage to materials); and
- Reactive (causes explosions or generates toxic gases).

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Record Search

A search of federal, State, and local databases by Track Info Services (TIS) that list contaminated sites, Brownfield sites, underground storage tank (UST) sites, waste storage sites, toxic chemical sites, contaminated well sites, clandestine drug lab sites, and other sites containing hazardous materials yielded over 100 sites within a mile and 302 sites within 5 miles of the project. Several facilities on the park site were listed on several agency databases, including several unknown incidents at the Police Substation and/or the Signal Building (records 1-4), several other unknown incidents involving private companies located just east of Alvarado Street (records 5-7, 9) or on the south side of 7th Street (record 8). There are two small waste generators and one large waste generator in the immediate vicinity of the park (i.e., on one of the perimeter streets). Most of the remaining sites in the surrounding areas are industrial facilities or locations where Leaking Underground Storage Tanks (LUSTs) have been found. Other than the Signal Building, there is no indication that these sites or incidents represent a hazard to the public or to existing or proposed facilities in the park. A complete listing of all the sites is included in Appendix C.

Hazardous Building Materials

The following hazardous building materials may be present on the project site:

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials (ACMs) are damaged or disturbed. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal OSHA) defines asbestos-containing materials as any material that contains 0.1 percent asbestos by weight. The Signal and Boathouse Buildings may have ACMs due to their age and type of construction.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil. The Signal and Boathouse buildings may contain lead paint because they were constructed prior to the federal ban on lead-based paint and other lead-based building materials.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of man-made chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977. Oil is typically not highly toxic or mobile in the environment, but transformer oil may contain PCBs. There are no local overhead service lines and poles on the streets surrounding the park or in the park, although there are a number of underground electrical transformer vaults observed in the general area.

Pesticides

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. The term pesticide applies to insecticides, herbicides, fungicides, and various other substances used to control pests. The health effects of pesticides depend on the type of pesticide. Examples of health risks posed by pesticides include cancer, nervous system damage, hormone or endocrine disruption, and eye or skin irritation. The park has not been subject to regular applications of fertilizers, pesticides, or other chemicals for the maintenance of turf or landscaped

areas. Therefore, there is a low potential for contamination by pesticides or other types of these chemicals.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The U.S. EPA has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l). Buildings made with naturally occurring materials such as serpentine rock or some types of brick may emit radon, especially in areas that are confined with inadequate ventilation (e.g., basements in houses or building with brick foundations). However, the park contains no structures that would contain or emit radon to a substantial degree.

High-Voltage Power Lines

High-voltage power lines emit electromagnetic fields (EMFs), which have been alleged to be a cause of cancer. However, scientific research has never conclusively established a link between EMFs and cancer. There are no local service electrical lines located along the perimeter streets of the park or within the park, and the only existing electrical facilities in the area are underground transformer vaults. Therefore, there is no potential for exposure to electromagnetic fields or accidents involving electrical short circuits or explosions in underground vaults.

Hydrocarbons/Aboveground and Underground Storage Tanks

Petroleum hydrocarbons are derived from crude oil, which is refined into various petroleum products such as diesel, gasoline, kerosene, lubricants, and heavy fuel oils. Hydrocarbons constituents include benzene, N-heptane, and toluene, and generate health effects such as cancer, leukemia, asthmatic bronchitis, kidney damage, and eye irritation. Hydrocarbons are stored in aboveground storage tanks (ASTs) and underground storage tanks (USTs). Leaking ASTs and USTs can result in contamination of groundwater sources or fire and explosion. City records and onsite reconnaissance indicate there are no ASTs or USTs on the park site.

Fire Hazards

The park itself represents a mixed resource and hazard relative to fire protection. The park contains a lake, large turf areas, and irrigated landscaping which works to reduce its overall risk or threat of fire relative to the surrounding developed uses. The neighborhoods surrounding the park also represent an urban fire threat. If a fire were to start in these areas, it could be carried to other developed uses, facilities, or to the park itself. The park also contains old buildings and other improvements that could be subject to an urban fire.

Wind Hazards

The Los Angeles Basin is occasionally subject to extremely high winds that have resulted in significant property damage in the past. The most significant wind problems are observed to occur at the canyon mouths and valleys extending downslope out of the San Gabriel Mountains. In addition, the highest velocities are associated with Santa Ana winds (90-100 mph), which reverse the prevailing southwesterly winds and usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are dry and warm and flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase as a result of “adiabatic cooling.”

High winds exacerbate urban and wildland fire conditions. Many major fires in the San Gabriel Mountains or foothill communities have occurred or have become worse during periods of high winds.

Airports/Airstrips

Land uses around airports or airstrips may be at higher risk due to accidents involving aircraft. There are no airports or airstrips within 2 miles of MacArthur Park, and the park site is not within the safety zone of any adopted airport plan.

Federal Regulatory Framework

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it

establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

State Regulatory Framework

California Health and Safety Code

The California EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Section 25531, et seq. incorporates the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

Local Regulatory Framework

City of Los Angeles

The Safety Element of the City's General Plan establishes a number of policies related to hazards and hazardous materials, mainly to reduce risks to the public safety or health from hazards such as fire and hazardous materials. Parks are also intended to be places where children, adults, and the elderly can play and interact in a relaxed and safe environment. The City of Los Angeles has adopted an Emergency Response Plan to address potential impacts from a major earthquake, hazardous materials incident, flood, national security emergency, wildfire, landslide, and dam failure. The objectives of the plan are to reduce injury and loss of life and property through effective management of emergency forces. The plan identifies the City's emergency planning, organizational, and response policies and procedures, integrating and coordinating these with other governmental levels when required.

The City Fire Department also maintains a Bureau of Fire Prevention and Public Safety, which requires local businesses that handle, store, or transport hazardous materials to register with the City so the Fire Department is aware of hazmat risks when they respond to emergency calls for service.

Los Angeles County

The County's Hazardous Materials program serves area residents by responding to emergencies and monitoring hazardous materials. The Hazardous Materials Area Plan is a comprehensive document that includes the identification of hazardous materials incident planning, operations, organization, and responsibilities for handling a hazardous materials incident that may impact County residents or land uses. It also provides support for hazardous materials management in the County, including the City of Los Angeles, through coordination of data management, business plans, and facility inspections. The Plan is a dynamic document designed to protect human health and the environment through hazardous materials emergency planning and community right-to-know programs within the County.

The County is authorized by the California Environmental Protection Agency to be the Certified Unified Program Agency (CUPA) for all cities and unincorporated areas within Los Angeles County. As the CUPA, the County is the local agency responsible for administering the six elements of the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program).

Methodology

MBA conducted research equivalent that necessary to prepare a Phase I ESA to document potential hazardous conditions on the project site and surrounding land uses. However, it did not prepare the actual Phase I ESA document for this process. The information included a review of local, State, and federal regulatory agency lists, a review of historic aerial photographs and topographic maps, and onsite reconnaissance.

4.6.3 - Thresholds of Significance

The *L.A. CEQA Thresholds Guide* (Section F) states that a project would normally have a significant impact related to hazards and hazardous materials if it would:

- a.) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b.) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into 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?
- 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?
- e.) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area?
- f.) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g.) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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?

4.6.4 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1: **The Proposed Project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions.**

Impact Analysis

This impact is associated with hazards caused by the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Police Substation/Signal Building facility has had several incidents involving hazardous materials over the years, and records indicate it had a Leaking Underground Storage Tank (LUST) in the late 1990's but this problem was remediated to the satisfaction of the state (i.e., the RWQCB) and the case was closed in 2000 (TIS record #2 – see Appendix C). The Police Substation is also listed as a small quantity generator of hazardous wastes under the RCRA (TIS record #3 – see Appendix C). There is no indication from available information that these conditions represent a significant hazard or risk to public health or safety.

Project construction activities may involve the limited use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, State, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. No significant impacts would occur during construction activities.

The park does not currently use large quantities of hazardous materials, although small quantities of hazardous materials are present, are used, and would be used onsite, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. These substances would be stored in maintenance areas and would comply with all applicable storage, handling, usage, and disposal requirements. The potential risks posed by the use and storage of these hazardous materials are primarily limited to the immediate vicinity of the materials. Transport of these materials would be performed by commercial vendors who would be required to comply with various federal and State laws regarding hazardous materials transportation. As such, they are not expected to expose human health or the environment to undue risks associated with their use.

Any small businesses or tenants in the Boathouse or Signal buildings that use hazardous materials would be required to submit a Hazardous Materials Business Plan to the County if they were to store 55 gallons of hazardous materials as a liquid, 500 pounds of hazardous materials as a solid, or

200 cubic feet of hazardous materials as a gas onsite. This is a legal requirement so it is not included as a mitigation measure.

With the implementation of mitigation, the Proposed Project's potential to create a significant hazard to the public or the environment from routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions can be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HAZ-1 Prior to the commencement of renovation activities at the Signal Building, City staff will verify that ongoing activities involving small amounts of hazardous materials generated by police activities, including any underground storage tanks, will not be adversely affected by planned renovations. Any work involving underground storage tanks will be planned and coordinated with appropriate local and state agencies. A letter report will be sent to the City Parks Commission prior to the start of any work at this facility if it involves hazardous materials or an underground storage tank.

Level of Significance After Mitigation

Less than significant impact.

Prior Contamination

Impact HAZ-2: The Proposed Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would not create a potential hazard to the public and the environment.

Impact Analysis

The database search indicated the Police Substation/Signal Building is listed on several federal, State, or local databases dealing with hazardous materials. These listings are the result of isolated incidents involving hazardous materials at the police station, and it is classified as a small waste generator under RCRA. Site reconnaissance by MBA personnel found that there was no evidence of contamination or potential sources of contamination (e.g., soil staining, illegal dumping, USTs, ASTs, electrical transformers) or any ongoing threat or risk to public health or safety.

The many hazmat sites in the surrounding commercial and industrial areas are listed on various governmental databases of hazardous materials users, which only indicates that such materials are currently or may have been previously used onsite; there are no records indicating that any actual significant contamination has occurred that would affect the park site. Therefore, surrounding land uses are not considered to pose a substantial contamination hazard to the Proposed Project, and therefore impacts would be less than significant.

Demolition of the Signal and Boathouse Buildings may require the removal or remediation of asbestos containing materials (ACMs) or lead based paint (LBP). Due to the age and nature of the buildings, this represents a potentially significant impact.

Onsite conditions do not produce any other significant public health or safety risks hazardous building materials (radon, PCBs, etc.), pesticides, or EMF exposure from high voltage power lines.

Level of Significance Before Mitigation

Potentially significant impact (relative to ACMs and LBP).

Mitigation Measures

MM HAZ-2 Prior to the start of any demolition or reconstruction work within the Signal Building or Boathouse Building, the City shall conduct a detailed survey of existing walls, ceilings, etc. to identify any specific areas or materials that have ACMs or LBP. Any ACMs or LBP identified in the areas to be reconstructed shall be removed by a licensed contractor and the materials disposed of in a licensed facility, consistent with state law and City practice. Any areas found to contain ACMs or LBP shall be isolated from existing uses or users to preclude any risks to public health, consistent with federal or state law and City practice.

Level of Significance After Mitigation

Less than significant impact.

Exposure of Schools to Hazardous Materials

Impact HAZ-3: The Proposed Project would not expose schools or parks to hazardous emissions, materials, substances, or waste.

Impact Analysis

The only potential hazardous material issue of concern relative to schools would be diesel particulate matter from heavy equipment and trucks, which would be emitted during construction and operational activities. There are no schools located within a quarter mile of any of the proposed construction areas of the Proposed Project, although there are several schools approximately a quarter of a mile from the park boundaries.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts With Emergency Response or Evacuation Plans

Impact HAZ-4: The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.

Impact Analysis

The Proposed Project consists of improvements to an existing urban park. The perimeter roads and Wilshire Boulevard provide immediate access for emergency vehicles to the park and surrounding areas. None of the planned improvements will restrict or diminish emergency response to the park or surrounding area. The provision of police and fire services is a separate issue from access for emergency vehicles. The Proposed Project does not contain any characteristics (e.g., permanent road closures, etc.) that would impair or otherwise interfere with emergency response, evacuation, or the policies of the City of Los Angeles Emergency Response Plan.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts With Public Airports

Impact HAZ-5: The Proposed Project is located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area.

Impact Analysis

The Proposed Project site is not within 2 miles of a public airport and is not within the land use plan of any public airports. The closest public airport is the Los Angeles International Airport (LAX) which is over 10 miles southwest of the project site.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Conflicts With Private Airstrips

Impact HAZ-6: The Proposed Project is located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

Impact Analysis

The Proposed Project site is not within 2 miles of a private airstrip.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Creates Fire Hazards

Impact HAZ-7: The Proposed Project 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.

Impact Analysis

The Proposed Project site is an urban park completely surrounded by developed uses in a developed urban area. Therefore, the threat of wildland fires is non-existent. However, the developed nature of the area and the recurrence of strong dry seasonal winds may create conditions supportive of urban fires. The park site contains landscaped materials and turf, which are relatively resistant to fire, and there are few buildings with exposed wood or other materials that would be susceptible to an urban fire. The planned improvements to the park are not expected to change conditions on the site relative to the risk of fire (i.e., most improvements are interior or involve a soccer field). The extent to which the planned artificial turf of the soccer field would increase the risk of fire within the park is unknown. However, the specifications of the materials to be used indicate they are fire retardant and most likely are not flammable to a great degree, although they are petroleum based (i.e., polyethylene). Therefore, there is an incremental impact related to potential fire risk involving the planned soccer field design.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HAZ-7 Prior to completion of the soccer field reconstruction, the City Fire Department will verify that the existing number and location of hydrants are sufficient to protect the new structure. If this level of protection cannot be verified, City park personnel will extend an existing hydrant line and install an additional hydrant or hydrants near the

soccer facility to assure it is adequately protected in the event of a fire in this portion of the park.

Level of Significance After Mitigation

Less than significant impact.

Other Potential Health or Safety Hazards

Impact HAZ-8: The Proposed Project exposes people or structures to a significant risk of loss, injury, or death involving other types of hazards or risks.

Impact Analysis

Although this is not an established CEQA threshold, it is reasonable to evaluate potential risks to the natural or man-made environment that might result from implementation of the Proposed Project. In this case, the Project involves the installation of artificial turf during reconstruction of the soccer field. There is anecdotal information on the internet that artificial turf may harbor certain kinds of bacteria or viruses (i.e., to a greater degree than would natural turf). In particular, concern has been expressed regarding methicillin resistant *Staphylococcus aureas* (MRSA) in this regard. However, it does not appear there is currently enough scientific evidence to conclude that artificial playing surfaces promote or harbor development of these contaminants. The extent to which the planned artificial turf of the soccer field would increase the risk to public health is unknown and is considered overly speculative. In addition, washing and other regular maintenance of this field, identified in Section 3.2, *Project Characteristics - Field Maintenance*, will help prevent the potential buildup of materials that might promote bacteria growth. In the absence of definitive scientific evidence, it is reasonable to conclude at this time that this concern does not represent a significant public health risk or impact of the Proposed Project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant impact.

Other Potential Health or Safety Hazards

Impact HAZ-9: The Proposed Project exposes people or structures to a significant risk of loss, injury, or death involving other types of hazards or risks.

Impact Analysis

Although this is not an established CEQA threshold, it is reasonable to evaluate potential risks to the natural or man-made environment that might result from implementation of the Proposed Project. In this case, the Proposed Project site (i.e., MacArthur Park) does have areas of the park that are less well lighted and where City staff would like to increase public safety during nighttime events. In

addition, the Proposed Project involves the reconstruction of an existing soccer field with lights that will expand its use into nighttime hours. This will attract more people to the park after dark, which could incrementally increase public safety concerns in the park.

The Proposed Project will involve the construction of new or reconstruction of existing walkways, landscaping areas, etc. to improve public safety in the park, especially at night. No major new facilities are planned in this regard, but a number of small improvements may be made in this regard once the soccer field is reconstructed and lighted. These changes would be made to improve the safety of the park and are therefore not considered to present a significant risk or hazard to public safety.

Level of Significance Before Mitigation

Less than significant impact (beneficial change relative to safety).

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.