

**HAZARDOUS MATERIALS
TECHNICAL STUDY
GRANTVILLE FOCUSED PLAN AMENDMENT,
EIR
SAN DIEGO, CALIFORNIA**

PREPARED FOR:

BRG Consulting, Inc.
304 Ivy Street
San Diego, California 92101

PREPARED BY:

Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123

November 11, 2013
Project No. 106695001

November 11, 2013
Project No. 106695001

Ms. Kathie Washington
BRG Consulting, Inc.
304 Ivy Street
San Diego, California 92101

Subject: Hazardous Materials Technical Study
Grantville Focused Plan Amendment, Subarea A
San Diego, California

Dear Ms. Washington:

In accordance with our proposal, S-6388 dated November 2007, and Request for Change in Work, Change Order No. 1 dated October 2013, we have performed a Hazardous Materials Technical Study of the above-referenced project. The attached report presents our methodology, findings, opinions, and recommendations regarding the environmental conditions at the project area.

We appreciate the opportunity to be of service to you on this project.

Sincerely,
NINYO & MOORE

Adrian Olivares
Project Environmental Scientist

Stephan A. Beck, C.E.G. 1512, HG. 126
Manager, Environmental Sciences Division

AO/SB/atf

Distribution: (1) Addressee

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	1
2. SCOPE OF WORK	1
3. PROJECT PURPOSE AND PROJECT AREA DESCRIPTION	2
4. ENVIRONMENTAL SETTING	3
4.1. Topography	3
4.2. Geology	4
4.3. Surface Waters.....	4
4.4. Groundwater.....	4
5. PROJECT AREA HISTORY	4
5.1. Aerial Photographs.....	4
5.2. Topographic Maps	5
6. RECORDS REVIEW.....	5
6.1. Standard Environmental Record Sources	5
6.2. Additional Environmental Record Sources	9
6.2.1. Online Regulatory Databases	9
6.2.2. Refuse Dumps and Solid Waste Disposal Facilities.....	9
6.2.3. Mines	10
7. COMMONLY ENCOUNTERED CONDITIONS.....	10
7.1. Aerially-Deposited Lead	10
7.2. Treated Wood	10
7.3. Asbestos-Containing Materials	10
7.4. Polychlorinated Biphenyl-Containing Material.....	10
7.5. Lead-Based Paint.....	11
7.6. Miscellaneous Hazardous Materials	11
8. SENSITIVE RECEPTORS.....	11
9. IMPACT ANALYSIS	11
9.1. Overview of Impacts	12
9.2. City of San Diego Significance Determination Thresholds	12
9.3. California Environmental Quality Act Initial Study Checklist	15
10. MITIGATION FRAMEWORK	17
11. LIMITATIONS	19
12. REFERENCES	20

Figures

Figure 1 – Project Area Location Map

Figure 2 – Release Cases and Sensitive Receptors

Tables

Table 1 – Environmental Database Search 6

Table 2 – Online Regulatory Databases 9

Appendices

Appendix A – Environmental Database Report (Electronic - On CD)

Appendix B – On-Site Properties on Unauthorized Release Databases

List of Acronyms

AAOZ	Airport Approach Overlay Zone
AEOZ	Airport Environs Overlay Zone
AST	Aboveground Storage Tank
CEQA	California Environmental Quality Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CIWMB	State of California, Integrated Waste Management Board
CUPA	Certified Unified Program Agency
DEH	Department of Environmental Health
DTSC	California Department of Toxic Substances Control
EC	Engineering Controls
EDR	Environmental Data Resources, Inc
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
HMTS	Hazardous Materials Technical Study
I-8	Interstate 8
IC	Institutional Controls
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NFRAP	CERCLIS No Further Remedial Action Planned
NLR	RCRA No Longer Regulated
NPL	National Priorities List (“Superfund”)
PCBs	Polychlorinated biphenyls
PERMITS	County of San Diego DEH Hazardous Materials Establishments
RCRA	Resource Conservation and Recovery Act
RCRA CORRACTS	RCRA Corrective Action Site database
RCRA LQG / SQG	RCRA Large and Small Quantity Generators List
RCRA TSDF	RCRA Treatment Storage and Disposal Facilities List
RPZ	Runway Protection Zone
RWQCB	Regional Water Quality Control Board
SDG&E	San Diego Gas and Electric
SLIC	SWRCB’s Spills, Leaks, Investigations, and Cleanup database
State Sites	DTSC Cal-Sites Program
State/Tribal IC	Deed Restricted Sites/Institutional Controls
State/Tribal VCP	DTSC Voluntary Cleanup Program Properties
SWIS	CIWMB Solid Waste Information System
SWL	Solid Waste Landfill-Related Sites
SWRCB	State Water Resources Control Board
Track Info	Track Info Services, LLC
USGS	United States Geological Survey
UST	Underground Storage Tank
UWR	Universal Waste Rule
VCP	Voluntary Cleanup Program
WDS	Waste Discharge System

1. INTRODUCTION

In accordance with your request, we have performed a Hazardous Materials Technical Study (HMTS) for the Grantville Focused Plan Amendment, Environmental Impact Report (EIR) project in San Diego, California. The focus of this HMTS report is Subarea A, located within the former Grantville Redevelopment Project Area, and encompasses portions of the Allied Gardens, Grantville, and College area communities of the city of San Diego (project area). Subarea A encompasses approximately 379 acres and is comprised of commercial, industrial and retail land uses north of Interstate 8 (I-8) and along both sides of Fairmont Avenue and Mission Gorge Road up to Zion Avenue.

Ninyo & Moore previously reported on hazardous materials conditions for Subareas A, B, and C of the Grantville Master Planning Area (Ninyo & Moore, 2004 and 2009a). The purpose of this HMTS is to document the presence of properties, which may have been impacted by hazardous materials or wastes, and to document, with respect to the California Environmental Quality Act (CEQA), the significance of impacts from the project area with respect to hazardous materials and wastes, and to discuss measures that can be implemented to reduce or mitigate the potential impacts. The HMTS consists of a review and summary of publicly available federal, state, and local regulatory databases and historical resources (i.e., topographic maps and aerial photographs). This report addresses existing environmental conditions in the project area, to assist the planning process with future land use changes that may be affected by hazardous materials or wastes. For the purposes of this report, the term “on-site” refers to properties within Subarea A, and “off-site” refers to properties outside of the Subarea A boundaries.

2. SCOPE OF WORK

Ninyo & Moore’s scope of work for this HMTS included the activities listed below.

- Reviewed physical setting information (e.g., topographic, geologic maps, groundwater data) pertaining to the project area.
- Reviewed federal, state, and local regulatory agency databases for the project area. The purpose of this review was to document the locations of facilities with unauthorized releases of hazardous materials or wastes to soil and/or groundwater.
- Reviewed readily available historical documents, including aerial photographs, topographic maps, and City of San Diego Report on Refuse Dumps, to document the presence or likely presence of hazardous materials or wastes.
- Documented the locations of sensitive receptors such as schools, daycare centers, and hospitals within the project area and on abutting properties.
- Evaluated potential impacts to sensitive receptors (i.e., schools, hospitals) from exposure to hazardous materials associated with the Master Plan.

- Evaluated whether the project area is located within an airport runway safety zone by reviewing Runway Protection Zone (RPZ), Airport Environs Overlay Zone (AEOZ), and Airport Approach Overlay Zone (AAOZ) maps.
- Reviewed the State Water Resources Control Board (SWRCB) Geotracker website and the California Department of Toxic Substances Control (DTSC) Envirostor website, to supplement information in the database report and provide a brief description of open unauthorized release cases, regulatory status and/or contaminated properties in the project area.
- Evaluate the findings with respect to the City of San Diego's CEQA Significance Determination Thresholds for Health and Safety.
- Prepare this HMTS report documenting findings and providing opinions and recommendations regarding possible environmental impacts to the project area from potential releases of hazardous materials or wastes, and potential impacts from hazardous materials or wastes from implementation of the Master Plan.

The HMTS was intended to provide a general overview of impacts from hazardous materials and/or wastes associated with the project area and was not inclusive of all properties with potential environmental concerns. The scope of work for this HMTS excluded documentation of specific properties outside the project area that may potentially be impacted by releases of hazardous materials and/or wastes, other than documenting properties which were listed on databases of unauthorized releases. The following, which is not intended to be all inclusive, represents out-of-scope items with respect to this HMTS and therefore are not addressed herein: human health risk assessment, asbestos-containing materials, underground pipelines, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic risk, industrial hygiene, health and safety, ecological resources, endangered species, mold, indoor air quality, and high-voltage power lines. In addition, Ninyo & Moore did not address interpretations of zoning regulations, building code requirements, or property title issues.

3. PROJECT DESCRIPTION

The project location, referred to as "Subarea A," is located within the former Grantville Redevelopment Project Area, within the eastern portion of the City of San Diego, in San Diego County. The City of San Diego is located adjacent to the United States International Border with Mexico and approximately 130 miles south of Los Angeles. Subarea A is a 379-acre area comprised of commercial, office, industrial, public facility, park and open space uses located immediately north of I-8 along both sides of Fairmount Avenue, Friars Road and Mission Gorge Road north to Zion Avenue (and including several parcels north of Zion Avenue). The southeast portion of Subarea A also includes the first seven parcels on the southern side of Adobe Falls Road (starting at Waring Road). Subarea A was formerly addressed by the Program EIR for the Grantville Redevelopment Project (March 2005, SCH #2004071122) prepared for the City of San Diego Redevelopment Agency.

The Grantville Focused Plan Amendment consists of three components: (1) a focused amendment to the Navajo Community Plan, (2) the processing of rezones, and (3) an update to the Navajo Facilities Finance Plan. The Focused Plan Amendment and rezones would introduce residential and mixed-use development to the Grantville neighborhood, currently comprised of predominately industrial and commercial uses. The proposal was developed through a series of design charrettes and several years of monthly stakeholder meetings. Through an extensive public meeting process the Grantville Stakeholders Committee has recommended Alternative D as the CEQA project to be analyzed in the Program level Environmental Impact Report. Alternative D would result in a net increase of approximately 8,275 residential dwelling units over what would be allowed by the existing community plan. The Grantville Focused Amendment to the Navajo Community Plan will set out the long-range vision and comprehensive policy framework for how Subarea A could develop over the next 20 to 30 years. The Amendment will provide policy direction for future development and has been guided by the City of Villages growth strategy and citywide policy direction contained within the City of San Diego's General Plan (2008).

The proposed project would rezone Subarea A from predominately single-use commercial and industrial zones to multiple-use zones which promote transit-oriented development.

The goals of the Grantville Redevelopment Project Area Master Plan are to remove physical and economic blighting conditions and to ensure the continued economic viability of the commercial, industrial, and retail uses within the project area. The Master Plan will eventually allow for the financing of improvements in order to remove physical and economic blight and to provide affordable housing.

Subarea A is comprised generally of commercial, industrial, and retail land uses north of I-8 and along both sides of Fairmont Avenue and Mission Gorge Road up to Zion Avenue.

4. ENVIRONMENTAL SETTING

The following sections include discussions of the topographic, geologic, and hydrogeologic conditions at the project area. The primary source of information was the Geology and Soils Evaluation conducted by Ninyo & Moore concurrently with this HMTS (Ninyo & Moore, 2013).

4.1. Topography

The majority of the project area is located in the San Diego River Valley. The elevation along the river is approximately 80 feet above mean sea level (MSL). Elevations of the eastern limits of the project area near Waring Road are up to approximately 200 feet MSL. Elevations of the southern limits of the project area near the College area are up to approximately 300 feet MSL (USGS, 2012).

4.2. Geology

Geologically, Subarea A is underlain by fill (both documented and undocumented), young alluvium, young colluvium, old alluvium, and formational soils of the Mission Valley Formation, Stadium Conglomerate, and Friars Formation (Ninyo & Moore, 2013). A more detailed analysis of geologic conditions, including faults, landslides, or other geologic hazards, was not part of the scope of work for this HMTS.

4.3. Surface Waters

The San Diego River is located along the western boundary of the project area. According to the SWRCB Water Quality Control Plan for the San Diego Basin, the San Diego River has been assigned beneficial uses for municipal, agricultural, industrial process, industrial service, recreational uses, and wildlife habitat (RWQCB, 2007).

4.4. Groundwater

According to the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan for the San Diego Basin, the project area is located within the Mission San Diego Hydrologic Subarea (907.11) of the Lower San Diego Hydrologic Area (907.10) of the San Diego Unit (907.00). Groundwater in this hydrologic subarea has been assigned beneficial uses for agricultural and industrial supply, with potential beneficial uses for municipal supply (RWQCB, 2007).

Based on research conducted for the geology and soils evaluation, groundwater is present at relatively shallow depths (as shallow as 9 feet below the adjacent surface) throughout Subarea A. Based on the topography of the project area and its proximity to the San Diego River, groundwater beneath the project area is presumed to flow generally in a westerly direction (Ninyo & Moore, 2013).

5. PROJECT AREA HISTORY

The following sections discuss the general historical development of the project area, as noted during a review of historical aerial photographs and/or topographic maps. Sanborn[®] fire insurance maps are also useful to evaluate property history, and were ordered from Track Info Services, LLC (Track Info). Based on the maps obtained from Track Info, map coverage is available for areas adjacent to the project area but not for the project area itself. In accordance with our scope of work and contract, additional site-specific historical data that may be available, including fire or building department records and reverse street directories, were not reviewed for this assessment. A previous HMTS reports prepared by Ninyo & Moore for Subareas A, B, and C was utilized as a reference, where applicable (Ninyo & Moore, 2004 & 2009b).

5.1. Aerial Photographs

Historical aerial photographs for selected years dated 1928 through 2012 were reviewed at the County of San Diego Department of Public Works and/or online sources for the previous HMTS re-

port (Ninyo & Moore, 2004). Selected photographs were reviewed for this assessment. Review of aerial photographs is useful in evaluating general land usage, such as residential, commercial, agricultural, or industrial use.

In general, scattered agricultural, commercial, and residential development has been present within the project area since the 1920s. By the 1950s, the majority of present-day roads were present, with increasing commercial development along major roads after approximately the 1960s. By the 1980s, the project area was densely developed with primarily commercial/light industrial uses, similarly to its current state. A listing of the photographs reviewed is presented in Section 12.

5.2. Topographic Maps

The United States Geological Survey (USGS) La Mesa Quadrangle topographic maps dated 1967 (photorevised 1975), 1994, and 2012 were reviewed to evaluate the presence of facilities of potential environmental concern. The earlier map (1967, photorevised 1975) depicts structures within the project area on the west side of Fairmount Avenue, along the San Diego River, which were interpreted to be industrial/commercial structures, since USGS maps typically do not depict individual residential structures in densely developed urban areas. Other clusters of commercial/industrial structures within the project area were noted on the north side of Alvarado Canyon Road along I-8, and surrounding the junction of Friars Road and Mission Gorge Road. The Grantville School was noted adjacent to the east of the project area, south of Vandever Avenue and east of Decena Drive/Mission Gorge Road.

In the 1994 USGS map, the clusters of commercial/industrial structures noted in the earlier map were no longer depicted; however, larger commercial/industrial structures were noted along Twain Avenue and Vandever Avenue, west of Mission Gorge Road. Other larger structures were noted along Mission Gorge Place, north of I-8. The project area was otherwise generally depicted as being a "built-up" area (i.e., with urban development). Structures are not depicted in the 2012 USGS map. Potential environmental concerns were not noted in the topographic map review.

6. RECORDS REVIEW

6.1. Standard Environmental Record Sources

A computerized, environmental database search including federal, state, and local databases was performed by Environmental Data Resources, Inc. (EDR) on October 16, 2013. A summary of the environmental databases searched, their corresponding search radii, and number of noted sites of environmental concern, is presented in the associated EDR report in Appendix A. The review was conducted to evaluate whether properties within a distance of up to one-eighth mile of the project area have been documented as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects. The databases searched

by EDR included those maintained by the United States Environmental Protection Agency (EPA), the DTSC, the California Department of Resources Recycling and Recovery (CalRecycle), the SWRCB, the RWQCB, the County of San Diego Department of Environmental Health (DEH), and other agencies. In San Diego County, the lead agency for unauthorized release cases is typically the DEH, with some properties with impacts to groundwater falling under the jurisdiction of the RWQCB. Current and former gas stations with Leaking Underground Storage Tanks (LUSTs), for example, are generally under the jurisdiction of the DEH and/or RWQCB. The DTSC maintains databases of facilities that have been impacted by releases of hazardous substances and/or wastes, and CalRecycle is generally responsible for oversight of current and former landfills, burn sites, and undocumented waste disposal sites. Although less common in San Diego County, the EPA maintains databases of sites on the “Superfund” and related lists.

Table 1 – Environmental Database Search

Database(s)	Description	Project Area Facilities Listed*
Federal Databases		
NPL	The National Priorities List (NPL) is the EPA’s database of hazardous waste facilities that have been listed under the Superfund Program due to their potential risk to human health and/or the environment.	0
CERCLIS/ NFRAP	The CERCLIS database contains data on potentially hazardous waste sites that have been reported to the United States Environmental Protection Agency (EPA) by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites, which are either proposed to or on the National Priorities List (NPL) and sites, which are in the screening and assessment phase for possible inclusion on the NPL. The CERCLIS NFRAP database contains sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA’s knowledge, assessment at a property has been completed and that the EPA has determined no further steps will be taken to list the property on the NPL. This decision does not necessarily mean that there is no hazard associated with a given site, it only means that, based upon available information, the site is not judged to be a potential NPL site.	0
Institutional Control	Facilities listed on the federal Institutional Control database are those listed in the Brownfields Management System maintained by the EPA. The database includes Superfund sites that have either an institutional control (e.g., deed restriction) or engineering control (e.g., vapor barrier). The purpose of the database is to organize and track information for Brownfields grant programs.	0
RCRA CORRACTS	RCRA Corrective Action (CORRACTS) is a list of handlers with Resource Conservation and Recovery Act (RCRA) Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.	0
RCRA TSDF	The RCRA, Treatment, Storage, and Disposal Facility database is a compilation by the EPA of facilities that report storage, transportation, treatment, or disposal of hazardous waste. The database does not necessarily include RCRA facilities where corrective action is required.	0
RCRA LQG	The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste in quantities greater than 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.	3

Table 1 – Environmental Database Search

Database(s)	Description	Project Area Facilities Listed*
RCRA SQG	The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste in quantities between 100 kg and 1,000 kg.	23
ERNS	The Emergency Response Notification System (ERNS) database includes incidents reported to the National Response Center, such as chemical spills, accidents involving chemicals, sightings of oil sheens on water bodies, terrorist incidents involving chemicals, etc.	5
Tribal Lands	The United States Department of the Interior and Bureau of Indian Affairs maintain a database of American Indian reservations and federally-administered lands which may not be included in the reservation.	0
Institutional and Engineering Controls	The DTSC maintains a list of deed-restricted properties where limits or requirements have been placed on the future use of the property.	0
State Databases		
DTSC ENVIROSTOR	The DTSC Site Mitigation and Brownfields Reuse Program’s Envirostor database identified sites that have known contamination for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites; state response including military facilities and state superfund, voluntary cleanup, and school sites.	7
WDS	WDS (Waste Discharge System) Database. The RWQCB maintains a list of waste discharge systems.	1
SLIC	The Spills, Leaks, Investigation and Cleanup (SLIC) database contains similar LUST information as well as information regarding other spills or releases, which may not involve USTs. The database is maintained by the SWRCB.	16
SWF/LF	Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites The data comes from CalRecycle’s Solid Waste Information System (SWIS) database.	1
LUST	The LUST database contains an inventory of reported leaking UST incidents. The database is maintained by the SWRCB, pursuant to Section 25295 of the Health and Safety Code.	47
UST/AST	Databases of facilities with registered/permitted underground storage tanks (USTs) and aboveground storage tanks (ASTs).	17

Table 1 – Environmental Database Search

Database(s)	Description	Project Area Facilities Listed*
<p>Database Acronyms: AST – Aboveground storage tank CERCLA – Comprehensive Environmental Response, Compensation and Liability Act CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System CORRACTS – Corrective Action Sites DEH – County of San Diego Department of Environmental Health DTSC – Department of Toxic Substances Control EPA – United States Environmental Protection Agency ERNS – Emergency Response Notification System LUST – Leaking Underground Storage Tanks NFRAP – No Further Remedial Action Planned NLR – No Longer Regulated NPL – National Priorities Lis PERMITS – County of San Diego hazardous materials establishments database RCRA – Resource Conservation and Recovery Act RWQCB – Regional Water Quality Control Board UST – Underground Storage Tank SWIS – Solid Waste Information System SWF/LF – Solid Waste Facilities / Landfills SWRCB – State Water Resources Control Board UST/AST – Underground Storage Tank/Aboveground Storage Tank TSD – Treatment, Storage, and Disposal VCP – Voluntary Cleanup Program *Some facilities have multiple listings under a single database and/or are listed on several databases</p>		

For facilities with more than one Map ID, the lowest Map ID number was depicted on Figure 2. Facilities in close proximity to each other may be assigned the same Map ID by EDR. Ninyo & Moore added a letter “a” through “f” to the MAP ID number to differentiate the facilities.

Facilities within the project area that were listed on unauthorized release databases are presented in Appendix B and depicted on Figure 2. In general, unauthorized release facilities were located along major streets within the project area, including Friars Road, Mission Gorge Road, and Fairmount Avenue. Some of the unauthorized release cases remain open with regulatory agencies, generally indicating that impacts to soil and/or groundwater have not been assessed, and/or that remedial activities are ongoing. Based on a review of the regulatory database, impacts to soil and groundwater have been documented at multiple properties within the project area.

A case-closed status generally indicates a lower likelihood that a release continues to be a significant source of impacts to groundwater; however, cases in the 1980s and early 1990s were often justified for closure using rationale and/or methodology that would not be considered to be the current standard of care, and closure is generally based on regulatory action levels, which can change over time. Therefore, while there is a lower likelihood that closed cases represent a significant concern to the project area, compared to potential impacts from open cases, it is possible that unauthorized releases which have been granted closure may have impacted soil and/or groundwater at the project area.

Businesses not listed on databases reporting unauthorized releases of hazardous materials or wastes generally have a lower likelihood of being associated with impacts to soil and/or groundwater. However, it is possible that releases have not yet been discovered or documented. For example, a dry cleaning facility or plating shop that has been in operation since the 1960s may be associated with contamination, which may not have been reported to regulatory agencies. Therefore, there is a possibility that soil and/or groundwater within the project area has been impacted by businesses that use, store, or dispose of hazardous materials or wastes, if releases of chlorinated solvents, petroleum hydrocarbons, and/or other hazardous materials/wastes have occurred.

6.2. Additional Environmental Record Sources

This section provides information obtained from a review of non-standard environmental record sources, which were selected based on their likelihood of providing information useful to identifying properties of potential environmental concern within the project area.

6.2.1. Online Regulatory Databases

Online regulatory databases were reviewed by Ninyo & Moore to supplement the environmental database search conducted by EDR. The following is a summary of pertinent information.

Table 2 – Online Regulatory Databases

Online Database/Website	Findings
DTSC EnviroStor	The review of the EnviroStor database identified the same cases as those discussed in Section 6.1.
DTSC Cortese List	The project area was not listed.
SWRCB GeoTracker	The review of the GeoTracker database identified the same cases as those discussed in Section 6.1
CalRecycle SWIS	According to the database, Admiral Baker Golf Course (37-CR-0002), located adjacent to the northwest of the project area was a pre-regulations disposal site. No violations were reported.
California Department of Oil, Gas, and Geothermal Resources (DOGGR)	Oil, gas, or geothermal wells were not depicted within the project area.
United States Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System Map Viewer	A natural gas transmission pipeline operated by San Diego Gas and Electric is present on the southern portion of the project area and generally trends east-west parallel to I-8.
Army Corps of Civil Engineers Formerly Used Defense Sites Database	Camp Elliot is depicted adjacent to the northwest of the project area. The camp consists of 30,500 acres and is known or suspected to contain military munitions and explosives.

6.2.2. Refuse Dumps and Solid Waste Disposal Facilities

A “Report on Refuse Dumps” prepared by the City Planning Commission of the City of San Diego, dated January 31, 1938, was reviewed to evaluate whether documented historical dumps of

trash/refuse were present in the project area. Disposal facilities in the vicinity of the project area were not listed in the document (City Planning Commission, 1938).

6.2.3. Mines

According to the California Division of Mines and Geology, Mines and Mineral Resources of San Diego County book dated 1963, two plaster sand processing operations are depicted along the San Diego River on the western portion of the project area (California Division of Mines and Geology, 1963).

7. COMMONLY ENCOUNTERED CONDITIONS

The following sections describe additional environmental conditions that are commonly encountered.

7.1. Aerially-Deposited Lead

Aerially-deposited lead (ADL) is typically associated with exposed soil near freeway rights-of-way as a result of emissions from vehicular exhaust prior to the elimination of lead from fuels in the mid-1980s. Based on the presence of roads within and adjacent to the project area it is possible that ADL is present within the project area.

7.2. Treated Wood

Wooden railroad ties and other wooden infrastructure (e.g., guardrails, telephone poles, fencing) may be treated with chemical preservatives to prevent rotting due to mold, mildew, and insects, which may leach from the wood into surrounding soil. Wood preservatives may include creosote, chromated copper arsenate, alkaline copper quaternary, copper azole, bis-(n-cyclohexyldiazoniumdioxo)-copper (copper-HDO), acid copper chromate, and chlorinated phenols. Sampling and analysis of wood would be needed to confirm whether it has been treated.

7.3. Asbestos-Containing Materials

Potentially asbestos-containing materials may be present within the project area in older structures (e.g., pre-1980). In addition, commonly encountered asbestos-containing materials in street rights-of-way may include insulated subsurface natural gas lines and cementitious water lines (e.g., transite).

7.4. Polychlorinated Biphenyl-Containing Material

PCBs were manufactured from the late 1920s until 1979 when their manufacture was banned by the Toxic Substances Control Act. PCBs were used in coolants, insulating fluids (transformer oil), caulk, sealants, and paints (roadway striping). Transformers associated with public utilities noted within the project area along public ROW are owned and operated by San Diego Gas and Electric (SDG&E).

SDG&E states that it is responsible for ensuring that its transformers comply with EPA regulations. SDG&E states that it has not specified PCB transformers for its electrical distribution system; however, some older (pre-1980) mineral transformers could have been inadvertently contaminated with PCBs by the manufacturer. Based on SDG&E's statistical sampling and testing program, SDG&E states that it is unlikely that its transformers are PCB-contaminated. The only way to know with certainty whether a material contains PCBs is by actually obtaining and testing a sample.

7.5. Lead-Based Paint

Painted surfaces within the project area may contain lead-based paint. The Consumer Product Safety Commission has banned the use of paint containing lead above certain thresholds for residential uses. However, lead-based paint may be used in industrial settings or may be present on older structures (e.g., pre-1980) within the project area.

7.6. Miscellaneous Hazardous Materials

Materials falling under the Universal Waste Rule (UWR) requirements may be present in buildings within in the project area including, but not limited to: potentially mercury-containing fluorescent light tubes and/or vapor lights, and potentially PCB-containing light ballasts.

8. SENSITIVE RECEPTORS

The locations of potential sensitive receptors to hazardous materials/waste impacts, such as schools and hospitals, were documented during review of background information (e.g., Thomas Brothers Guide maps, topographic maps, online resources such as Google Earth). The DTSC EnviroStor online database was also consulted for locations of existing and proposed schools. Schools, daycare, and/or education-related facilities noted in the project area included Little Sprouts Academy, Dehesa Charter School, Mission Nazarene Child Care, Academy of Learning Preschool, Junior Achievement of San Diego, and Gold N Child Care Services. National University and Stein Education Center were noted in the vicinity of the project area, beyond the project area boundaries. The approximate locations of these facilities are depicted on Figure 2. Hospitals in the project area include Kaiser Foundation Hospital, located south of Zion Avenue and West of Crawford Street, and the Kaiser Permanente Medical Facility located at 4405 Vandever Avenue, between Fairmount Avenue and Mission Gorge Road (Figure 2).

9. IMPACT ANALYSIS

The following sections include a general discussion of potential impacts from hazardous materials issues, including exposure of sensitive receptors to hazardous materials, increased construction costs, and community health and safety concerns. Potential impacts were then evaluated with respect to selected CEQA significance criteria established by the City of San Diego (City of San Diego, 2011).

9.1. Overview of Impacts

Overall, implementation of the Master Plan is not anticipated to result in increased generation of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or wastes. However, soil and/or groundwater that has been impacted by releases of hazardous materials/petroleum products, such as from surficial spills, subsurface releases from USTs, or other sources, may be considered a waste. If the concentrations of constituents of concern in the affected media are found to exceed state and/or federal screening criteria, the waste may be considered hazardous. As discussed in Section 7, other hazardous materials that may be disturbed during redevelopment activities include aerially-deposited lead, treated wood, PCB-containing material, lead-based paint, potentially asbestos-containing materials, and miscellaneous materials falling under the UWR. However, these potentially hazardous materials/wastes are already located within the project area. Implementation of the Master Plan would not result in additional handling of hazardous materials or generation of hazardous wastes beyond short-term construction phase activities, such as exposing soil during redevelopment activities or abatement of asbestos-containing materials during demolition.

Properties/facilities of potential environmental concern documented in the project area may have a higher likelihood of being associated with impacted soil and/or groundwater. Redevelopment of potentially contaminated properties (e.g., from industrial to residential) may increase the exposure of sensitive receptors in residential populations to constituents of concern. However, as one of the overall goals of the Master Plan is to alleviate the proliferation of substandard industrial properties and allow for the financing of improvements such as industrial pollution mitigation, implementation of the plan would be expected to result in the overall decreased exposure of sensitive receptors to hazardous materials.

It is unlikely that potential impacts from hazardous materials would be significant, with the incorporation of mitigation measures discussed in Section 10. The following summary of significance determination thresholds from the City of San Diego is provided.

9.2. City of San Diego Significance Determination Thresholds

Potential impacts from hazardous materials/waste issues were evaluated with respect to City of San Diego CEQA Significance Determination Thresholds established by the Development Services Department (City of San Diego, 2011). The following summary of thresholds and significance is provided.

1. "Projects which propose the handling, storage, and treatment of hazardous materials (i.e., a Hazardous Waste Facility) falling under Municipal Code Section 141.1001 Hazardous Waste Research Facilities and Section 141.1002:" As the project does not specifically propose increased handling, storage, and/or treatment of hazardous materials, it would not be considered a Hazardous Waste Facility project.

2. "Project sites on or near known contamination sources:" The guideline lists the following sources of information to be reviewed to determine the significance threshold:
 - a. "San Diego County Environmental Assessment Listing:" The County of San Diego DEH is the Certified Unified Program Agency (CUPA) responsible for tracking and maintaining hazardous materials/hazardous waste files in the County of San Diego. The DEH maintains listings of properties associated with unauthorized releases of hazardous materials/petroleum products and wastes. These listings, including LUST cases, were reviewed in the EDR environmental database report (Section 6.1). Several facilities on the environmental assessment case listing were reported to be located on properties within the project area.
 - b. "State Department of Toxic Substances Control [DTSC] "Cortese List" of hazardous waste sites compiled pursuant to Section 65962.5 of the California Government Code:" The DTSC's Cortese List was reviewed (DTSC, 2012). Sites within the project area were not noted on the Cortese List.
 - c. "Other possible sources - Sanborn[®] maps, Fire Department records, topographic/existing conditions surveys:" Sanborn[®] fire insurance maps were not available for the project area (Section 5). Topographic maps, aerial photographs, environmental databases, among other sources, were reviewed for this assessment. Various properties of potential environmental concern were noted in the project area during review of the environmental database report, including the unauthorized release facilities depicted on Figure 2.
 - d. "Site-specific emission data from the San Diego Air Pollution Control District:" As the project does not specifically propose the construction of new industrial facilities, which would emit hazardous air pollutants, this criterion is considered non-applicable to the project. However, please refer to the air quality technical study report prepared by others for the project for potential transportation-related air emissions.
3. Project sites that meet one or more of the following criteria may result in a significant impact.
 - a. "Located within 1,000 feet of a known contamination site:" Based on review of the environmental database search report, known contamination sites, such as those associated with unauthorized releases of hazardous materials and wastes (e.g., LUST cases), are located in the project area.
 - b. "Located within 2,000 feet of a known 'border zone property' (also known as a 'Superfund' site) or a hazardous waste property subject to corrective action pursuant to the Health and Safety Code:" The DTSC has stated that it has not designated any hazardous waste property or border zone property pursuant to Government Code Section 65962.5(a). It also states that there are two hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, which are not located in San Diego County (DTSC, 2012).
 - c. "Sites with DEH Site File Closed:" Based on review of the environmental database search report, properties associated with unauthorized release/LUST cases are located in the project area. Some of the properties are associated with unauthorized release cases that

remain open with regulatory agencies, generally indicating that impacts to soil and/or groundwater have not been delineated/assessed, and/or that remedial activities are ongoing.

A case-closed status generally indicates a lower likelihood that a release continues to be a significant source of impacts to soil and/or groundwater; however, earlier cases, such as those in the 1980s and early 1990s, were often justified for closure using rationale and/or methodology that may not be considered to be the current standard of care, and closure is generally based on regulatory action levels, which can change over time. Therefore, while there is a lower likelihood compared to potential impacts from open cases, it is possible that unauthorized releases, which have been granted closure, are associated with contamination within the project area.

- d. "Located in Centre City San Diego, Barrio Logan, or other areas known or suspected to contain contamination sites:" The project is not located in Centre City or in Barrio Logan. However, based on review of historical and regulatory sources indicating facilities of potential environmental concern, known and/or suspected contamination sites are located in the project area.
- e. "Located on or near an active or former landfill:" The Admiral Baker Golf Course Landfill is a closed, pre-regulations facility located adjacent to the northwest of the project area, within the San Diego River valley. According to the CalRecycle website, the most recent inspection was conducted in December 2003, no violations were reported.

Review of the 1938 City of San Diego City Planning Commission Report on Refuse Dumps and the County of San Diego Solid Waste Disposal Facilities map dated January 1985 did not reveal evidence that known refuse (trash) dumps or solid waste disposal facilities were historically located within or near the project area.

- f. "Properties historically developed with industrial or commercial uses, which involved dewatering (the removal of groundwater during extraction) in conjunction with major excavation in an area with high groundwater (such as downtown):" Based on the research conducted by Ninyo & Moore for the Geology and Soils Evaluation, groundwater is present at relatively shallow depths in the project area (as shallow as 9 feet below the adjacent surface). Therefore, the project area is considered to be in a location with relatively high groundwater. Some properties within the project area may have been associated with dewatering activities, the identification of which was beyond the scope of work for this HMTS.
- g. "Projects located in the Runway Protection Zone [RPZ], the Airport Environs Overlay Zone [AEOZ] or the Airport Approach Overlay Zone [AAOZ] or where the Federal Aviation Administration [FAA] has reached a determination of 'hazard' through FAA Form 7460-1, 'Notice of Proposed Construction or Alteration' as required by FAA regulations in the Code of Federal Regulations Title 14 Section 77.13:" Based on review of online resources provided by the City of San Diego City Clerk's office, the project area is not located in the RPZ, AEOZ, or AAOZ (City of San Diego, 2009).

- h. “Located on a site presently or previously used for agricultural purposes:” Previous agricultural land usage can result in concentrations of constituents of concern (e.g., pesticides, herbicides) in soil and/or groundwater. Agricultural land usage in the project area was noted during review of historical aerial photographs. However, by the 1980s, the majority of the project area was developed with non-agricultural uses (e.g., commercial, industrial, residential). Properties within the project area would be expected to have a similar likelihood of containing agriculturally-related contaminants, if any, as other nearby properties within San Diego. Implementation of the Master Plan would not be expected to result in exposure beyond short-term construction phase activities, such as exposing potentially impacted soil during redevelopment activities. Based on the urban development of the project area, and the length of time since agricultural uses, it is not likely that residual agricultural contaminants, if any, would result in a significant impact to project redevelopment with incorporation of the mitigation measures discussed in Section 10.

9.3. California Environmental Quality Act Initial Study Checklist

The City of San Diego’s Significance Determination Threshold guidance contains a subset of significance determination questions, some of which are related to the CEQA Appendix G Initial Study checklist. The following questions were evaluated, based on findings from the existing conditions analysis and the assumption that no new industrial uses that would emit hazardous air pollutants.

Would the project “result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?”

Several existing schools and/or day care/educational centers are located within the project area (Figure 2), and other proposed and/or existing schools may be located within a quarter-mile of the project area. While it is possible that hazardous materials/wastes may be disturbed during project activities, implementation of the Master Plan would be expected to result in the overall decreased exposure of sensitive receptors to hazardous materials, since one of the overall goals of the Master Plan is to alleviate the proliferation of substandard industrial properties and allow for the financing of improvements such as industrial pollution mitigation. It is unlikely that the project would result in a significant impact with the incorporation of the mitigation measures discussed in Section 10.

Would the project “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, create a significant hazard to the public or environment?”

According to the DTSC, Government Code Section 65962.5 requires that DTSC compile a list of facilities/properties in the categories discussed below (DTSC, 2012).

- *Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code* - The DTSC has designated two facilities in the state of California that fall under this category. These two facilities are located outside of San Diego County.

- *Land designated as “hazardous waste property” or “border zone property”* - The DTSC has indicated that no facilities or properties are listed under this provision because DTSC has not designated any hazardous waste property or border zone properties pursuant to the provisions cited in the Health and Safety Code.
- *Properties with hazardous waste disposals on public land* - The DTSC has indicated that it does not maintain separate records of reports that relate to public lands/properties.
- *Hazardous substance release sites selected for (and subject to) a response action* - The DTSC has specified that the list of sites that meet this criteria are listed on the “Cortese List.” Review of the Cortese List did not indicate properties located within the project area.
- *Sites included in the Abandoned Site Assessment Program* - The Abandoned Site Assessment Program was intended to include properties in “rural unsurveyed counties.” The program concluded in the early 1990s, and properties in the program were transferred to the Cal-Sites database, which has been incorporated into the DTSC’s current EnviroStor database. However, the EnviroStor database does not indicate whether a specific site was at one time included in the Abandoned Site Assessment Program and does not have a separate category for abandoned sites. Several properties/facilities within the project area were depicted on the DTSC EnviroStor database, which generally correspond to those properties/facilities listed in the environmental database report (Section 6). Based on the fact that these properties/facilities are not located in “rural unsurveyed counties,” they would not be considered to have been in the Abandoned Site Assessment Program.

Based on the information provided above, the project is not located on a site included in a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Would the project “expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?”

As discussed previously in Section 9.2, question 3(h), it is possible that former agricultural uses within the project area may have resulted in concentrations of constituents of potential concern in soil and/or groundwater (e.g., pesticides, herbicides, metals). Properties within the project area would be expected to have a similar likelihood of containing agriculturally-related contaminants, if any, as other nearby properties within San Diego. Implementation of the Master Plan would not be expected to result in additional exposure beyond short-term construction phase activities, such as exposing soil during redevelopment activities. Based on the urban development of the project area, and the length of time since agricultural uses, it is not likely that residual agricultural contaminants, if any, would result in a significant impact to project redevelopment with incorporation of the mitigation measures discussed in Section 10.

10. MITIGATION FRAMEWORK

The following mitigation framework measures relating to hazardous materials/wastes are provided. These mitigations will help in implementation of the Master Plan to identify where further remediation may be needed and what type of land uses may be appropriate and feasible at various locations.

- Property-specific due diligence processes should be conducted by qualified environmental professionals, in accordance with applicable guidelines and regulations, on specific properties within the project area prior to property transactions and/or redevelopment. Phase I Environmental Site Assessments (ESAs) should be conducted by qualified environmental professionals in accordance with the standard of care at that time (currently the American Society for Testing and Materials Standard Practice E1527-13) and applicable regulations (currently the EPA 40 Code of Federal Regulations §312 titled “Standards and Practices for All Appropriate Inquiries”).
- For properties within the project area with suspected or documented soil and/or groundwater contamination or other potential environmental concerns, further evaluation, such as Phase II ESAs and/or remediation activities, should be conducted prior to or during redevelopment activities by appropriately certified and/or registered professionals in accordance with a work plan that is approved by the regulatory agency having oversight of the activities. Results of previous assessment activities for a property (e.g., previous Phase II ESAs, UST removal sampling data), if any, should be evaluated by certified and/or registered professionals prior to redevelopment activities.
- The “case closure” regulatory status should be reevaluated prior to redevelopment activities by a qualified environmental professional in conjunction with the regulatory agency having oversight of the activities for unauthorized release properties when a site use change is part of the planned redevelopment (e.g., from industrial to residential use).
- For properties with documented or suspected impacts to soil and/or groundwater, appropriate worker and community health and safety measures should be implemented by the contractor, under the oversight of a qualified environmental professional, during soil/groundwater disturbance activities (e.g., dust control, air monitoring, stockpile management).
- It is possible that contaminated soil and/or groundwater, not identified during this technical study, may be present within the project area (e.g., lead in shallow soil, burn pits). For this reason, the following precautions should be observed during excavation activities associated with the improvements conducted during redevelopment:
 - Pre-project activities (e.g., planning or early design) should include site-specific environmental evaluation to address hazardous materials concerns related to worker and community health and safety, waste generation and disposal, and regulatory requirements.
 - Caution should be taken during excavation activities near the facilities associated with unauthorized releases, because of the potential for encountering documented and undocumented releases of contaminants and hazardous materials or wastes that may have occurred within or adjacent to these sites. Excavation and/or soil monitoring should be conducted by professionals trained in the identification and management of hazardous materials or wastes, such as contaminated soil or groundwater.

-
- Appropriate references to the potential to encounter contaminated soil or groundwater should be included in construction specifications.
 - A Site Health and Safety Plan should be prepared and implemented prior to initiation of construction activities within the boundaries of the project area to reduce potential health and safety hazards to workers and the public.
 - Soil generated during construction activities for redevelopment (e.g., subsurface excavation, grading) at contaminated properties may require chemical characterization (e.g., analytical testing) by a qualified environmental professional prior to reuse, export, or disposal.
 - Further assessment is recommended to be performed by a qualified environmental professional if discolored soil or other potential environmental issues are encountered in the project area during construction/redevelopment activities. If contamination is discovered, regulatory agencies may require additional environmental investigation and/or mitigation to be conducted by the property owner, particularly if there is the potential to affect public health, safety, and/or the environment.
 - Future redevelopment of impacted or potentially impacted properties involving soil excavation, grading, or other subsurface disturbance should include implementation of a soil and groundwater management plan to address the possibility of encountering localized areas of potential environmental concern. The plan should be prepared by a qualified environmental consultant and should be implemented during soil/groundwater disturbance activities under the oversight of an environmental professional on behalf of the property owner/developer. The plan should address monitoring of excavated soil, community and worker health and safety, and soil and groundwater handling, stockpiling, characterization, on-site reuse, export, and disposal protocols. Appropriate references to the potential to encounter contaminated soils and/or groundwater should be included in construction specifications and bid documents so that the contractor can consider various factors (e.g., groundwater pumping rates, soil disposal) in their work.
 - Groundwater at certain locations within the project area has been documented as being impacted. Based on evidence of shallow groundwater depths (i.e., as shallow as 9 feet below adjacent ground surface) at some locations, if dewatering activities are planned for construction or other proposed improvements, they may be subject to increased disposal costs or other environmental surcharges (e.g., permitting) as a result of the presence of contaminated groundwater. A discharge permit will likely be required for dewatering, and water may need to be characterized by a qualified environmental consultant and/or treated prior to discharge. The RWQCB and/or agency providing oversight of wastewater discharge should be contacted by a qualified environmental consultant in conjunction with the contractor and/or property owner for guidance on the requirements for discharge of dewatering effluent, prior to initiation of construction activities. The groundwater management plan mentioned in the previous bullet should be implemented by a contractor during construction activities if groundwater is expected to be encountered.
 - Prior to renovation or demolition of structures, surveys should be conducted for the presence of hazardous building materials such as asbestos-containing materials, lead-containing surfaces, and other materials falling under UWR requirements. The surveys should be conducted by California Department of Public Health Certified Lead Inspector/Assessors and California Division of Occupational Safety and Health Certified Asbestos Consultants in accordance with applicable local, state, and federal guidelines

and regulations. Prior to renovation or demolition of buildings, appropriate abatement measures should be implemented by a licensed abatement contractor using trained and certified workers and supervisors.

- For sites where structures are to be demolished, especially structures built in the 1970s or earlier, analyze surface and shallow soils for lead and termiticides prior to demolition or soil disturbance (e.g., grading).

11. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Please note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

12. REFERENCES

- California Department of Toxic Substances Control (DTSC), 2013, EnviroStor Online Database, <http://www.envirostor.dtsc.ca.gov/public/>: accessed in October.
- California Department of Toxic Substances Control (DTSC), 2012, Information Required from the Department of Toxic Substances Control Under Government Code Section 65962.5(a), <http://www.calepa.ca.gov/sitecleanup/corteselist/SectionA.htm>: Updated February 16.
- California Division of Mines and Geology, 1963, Mines and Mineral Resources of San Diego County California, County Report 3.
- California Integrated Waste Management Board, 2013, Solid Waste Information System database, <http://www.ciwmb.ca.gov/SWIS>: accessed in October.
- California State Water Resources Control Board, 2013, GeoTracker Website: www.geotracker.swrcb.ca.gov: accessed in October.
- City of San Diego, 2011, Development Services Department, CEQA Significance Determination Thresholds: dated January.
- City of San Diego, 2011, Municipal Code, <http://www.sandiego.gov/city-clerk/officialdocs/legisdocs/muni.shtml>: accessed in November.
- City Planning Commission, 1938, City of San Diego Report on Refuse Dumps: dated January 31.
- County of San Diego, Department of Public Works, (selected years), Historical Aerial Photographs of San Diego County.
- Google Earth: <http://www.googleearth.com>
- Historicaerials.com, 2013, Historic Aerials of the Project Area, <http://www.historicaerials.com/>: accessed in October.
- Ninyo & Moore, 2004, Draft Hazardous Materials Technical Study, Grantville Redevelopment Project and Study Area, San Diego, California: dated September 17.
- Ninyo & Moore, 2009a, Draft Geology and Soils Evaluation, Grantville Redevelopment Project Area Master Plan EIR, San Diego, California: dated December 7.
- Ninyo & Moore, 2009b, Draft Hazardous Materials Technical Study, Grantville Redevelopment Project Area Master Plan EIR, Subarea A, San Diego, California: dated December 16.
- Ninyo & Moore, 2013, Geology and Soils Evaluation, Grantville Redevelopment Project Area Master Plan EIR, San Diego, California: dated October 24.
- Regional Water Quality Control Board (RWQCB), 1994, Water Quality Control Plan for the San Diego Basin (9), with amendments effective prior to April 25, 2007: dated September 8.
- State Water Resources Control Board, 2013, GeoTracker Website, <http://www.geotracker.swrcb.ca.gov>: accessed in October.

Thomas Guide, 2009, San Diego County Street Guide.

Track Info Services, Inc., 2009a, Historical Sanborn® Fire Insurance Map Abstract Research Results: dated October 22.

Track Info Services, Inc., 2009b, FirstSearch™ Report: dated October 21.

United States Department of Defense, 2013, Formerly Used Defense Sites (FUDS) Online GIS Database, www.usace.army.mil/Missions/Environmental/FormerlyUsedDefenseSites/FUDSGIS.aspx: accessed in October.

United States Geological Survey, 1967, Photorevised 1975, La Mesa Quadrangle, California, San Diego County, 7.5-Minute Series (Topographic): Scale 1:24,000.

United States Geological Survey, 1994, La Mesa Quadrangle, California, San Diego County, 7.5-Minute Series (Topographic): Scale 1:24,000.

United States Geological Survey, 2012, La Mesa Quadrangle, California, San Diego County, 7.5-Minute Series (Topographic): Scale 1:24,000.

Aerial Photographs Reviewed

Year	Photograph Number	Source
1928	16S/2W 60E, 60D	A
1953	AXN 3M-99, AXN 14M-97	B
1964	Historicaerials.com	C
1966	VBO-1 150, VBO-1 168	A
1973-1975	23/26, 22/24, 22/25	A
1978-1979	25/D1, C16, C17, 26/B32, C1, C2	A
1980	Historicaerials.com	C
1989	Historicaerials.com	C
1995	Thomas Bros Aerial Foto Map Book, page 1249	B
2003	Historicaerials.com	C
2005	Historicaerials.com	C
2012	Google Earth	D

Sources:

- A – San Diego County, Department of Public Works
- B – Ninyo & Moore In-House Library
- C – Online Resource
- D – Google Earth

APPENDIX A
ENVIRONMENTAL DATABASE REPORT (Electronic - On CD)

APPENDIX B

ON-SITE PROPERTIES ON UNAUTHORIZED RELEASE DATABASES