3.6 HAZARDS AND HAZARDOUS MATERIALS

As a result of the *Initial Study*,[1] the City of Pasadena determined that the Arroyo Seco Master Plan Project (proposed project) had the potential to result in impacts related to hazards and hazardous materials. Therefore, this issue was carried forward for detailed analysis in this Master Environmental Impact Report (*Master EIR*). This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potential significant impacts to the proposed project in relation to hazards and hazardous materials. This analysis considers impacts that could occur from all phases of the proposed project and sources hazards and hazardous materials related to the project, including construction activities and operation.

The analysis of hazards and hazardous materials includes a description of the regulatory framework that guides the decision-making process, existing conditions of the proposed project area, thresholds for determining if the proposed project will result in significant impacts, anticipated impacts, mitigation measures, and level of significance after mitigation. The potential for impacts to hazards and hazardous materials has been analyzed in accordance with the protocol established by the American Society of Testing and Materials (ASTM) Standard E 1527-00 titled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (Appendix E, Phase I Environmental Site Assessment of the Arroyo Seco Master Plan Area).

3.6.1 Regulatory Framework

This regulatory framework identifies the federal, state, and local statutes that govern the production, storage, and transport of hazardous materials and potential exposure

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[1] City of Pasadena, 2000. *Initial Study Arroyo Seco Mater Plan Project.* Prepared by: Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105. Contact: Department of Planning and Permitting, 175 North Garfield, Pasadena, CA 91109.

[2] 42 U.S.C., Chapter 103, "Comprehensive Environmental Response, Compensation, and Liability Act."

of hazards and hazardous materials that must be considered by the City of Pasadena when rendering decisions on projects involving such activities.

FEDERAL

Elements of the proposed project could potentially be funded by federal grant monies. The National Environmental Policy Act (NEPA) and its supporting federal regulations establish certain requirements that must be adhered to for any project "...financed, assisted, conducted or approved by a federal agency...." In making a decision on the issuance of federal grant monies for elements of the Arroyo Seco Master Plan Project, the federally designated lead agency pursuant to NEPA is required to "...determine whether the proposed action may significantly affect the quality of the human environment."

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),[2] also known as Superfund law, outlines the potential liability for the cleanup of hazardous substances, available defenses to such liability, appropriate inquiry into site status under Superfund, statutory definitions of hazardous substances, petroleum products, and petroleum exclusion under CERCLA.

Superfund Amendment and Reauthorization Act Title III

Title III of the Superfund Amendment and Reauthorization Act of 1986 is the Emergency Planning and Community Right-to-Know Act.[3] Facilities are required to report the following four items on U.S. Environmental Protection Agency Form R, the Toxic Chemical Release Inventory Reporting Form: facility identification, off-site locations to which toxic chemicals are transferred in wastes, chemical-specific information and supplemental information. Form R requires a facility to list the

[3] 42 U.S.C., Chapter 116 et. seq.: " Community Planning and Emergency Right-To-Know Act."

hazardous substances that are handled on site, and to account for the total aggregate releases of listed toxic chemicals for the calendar year. Releases to the environment are to include emissions to the air, discharges to surface water, and on-site releases to land and underground injection wells.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA)[4] regulates the potential health and environmental problems associated with solid waste hazards and non-hazardous waste. RCRA, and the regulations developed by the U.S. Environmental Protection Agency to implement it, provide the general framework for the national hazardous and non hazardous waste management systems. This framework includes the determination of whether hazardous wastes are being generated, techniques for tracking wastes to eventual disposal, and the design and permitting of hazardous waste management facilities. RCRA amendments enacted in 1986 began the process of eliminating land disposal as the principal hazardous-waste disposal method. Hazardous waste regulations promulgated in 1991 address siting, design, construction, operation, monitoring, corrective action, and closure of disposal facilities. Additional regulations addressing solid waste issues are contained in 40 CFR Part 258.

Occupational Safety and Health Standards

Regulations for asbestos are contained in Occupational Safety and Health Administration (OSHA) Standards-29 CFR. Regulations for lead-based paint are contained in the Lead-Based Paint Elimination Final Rule 24 CFR 33, governed by the U.S. Housing and Urban Development (HUD).[5]

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[4] 42 U.S.C., §§ 6901-6987. "Solid Waste Disposal Act, Resource Conservation and Recovery Act of 1986."

[5] 24 CFR, Part 35 et seq.: "Lead Based Paint Poisoning Prevention in Certain Residential Structures." Washington, D.C. Office of the Federal Register, National Archives and Records Administration.

STATE

Title 22 of the California Code of Regulations

In California, Title 22 of the California Code of Regulations (CCR) addresses hazardous materials and wastes. The Hazardous Waste Control Law of 1972[6] is the seminal hazardous waste control law in California.

The Hazardous Materials Release Response Plans and Inventory Law of 1986 (Business Plan Act)[7] governs hazardous materials handling, reporting requirements, and local agency surveillance programs.

Section 65962.5 of the Government Code[8] directs the Department of Toxic Substances Control (DTSC) to compile a list of all hazardous-waste facilities subject to corrective action pursuant to Section 25187.5[9] of the California Health and Safety Code.

CITY OF PASADENA

Public Safety Element of *City of Pasadena Comprehensive General Plan*

The *Comprehensive General Plan Public Safety Element of the City of Pasadena*[10]

[6] California Health and Safety Code, § 25100 et. seq.: " California Hazardous Waste Control Law."

[7] California Health and Safety Code, § 25500 et seq.: "Hazardous Materials Release Response Plans and Inventory Law."

[8] California Government Code, Chapter 4.5, Article 6, §65962.5.

[9] California Health and Safety Code, Chapter 6.5, Article 8, §25187.5.

[10] City of Pasadena, Planning Division. 1994. "Public Safety Element", *City of Pasadena Comprehensive General Plan*. Contact: 175 North Garfield Avenue, Pasadena, CA 91109-7215.

provides for code enforcement to reduce urban fires caused by violations of code sections related to fire safety and requires the reduction of fire hazards in extreme and high fire-risk areas through weed and brush removal and planting of fire-retardant materials.

3.6.2 Existing Conditions

A review of current applicable federal, state, and local environmental regulatory databases was conducted in support of the *Initial Study*[11] and the *Phase I Environmental Site Assessment of the Arroyo Seco*[12] (Appendix E) to ascertain whether the project site is currently affected by or could be affected by on-site or off-site unauthorized releases of hazardous materials. The review of the federal, state, and local environmental regulatory database revealed that there were no current unauthorized releases of hazardous materials originating on site. The National Aeronautics and Space Administration Jet Propulsion Laboratory (JPL), adjacent to the northwestern portion of the Hahamongna Watershed Park has been identified as a CERCLA site, listed since 1992 on the National Priority List (NPL), also known as Superfund.

The Arroyo Seco is not located with an airport land use plan or within 2 miles of a public use airport or private airstrip.

Many of the existing trails within the Arroyo Seco traverse wildland areas that are adjacent to other developed areas of the park and adjacent residential areas.

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[11] City of Pasadena, 13 September 2000.

[12] Sapphos Environmental, Inc., April 2002. *Phase I Environmental Site Assessment of the Arroyo Seco Park.* Contact: City of Pasadena Planning Department, 175 North Garfield Avenue, Pasadena, CA 91109. Prepared by Sapphos Environmental, Inc., 133 Martin Alley, Pasadena, CA 91105.

Emergency response facilities are located in and adjacent to the park. While there are emergency evacuation plans for selected facilities within the park, there is no comprehensive emergency evacuation plan.

Hahamongna Watershed Park

The Hahamongna Watershed Park includes Oak Grove Park, Devil's Gate Dam, Johnson Field, equestrian staging areas, multi-use trails, groundwater wells, water conservation spreading basins, a water treatment plant, asphalt-paved parking areas, various maintenance buildings, and public restrooms.

No on-site hazardous material sites reporting unauthorized releases of hazardous materials were identified in the proposed project area. The National Aeronautics and Space Administration Jet Propulsion Laboratory (JPL), adjacent to the northwestern portion of the Hahamonga Watershed Park has been identified as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site (also known as Superfund), and has been listed since 1992 on the National Priority List (NPL).

JPL contains approximately 150 buildings and other structures on about 176 acres of land. The northeastern portion of JPL is used for project support, testing, and storage; the southwestern portion is used for administrative, laboratory, and project functions. During its operational history, various chemicals and chemical waste materials were generated at the site, including solvents, solid and liquid rocket propellants, and laboratory wastes. In the 1940s and 1950s, many buildings at JPL maintained seepage pits to dispose of liquid and solid wastes collected from drains and sinks within the buildings. The pits were designed to allow liquid wastes to seep into the surrounding soil. The results of a remedial soil and groundwater investigation conducted by the California Environmental Protection Agency (EPA) in 1990 revealed the presence of volatile organic compounds (VOC) in the soil and groundwater at the site in levels exceeding federal and state drinking water standards at depths up to 200 feet below ground surface (bgs). Subsequent site investigations have identified a VOC plume beneath approximately 45 acres in the central portion of the site, ranging from about

50 feet bgs to the water table (approximately 200 bgs). In response to a request by the EPA, JPL initiated a long-term quarterly groundwater monitoring program plan in August 1996. Additionally, soil vapor extraction methods are planned to remediate the contaminated soil on site.[13]

Since the inception of the quarterly monitoring plan, the following compounds have been detected in concentrations above their respective state or federal regulatory limits: carbon tetrachloride, trichloroethene (TCE), tetrachloroethene (PCE), Perchlorate, 1,2-DCA, 1,4-Dioxane, Total Chromium, Hexavalent Chromium, and Lead (metals). The results of the April 2001 quarterly monitoring program revealed that carbon tetrachloride, TCE, PCE, and Perchlorate were the only remaining compounds detected at concentrations above their respective limits (Appendix E). A groundwater treatment facility, located in the northeast portion of the Hahamongna Watershed Park, treats contaminated groundwater pumped from three wells.

In addition, JPL is a permitted hazardous waste generator and solid waste disposal facility. JPL has 19 registered underground storage tanks (USTs) ranging in capacity from 1,000 gallons to 20,000 gallons. There are two leaking underground storage tank (LUST) locations within the JPL facility; both were discovered during tank closures in 1990 and 1995, respectively. These unauthorized releases of petroleum hydrocarbons (gasoline and diesel) were confined to soil and are not a factor in assessing groundwater quality.

Existing restrooms near the Equestrian Staging Area in the Hahamongna Watershed Park are connected to three septic tanks.

Due to the age of construction of restroom and maintenance structures located in the Hahamongna Watershed Park (1950s), it is reasonable to assume asbestos-containing

[13] National Aeronautics and Space Administration Jet Propulsion Laboratory, 24 April 2001. *Proposed Plan to Select a Remedy to Clean Up Soils at the National Aeronautics and Space Administration Jet Propulsion Laboratory, Pasadena, California*.

building materials (ACMs) were used during original construction activities, and surfaces may have been treated with lead-based paint (LBP).

The County of Los Angeles Fire Department Camp 2 facility is located in the northwestern part of Hahamongna Watershed Park. Camp 2 is supported by a helipad that is used for emergency operations. A second helipad, operated by the City of Pasadena Police Department is located at 2175 Yucca Lane, southeast of Devil's Gate Dam.

Central Arroyo Seco

The Central Arroyo Seco contains the Rose Bowl, the Rose Bowl Aquatic Center, Jackie Robinson Baseball Field, tennis courts, Brookside Golf Course and Clubhouse, multi-use trails, equestrian loop, multi-purpose fields, Rosemont Pavilion, an amphitheater, Brookside Park, and associated asphalt-paved parking. The Rose Bowl is described as part of the Rose Bowl Operating Company.

The Brookside golf course maintenance facility, located at 1450 West Drive, maintains two 1,000-gallon USTs containing diesel and unleaded, respectively. The Rose Bowl Aquatic Center and the Rosemont Pavilion maintain supplies that are listed in their hazardous material inventories on file with the Pasadena Fire Department. No unauthorized releases of hazardous materials are reported for any of the above-listed facilities.

Due to the age of construction of the stadium, restrooms, and maintenance structures located in the Central Arroyo (prior to 1978/1979 when asbestos and lead regulations limited the use of ACM and LBP), it is anticipated that asbestos-containing building materials were used during original construction activities, and surfaces may have been treated with LBP.

Lower Arroyo Seco

The Lower Arroyo Seco contains a natural park, fly-casting pond and clubhouse, archery range and clubhouse, and multi-use trails for walking, jogging, cycling, and equestrian use. No USTs, ASTs, or reportable quantities of hazardous materials are used, stored, or generated in the Lower Arroyo Seco.

Due to the age of construction of the restrooms and maintenance structures located in the Lower Arroyo (prior to 1978/1979 when asbestos and lead regulations limited the use of ACM and LBP) it is reasonable to assume asbestos-containing building materials were used during original construction activities, and surfaces may have been treated with LBP.

Rose Bowl Operating Company

The Rose Bowl has the capacity to accommodate approximately 91,000 spectators. The City of Pasadena maintains an emergency evaluation plan that can be applied to major events. The Rose Bowl Stadium maintains supplies that are listed in their hazardous material inventories on file with the Pasadena Fire Department. No unauthorized releases of hazardous materials are reported for any of the above-listed facilities.

Due to the age of construction (prior to 1978/1979 when asbestos and lead regulation limited the use of ACM and LBP) of the stadium, restrooms, and associated maintenance structures, it is anticipated that asbestos-containing building materials were used during original construction activities, and surfaces may have been treated with LBP.

3.6.3 Significance Thresholds

The City of Pasadena considers a project to result in a significant impact with respect to hazards and hazardous materials if the project has the potential to

?? Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

?? Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

?? Emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 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, would create a significant hazard to the public or the environment.

?? Result in a safety hazard for people residing or working in the project area, 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.

?? For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

?? Impair implementation of or physically interfere with an adopted emergency-response plan or emergency-evacuation plan.

?? Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.6.4 Impact Analysis

The *Initial Study*[14] indicated the possibility of construction impacts resulting from the proposed project. Implementation of the proposed project would temporarily expose construction workers to impacts related to hazards and hazardous materials during the renovation or relocation of storm drains, sewage systems, and water transports systems (pump stations).

3.6.4.1 Hahamongna Watershed Park

3.6.4.1.1 Significant Impacts

Existing restrooms at the Equestrian Staging Area and Devil's Gate Dam in Hahamongna Watershed Park would be retained and upgraded. Additional restrooms would be provided in conjunction with the Supervised Overnight Camping Area and east side parking. All three existing septic tanks would be pumped out, cleaned, backfilled with sand, and abandoned in place, with their requirement being met by a new sewage collection system. This would entail the temporary transport and disposal of hazardous materials, thereby creating a potential significant impact to the public or the environment requiring the consideration of mitigation measures.

Those improvements that would involve grading below 1040.5 feet mean sea level (msl) would potentially expose construction workers to contaminated soils or groundwater that is a significant impact, thus requiring the consideration of mitigation measures. Several of the improvements would have the potential to require grading below 1040.5 msl: water conservation, flood management, west lake, east lake, Gabredino Trail area, habitat conservation, and utilities. Groundwater in the Hahamongna Watershed Park has been contaminated by chlorinated solvents originating from the JPL facility. Any grading activity below 1040.5 feet above msl elevation within Hahamongna Watershed Park has the potential to expose contaminated soils, thus requiring the consideration of mitigation measures.

[14] City of Pasadena, 2000.

Subsurface construction activity that has the potential to contact groundwater could expose construction workers or the general public to hazardous materials, thus requiring the consideration of mitigation measures. Groundwater sampling surveys for contaminants in concentrations above accepted state and federal regulatory levels should be conducted prior to the commencement of construction activities that might be expected to contact ground water.

The existing restrooms and maintenance structures in the Hahamongna Watershed Park were constructed prior to 1979 when asbestos was banned in many construction materials. Construction materials employed prior to 1979 have a greater potential to contain ACM, which is a significant impact requiring the consideration of mitigation measures.

In addition, it is possible that painted surfaces on existing structures were applied prior to 1978 when the Consumer Products Safety Commission lowered the allowable concentration of lead in paints to 0.5 percent by weight. Therefore, some painted building material surfaces may contain unhealthful amounts of lead. LBP sampling surveys should be conducted on any building material prior to renovation or demolition in order to prevent the potential to expose construction workers or the general public to LBP. If found, the potential exposure of the public and construction workers to LBP is a significant impact requiring the consideration of mitigating measures.

3.6.4.1.2 Issues Found Not to Be Significant

Those activities that would not require grading in areas below 1040.5 feet msl would not be expected to expose people to hazards from contaminated soil or groundwater: Devil's Gate Dam area, west side park access, east side park access, Oak Grove area, supervised overnight camping area, equestrian staging area, sunrise overlook, west Arroyo parking, east side parking area, sunset overlook, trail development, bicycle route, and fencing.

Implementation of the proposed project would not be expected to impact an airport land use plan. The proposed project is not located within an airport land use plan, nor is it located within two miles of a public airport. The nearest public airport is the Burbank-Glendale-Pasadena Airport, located approximately 9 miles northwest of the site. Therefore, the proposed project would not expose people to a safety hazard related to air safety. There are no private airstrips located within 2 miles of the Arroyo Seco; therefore the proposed project would not expose people to a safety hazard related to private airstrips.

The proposed project would not alter the location of the existing Camp 2 facilities operated by the County of Los Angeles Fire Department. The proposed project would not change existing land use near Devil's Gate Dam, located immediately adjacent to the helicopter landing area operated by the City of Pasadena Police Department. Therefore, the proposed project would not increase the exposure of people to hazards related to emergency air support operations.

Implementation of the proposed improvements in Hahamongna Watershed Park would not encroach on existing support areas for emergency evacuation plans: County of Los Angeles Fire Department Camp 2 facility or City of Pasadena helicopter landing area. Therefore, the Hahamongna Watershed Park would not be expected to affect emergency response or emergency evacuation plans or access to emergency vehicles and personnel.

Native vegetation within Hahamongna Watershed Park is interspersed with irrigated landscaped areas and Devil's Gate reservoir. Therefore, recreation improvements considered as part of the Hahamongna Watershed Park element of the proposed project would not be expected to expose people or structures to significant risks of loss, injury or death involving wildland fires. The improvements to the Arroyo Seco would not involve potentially significant increases in fire hazard in areas with flammable brush, grass, and trees. The proposed construction activities and building materials should not change the existing potential for fire hazard. Protocols for handling a wildfire situation would remain consistent with city policies and emergency

preparedness plans.

3.6.4.2 Central Arroyo Seco

3.6.4.2.1 Significant Impacts

The existing restrooms in the Central Arroyo Seco were constructed prior to 1979 when asbestos was banned in many construction materials. Construction materials employed prior to 1979 have a greater potential to contain ACM. Renovation of restrooms recommended in the CAMP would have the potential to expose construction workers or the general public to ACMs, which is a significant impact requiring the consideration of mitigation measures.

In addition, it is possible that painted surfaces on existing structures were applied prior to 1978 when the Consumer Products Safety Commission lowered the allowable concentration of lead in paints to 0.5 percent by weight. Therefore, some painted building material surfaces may contain unhealthful amounts of lead. LBP sampling surveys should be conducted on any building material prior to renovation or demolition to prevent the potential to expose construction workers or the general public to LBP. If found, the potential exposure of construction workers to LBP would be a significant impact requiring the consideration of mitigation measures.

3.6.4.2.2 Issues Found Not to Be Significant

Those activities that would not involve structures built of stone or structures built prior to 1978 would not be expected to expose people to hazards: ceremonial main entry, parking, unreserved picnic area, hillside improvements, parts of the group picnic area other than the restroom, 3-mile recreation loop, pedestrian pathways, landscape and aesthetic improvements, and accessibility and security.

The proposed project would not be located within an airport land use plan, nor is it located within 2 miles of a public airport. Therefore, there would be no exposure of

people to hazards related to air travel.

The improvements recommended in the CAMP element of the proposed project would not affect any existing designated evacuation route or plan. Therefore, implementation of the CAMP would have a less than significant impact on emergency response or emergency evacuation plans; access to emergency vehicles and personnel would be maintained during construction.

Native vegetation within the Central Arroyo is interspersed with irrigated landscaped areas, structures, and landscape areas. Therefore, recreation improvements considered as part of the CAMP element of the proposed project would not be expected to expose people or structures to less than significant risks of loss, injury or death involving wildland fires. The improvements to the Central Arroyo Seco would not involve potentially significant increases in fire hazard in areas with flammable brush, grass, and trees. The proposed construction activities and building materials should not change the existing potential for fire hazard. Protocols for handling a wildfire situation will remain consistent with City policies and emergency preparedness plans.

3.6.4.3 Lower Arroyo Seco

3.6.4.3.1 Significant Impacts

The proposed project would include one new restroom facility and the renovation of an existing restroom facility. The existing restrooms in the Lower Arroyo Seco were constructed prior to 1979 when asbestos was banned in many construction materials. Construction materials employed prior to 1979 have a greater potential to contain ACM. Renovation of restrooms recommended in the LAMP would have the potential to expose construction workers or the general public to ACMs, which is a significant impact requiring the consideration of mitigation measures.

In addition, it is possible that painted surfaces on existing structures were applied prior to 1978 when the Consumer Products Safety Commission lowered the allowable concentration of lead in paints to 0.5 percent by weight. Therefore, some painted building material surfaces may contain unhealthful amounts of lead. LBP sampling surveys should be conducted on any building material prior to renovation or demolition to prevent the potential to expose construction workers or the general public to LBP. If found, the potential exposure of construction workers to LBP would be a significant impact requiring the consideration of mitigation measures.

3.6.4.3.2 Issues Found Not to Be Significant

Those activities that would not involve structures built before 1998 would not be expected to expose people to hazards: improvements to the grounds at La Casita del Arroyo's main parking entrance; new south entrance; improve casting pond area; enhance bird sanctuary; northern archery range; southern archery range; bridge crossing; wash-side multi-use trails bridge and access points; and memorial grave restoration. The proposed project would not be located within an airport land use plan, nor is it located within 2 miles of a public airport. Therefore, there would be no exposure of people to hazards related to air travel.

The improvements recommended in the LAMP element of the proposed project would not encroach on existing support areas for emergency evacuation. Therefore, implementation of the LAMP would have a less than significant impact on emergency response or emergency evacuation plans; access to emergency vehicles and personnel would be maintained during construction.

Native vegetation within the Lower Arroyo is interspersed with irrigated structures and landscape areas. Therefore, recreation improvements considered as part of the LAMP element of the proposed project would not be expected to expose people or structures to significant risks of loss, injury, or death involving wildland fires. The improvements to the Lower Arroyo Seco would not involve potentially significant increases in fire hazard in areas with flammable brush, grass, and trees. The proposed construction activities and building materials should not change the existing potential for fire hazard. Protocols for handling a wildfire situation will remain consistent with City policies and emergency preparedness plans.

3.6.4.4 Rose Bowl Use Plan

3.6.4.4.1 Significant Impacts

The Rose Bowl Use Plan is an operational plan that would not involve physical changes in the environment; therefore, it would not have the potential to result in significant impacts related to hazards.

3.6.4.4.2 Issues Found Not to Be Significant

The Rose Bowl Use Plan does not involve a physical change to the environment. Implementation of the Rose Bowl Use Plan portion of the Master Plan would not result in the use or disturbance of materials or areas that would involve hazards or hazardous materials.

The Master Plan includes a Rose Bowl Use Plan that would result in the increase of major events held in the Rose Bowl. The definition of a major event is an event that has a minimum of 20,000 attendees. With the exception of 1994, there have been no more than 14 major events in any year. The increase in the annual number of major events held at the Rose Bowl would not require application of the existing City of Pasadena evacuation plan. However, the increase in the number of special events would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

3.6.4.5 Design Guidelines

The proposed project would not expose people or property to significant impacts related to hazards. The design guidelines would provide a tool for the City to use in applying a unified set of criteria for site-specific improvements articulated in the proposed project. However, the design guidelines would not constitute a physical change in the environment; therefore, the design guidelines would not have the potential to expose people to hazards or hazardous materials.

3.6.5 Mitigation Measures

Measure Hazards-1

Potential exposure of construction workers to ACMs shall be minimized through disclosure of the potential presence of ACMs for demolition and renovation of structures that were constructed prior to 1979. Asbestos sampling surveys shall be conducted on any building material prior to demolition or renovation. Prior to demolition or renovation of buildings or structures that were constructed prior to 1979, the City shall prepare an Operations and Maintenance Plan that meets all applicable federal, state, and local requirements. This plan shall address methods for safely maintaining the ACMs that are to be left in place at the project site. Removal, transport, and disposal of any ACMs shall be undertaken in accordance with all applicable federal, state, and local statutes and regulation.

Measure Hazards-2

Potential exposure of construction workers to LBP shall be minimized through disclosure of the potential presence of LBP for demolition and renovation of structures that were constructed prior to 1979. Prior to any demolition or renovation to be conducted on any painted surfaces at the project site, a LBP survey shall be conducted by the City to determine the level of risk posed to maintenance personnel, facility staff, and patrons from exposure to the paints present at the site. Any recommendations made in that survey related to the paints present at the project site shall be implemented prior to the demolition or renovation of said painted surfaces. Removal, transport, and disposal of any LBP shall be undertaken in accordance with all applicable federal, state, and local statutes and regulation.

Measure Hazards-3

Potential exposure of construction workers to contaminants in soils or groundwater during grading and construction in areas of Hahamongna Watershed Park below 1040.5 feet msl shall be minimized through the requirement to test for contaminants and establish and implement a remediation plan as part of the proposed grading.

Groundwater sampling surveys for contaminants in concentrations above accepted state and federal regulatory levels shall be conducted by the City prior to the commencement of construction activities that would be expected to contact ground water. If contaminated soils or groundwater are found to be present in the proposed construction areas, the City shall complete remediation or treatment prior to the institution of grading. The City shall be responsible for notifying all construction contractors undertaking activities below the 1040.5 feel msl of the potential for exposure to contaminated soils and groundwater and require adherence to all applicable federal, state, and local standards.

3.6.6 Level of Significance after Mitigation

Incorporation of Mitigation Measures Hazards and Hazardous Materials 1 through 3 would reduce the potential exposure of people to impacts related to hazards and hazardous materials to below the level of significance.