

**COUNTY OF SAN DIEGO**  
**GUIDELINES FOR DETERMINING SIGNIFICANCE**

HAZARDOUS MATERIALS AND  
EXISTING CONTAMINATION



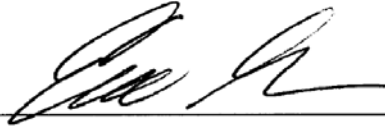
**LAND USE AND ENVIRONMENT GROUP**

Department of Planning and Land Use  
Department of Public Works

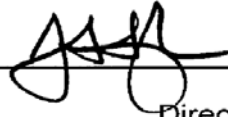
July 30, 2007

**APPROVAL**

I hereby certify that these Guidelines for Determining Significance for addressing **Hazardous Materials and Existing Contamination** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the 30<sup>th</sup> day of July, 2007.




ERIC GIBSON  
Interim Director of Planning and Land Use



JOHN SNYDER  
Director of Public Works

I hereby certify that these **Guidelines for Determining Significance for Hazardous Materials and Existing Contamination** are a part of the County of San Diego, Land Use and Environment Group's Guidelines for Determining Significance and have hereby been approved by the Deputy Chief Administrative Officer (DCAO) of the Land Use and Environment Group on the on the 30<sup>th</sup> day of July, 2007. The Director of Planning and Land Use is authorized to approve revisions to these Guidelines for Determining Significance for Hazardous Materials and Existing Contamination except any revisions to the Guidelines for Determining Significance presented in Section 4.0 must be approved by the DCAO.

Approved, July 30, 2007



CHANDRA WALLAR  
Deputy CAO

## EXPLANATION

These Guidelines for Determining Significance for Hazardous Materials and Existing Contamination and information presented herein shall be used by County staff for the review of discretionary projects and environmental documents pursuant to the California Environmental Quality Act (CEQA). These Guidelines present a range of quantitative, qualitative, and performance levels for particular environmental effects. Normally, (in the absence of substantial evidence to the contrary), an affirmative response to any one Guideline will mean the project will result in a significant effect, whereas effects that do not meet any of the Guidelines will normally be determined to be “less than significant.” Section 15064(b) of the State CEQA Guidelines states:

“The determination whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on factual and scientific data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

The intent of these Guidelines is to provide a consistent, objective and predictable evaluation of significant effects. These Guidelines are not binding on any decision-maker and do not substitute for the use of independent judgment to determine significance or the evaluation of evidence in the record. The County reserves the right to modify these Guidelines in the event of scientific discovery or alterations in factual data that may alter the common application of a Guideline.

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## **List of Acronyms**

APCD	Air Pollution Control District
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
CalOSHA	California Occupational Safety and Health Administration
CCR	California Code of Regulations
CEC	California Education Code
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CHHSL	California Human Health Screening Levels
CIWMB	California Integrated Waste Management Board
DEH	Department of Environmental Health
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPCRA	Emergency Planning Community Right-to-Know Act
ESA	Environmental Site Assessment
FUDS	Formerly Used Defense Sites
HMBP	Hazardous Materials Business Plan
HMD	Hazardous Materials Division (DEH)
HIRT	Hazardous Incident Response Team
H&SC	Health and Safety Code
HTRW	Hazardous, Toxic and Radioactive Waste
LEA	Local Enforcement Agency
MCL	Maximum Contaminant Level
MSDS	Materials Safety Data Sheet
NEPA	National Environmental Policy Act
NPL	National Priorities List
OE	Ordnance and Explosives
OEHHA	Office of Environmental Health Hazard Assessment
PCB	Polychlorinated biphenyls
PEA	Preliminary Environmental Assessment
PPM	Parts Per Million
PRG	Preliminary Remediation Goal
RCRA	Resource Conservation and Recovery Act
RAW/RAP	Removal Action Workplan/Remedial Action Plan
RMP	Risk Management Plan
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment and Mitigation program (DEH)
SARA	Superfund Amendments and Reauthorization Act
SIP	Site Identification Process
SWIS	Solid Waste Information System
TDS	Total Dissolved Solids
TRI	Toxics Release Inventory

UBC	Uniform Building Code
UFC	Uniform Fire Code
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VAP	Voluntary Assistance Program (DEH)
VOC	Volatile Organic Compound
XRF	X-ray Fluorescence



## INTRODUCTION

This document provides guidance for evaluating adverse environmental effects that a proposed project may have from exposure of people or the environment to hazardous substances, including hazards resulting from existing site contamination or contamination from adjacent properties. Specifically, this document addresses the following questions listed in the California Environmental Quality Act (CEQA) Guidelines, Appendix G, VII. Hazards and Hazardous Materials:

Would the project::

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?<sup>1</sup>
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The intent of these guidelines is to identify the significance of potential adverse effects resulting from the handling of hazardous substances by businesses, residents, and during site development and construction; to identify the significance of potential adverse effects from the exposure of people or the environment to existing onsite hazards or contaminated media (e.g., soil, soil vapor, groundwater) from past activities; and to identify adequate mitigation measures to minimize the potential adverse effects to people and the environment from hazardous substance handling and exposure to existing contamination.

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<sup>1</sup> Hazardous air emissions are addressed in the County's "Guidelines for Determining Significance for Air Quality", available online at <http://www.sdcounty.ca.gov/dplu/Resource/docs/3~pdf/AQ-Guidelines.pdf>.

## **1.0 GENERAL PRINCIPLES AND EXISTING CONDITIONS**

### **1.1 Hazardous Materials Handling**

Hazardous materials are generally defined as any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or future hazard to human health and safety or to the environment, if released into the workplace or the environment (Health and Safety Code (H&SC), §25501(o)). Hazardous materials are commonly stored and used by a variety of businesses and are commonly encountered during construction activities. Hazardous materials typically require special handling, reuse, and disposal because of their potential to harm human health and the environment.

Depending on the type of hazardous materials that a business will handle, facilities may be required to submit plans to demonstrate compliance with applicable Federal, State, or local regulations. Two types of plans that are commonly required are Hazardous Materials Business Plans (HMBP) and Risk Management Plans (RMP). The requirements of each plan are detailed below.

#### **1.1.1 Hazardous Materials Business Plans (HMBP)**

Any business that handles, stores, or disposes of a hazardous substance at a given threshold quantity must prepare an HMBP to minimize hazards to human health and the environment from fires, explosions, or an unplanned release of hazardous substances into air, soil, or surface water. The HMBP must be carried out immediately whenever a fire, explosion, or unplanned chemical release occurs. The plan is meant to identify major hazards and identify project design elements to address the risk of a hazardous substance release.

The HMBP includes three sections: (1) an inventory of hazardous materials, including a site map, which details their location; (2) an emergency response plan; and (3) an employee-training program. The HMBP serves to aid employers and employees in managing emergencies at a given facility and to better prepare emergency response personnel for handling a wide range of emergencies which might occur at the facility. The plan contains basic information on the location, type, quantity, and health risks of the hazardous substances stored, handled, or disposed of at the site.

Chapter 6.95 of the H&SC and/or San Diego County Code Section 68.1113, establish minimum standards for HMBPs in San Diego County. In San Diego County, any business which handles hazardous substances in amounts greater than or equal to any of the following, must disclose their chemical inventory and prepare a HMBP:

1. 55 gallons of a liquid;
  2. 500 pounds of a solid;
  3. 200 cubic feet of compressed gas at standard temperature and pressure;
- and/or

4. Any amount of a highly toxic compressed gas (i.e. compressed gases with a Threshold Limit Value (TLV) of 10 parts per million (ppm) or less) as referenced by the American Conference of Governmental Industrial Hygienists – ACGIH.
5. Carcinogens and reproductive toxins in any quantity must be disclosed annually for the materials used in the previous year.

HMBPs are submitted to the Department of Environmental Health (DEH) Hazardous Materials Division (HMD). The plans must be resubmitted, reviewed, revised or amended as necessary every three years. The HMBP must also be amended within 30 days whenever there is:

- A 100 percent or greater increase in quantity of a hazardous substance listed on the inventory; or
- A disclosed quantity threshold is exceeded of a previously undisclosed substance; or
- A change in storage, location, or use which could effect an emergency response; or
- A change in business name, address, or ownership.

### **1.1.2 Risk Management Plans (RMP)**

The majority of facilities or businesses in San Diego County that have prepared RMPs are ammonia refrigeration facilities and water treatment and wastewater treatment plants that handle chlorine gas. Article 2 of Chapter 6.95 (H&SC Sections 25531-25543.3) requires the owner or operator of a stationary source (non-transportation) with more than a threshold quantity of a regulated substance in a process to prepare a RMP. Regulated substances are toxic chemicals (e.g. chlorine gas and ammonia) and flammable chemicals (e.g. methane and propane) listed in Title 19 of the California Code of Regulations (CCR). The State statutes and regulations combine Federal and State program requirements for the prevention of accidental releases of listed substances. The incorporation of the Federal and State requirements has been designated the California Accidental Release Prevention (CalARP) Program.

CalARP requires that a RMP include a hazard assessment program, an accidental release prevention program, and an emergency response plan. The RMP must be revised, as necessary, or every five years. The required components of a RMP are detailed below.

#### **Hazard Assessment Program**

The hazard assessment program identifies regulated substances and quantities onsite, includes a five-year accident history, and assesses a worst-case release scenario analysis (based on realistic parameters). The main purpose of the release scenario analysis is to identify vulnerable public receptors, such as residences, schools, child day care facilities, hospitals, businesses, prisons, and other facilities, as well as vulnerable environmental receptors, such as wildlife preserves, parks and other natural areas. The analysis identifies the scope and needs of the vulnerable receptors in order to plan for a

community response to accidents. Worst-case scenarios assume the total quantity of the regulated substance is quickly released, atmospheric conditions will maximize the effect of the event, and no mitigation or response actions are taken. Worst-case scenarios can predict long distance effects that represent a highly unlikely chain of events. Alternative release scenarios are based on more credible and predictable factors. The scenario can assume, for example, that mitigation measures operate as designed and atmospheric conditions are typical, rather than worst-case.

### **Accidental Release Prevention Program**

In addition to requiring facilities to identify and assess hazards, CalARP requires facilities to develop accident prevention programs. RMPs must contain summary information about major hazards identified, safety features and process controls to prevent releases, mitigation systems (e.g. dikes, shut-off valves, scrubbers) used to lessen the effect of any release, monitoring and detection systems, worker training, and maintenance records. Facilities must also include a summary of their five-year accident history for relevant chemical processes. The frequency and extent of past releases provides a measure of the facilities effectiveness in controlling chemical hazards.

### **Emergency Response Plan**

The RMP must also describe emergency response procedures that are in place in the event of a release of a regulated substance. The emergency response plan must detail the actions taken by employees and other individuals onsite over the entire course of the release event. It must address the alarm system; the evacuation, assembly, and return procedures; emergency first aid; and the use of response equipment and personnel cleanup and decontamination procedures. The emergency response plan must describe the type of off-site response assistance that will be needed in the event of a release, including firefighting, security, and public notification.

## **1.2 Existing Contamination**

A variety of regulatory agencies maintain listings of sites that have been contaminated from a release of hazardous substances. As part of a CEQA assessment regarding potential human exposure to existing onsite contamination, it is necessary to consult available databases to ensure the proposed project is not located on or near a site with contamination risks. In addition to available database consultation, it may be necessary to conduct additional site investigation to identify undocumented releases of hazardous substances or potential migration of hazardous substances from offsite sources.

### **1.2.1 Listed Sites**

A variety of government data sources are available to identify sites that may have been subject to a release of hazardous substances or that may have supported a use that could have resulted in a hazardous condition onsite. Phase I Environmental Site Assessments (ESAs) typically include a search of numerous Federal, State and local regulatory data sources to identify the history of onsite and surrounding environmental conditions. Phase I ESAs are completed in accordance with the active standard for

Phase I ESA's as defined by American Society for Testing and Materials (ASTM) Standard Practice for Phase I ESA Process. Listed below are summaries of key sources of government data that identify potential environmental conditions and historical uses that may represent a hazardous condition on specific properties.

### **Cortese List (Government Code Section 65962.5)**

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List after the Legislator who authored the legislation that enacted it. The list is referenced in the CEQA Guidelines, Appendix G, VII Hazards and Hazardous Materials. Because this statute was enacted over twenty years ago in 1985, some of the provisions refer to agency activities that are no longer being implemented and, in some cases, the information to be included in the Cortese List does not exist. While the Government Code Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access and this information is now largely available on the Internet sites of the responsible organizations. Those requesting a copy of the Cortese list are now referred directly to the appropriate information resources contained on the Internet web sites of the boards or departments that are referenced in the statute. The list below is a summary of the regulatory agencies and the associated data sources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements:

- List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database ([http://www.dtsc.ca.gov/SiteCleanup/Cortese\\_List.cfm](http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm))
- List of Leaking Underground Storage Tank Sites by County and Fiscal Year from Water Board GeoTracker database (<http://www.geotracker.waterboards.ca.gov/search/>)
- List of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels outside the waste management unit (<http://www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf>)
- List of "active" Cease and Desist Orders (CDO) and Cleanup Abatement Orders (CAO) from the Water Board (<http://www.calepa.ca.gov/SiteCleanup/CorteseList/CDOCAOList.xls>)
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the H&SC, identified by DTSC. (<http://www.calepa.ca.gov/SiteCleanup/CorteseList/Facilities>)

The DTSC EnviroStor database and the GeoTracker database have listed sites in San Diego County. These databases are discussed under separate headings below. As of January 2007, no sites within San Diego County were included on the "List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit" or the "List of hazard waste facilities subject to corrective action pursuant to Section 25187.5 of the H&SC, identified by DTSC." The list of "active CDO and CAO from Water Board" includes several landfills located in San Diego County and other facilities or businesses.

### **DTSC Site Mitigation and Brownfields Data Management System (EnviroStor)**

The EnviroStor database includes the following site types: Federal Superfund sites [National Priorities List (NPL)]; State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. Information includes site name, site type, status, address, any restricted use (recorded deed restrictions), past use(s) that caused contamination, potential contaminants of concern, potential environmental media affected, site history, planned and completed activities.

### **Waterboards GeoTracker**

The GeoTracker is a geographic information system that provides online access to environmental data including underground fuel tanks, fuel pipelines and public drinking water supplies. GeoTracker contains information about leaking underground fuel tanks (LUFT) and can identify and display LUFT sites within various distances of wells providing users the ability to assess potential threats to their drinking water sources. GeoTracker also has information and data on non-LUFT cleanup programs, including Spills-Leaks-Investigations-Cleanups (SLIC) sites, Department of Defense Sites (DOD) and Land Disposal programs.

### **County of San Diego Site Assessment and Mitigation Program Case Listing**

The County of San Diego DEH maintains the Site Assessment and Mitigation (SAM) list of contaminated sites that have previously or are currently undergoing environmental investigations and/or remedial actions. If a discretionary project is located on a site found on the SAM list, the project's status must be determined and any ongoing remediation requirements coordinated with the DEH SAM project manager. The SAM case list can be accessed on the DEH's website at <http://www.co.san-diego.ca.us/deh/lwq/sam/index.html>.

#### **1.2.2 Solid Waste Disposal Sites**

The County's Local Enforcement Agency (LEA) is the lead agency required to investigate and inspect active, closed, illegal and abandoned waste disposal sites in the unincorporated portions of the County of San Diego and incorporated cities, with the exception of the City of San Diego. The LEA, in coordination with the Regional Water Quality Control Board (RWQCB) and California Integrated Waste Management Board (CIWMB), can review Work Plans, Site Assessment Reports, and issue no further action letters related to the remediation of burn dump sites.

#### **Burnsites (burn ash)**

Burn ash refers to the debris, refuse, ash, and ash-contaminated soil that is produced from the open burning of municipal solid waste. In San Diego County, numerous burn ash sites exist from the time when open burning was the primary method used to dispose of solid waste. This was common from the 1900s to the early 1970s. Ash from the open burning of municipal solid waste is the most common, but not the only source of burn ash. Historically, some open burning and low temperature incineration did occur with specific commercial wastes streams, often disposed of onsite. Ash from these sites could have very different characteristics from those of municipal solid waste. Burn ash

can be commingled with other solid wastes, including incompletely burned refuse. There are many environmental issues and concerns regarding the management of burn ash sites. Burn ash commonly contains elevated concentrations of lead and other heavy metals, often at concentrations that require it to be disposed of as hazardous waste. Without appropriate care, burn ash and burn ash contaminated soil have a potential for causing public health and environmental impacts. During development activities soil containing burn ash must be properly managed onsite and offsite, if transported from the site. The primary pathways for potential public health and environmental impacts include dust migration, surface erosion, and surface water contamination. The CIWMB has published guidance for the evaluation and remediation of burn dump sites that is available online at <http://www.ciwmb.ca.gov/LEAAdvisory/56/Default.htm>. The DTSC publication, "Protocol for Burn Dump Site Investigation and Characterization" is also available online at [http://www.dtsc.ca.gov/SiteCleanup/upload/SM\\_POL\\_Burn-Dump-Protocol.pdf](http://www.dtsc.ca.gov/SiteCleanup/upload/SM_POL_Burn-Dump-Protocol.pdf).

### **Landfills**

Open, abandoned and closed landfills present potential issues related to the exposure of humans to hazards when a project is proposed on or near a landfill site. Projects that propose the construction of buildings on landfill property, within 1,000 feet of buried waste are subject to specific requirements pursuant to the CCR Title 27 Section 21190, Postclosure Land Use<sup>2</sup>. The requirements of this section identify specific requirements for design and construction such that gas migration into buildings will not occur. While this regulation is only applicable to projects located on landfill property (but not for non-landfill property), it provides useful guidance for a range of construction design considerations that may be used to minimize potential impacts from landfill gas migration when projects are located within 1,000 feet of buried waste. Major underground utilities within 1,000 feet of a landfill can also act as a conduit for landfill gas, and should be evaluated for this risk.

### **Solid Waste Information System (SWIS)**

The CIWMB maintains a Solid Waste Information System (SWIS) database that contains information on solid waste facilities, operations, and disposal sites throughout

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<sup>2</sup> Title 27 CCR, Section 21190(g) - All on site construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed in accordance with the following, or in accordance with an equivalent design which will prevent gas migration into the building, unless an exemption has been issued:

- (1) a geomembrane or equivalent system with low permeability to landfill gas shall be installed between the concrete floor slab of the building and subgrade;
- (2) a permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches shall be installed between the geomembrane and the subgrade or slab;
- (3) a geotextile filter shall be utilized to prevent the introduction of fines into the permeable layer;
- (4) perforated venting pipes shall be installed within the permeable layer, and shall be designed to operate without clogging;
- (5) the venting pipe shall be constructed with the ability to be connected to an induced draft exhaust system;
- (6) automatic methane gas sensors shall be installed within the permeable gas layer, and inside the building to trigger an audible alarm when methane gas concentrations are detected; and
- (7) periodic methane gas monitoring shall be conducted inside all buildings and underground utilities in accordance with Article 6, of Subchapter 4 of this chapter (section 20920 et seq.).

the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. This data is available online at <http://www.ciwmb.ca.gov/SWIS/>.

### 1.2.3 Formerly Used Defense Sites (FUDS)

FUDS are real properties that were under the jurisdiction of the Secretary of Defense and owned by, leased by, or otherwise possessed by the United States. FUDS are located throughout the United States and in many cases the ownership of these properties have been transferred to private individuals, corporations, state and local governments, federal agencies, and tribal governments. FUDS include, but are not limited to:

- Hazardous, toxic and radioactive waste (HTRW);
- Military munitions including munitions constituents;
- Containerized HTRW;
- Building demolition and debris removal; and
- Potentially responsible party sites (Government shares burden with private entity).

USACE catalogs all FUDS properties in their site inventory<sup>3</sup>, which details property locations, property number, and status of potentially hazardous findings. Once the property is confirmed as being formerly used by a defense agency, it is entered into the FUDS inventory. If contamination resulting from past Defense practices exists, an investigation must be conducted to determine the extent of the contamination and the appropriate response. Once these two phases are completed a cleanup process will begin to reduce the risk to human health and the environment, or to improve public safety. Cleanup activities are accomplished based on priority—sites posing the greatest risks are addressed first.

There are approximately 146 FUDS in San Diego County including FUDS within incorporated cities. Some of these FUDS, whose history dates back to World War II, were military camps which included troop training and bombing ranges. Many FUDS have potential hazardous waste contamination problems such as disposal areas and leaking underground storage tanks. Other FUDS utilized practice rounds for training, and some FUDS used live munitions and explosives, known collectively as ordnance and explosives, or OE. The live munitions that were fired but did not detonate are known as unexploded ordnance, or UXO. The UXO that remain on FUDS properties today pose the greatest safety hazard to the public, if they are disturbed. Records for FUDS show that after the military used the property for military exercises an OE sweep was usually done and the property was then released for private and public use. However, history has shown that the OE sweeps were not completely effective and many OE and UXO remain on FUDS sites.

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<sup>3</sup> Available online at <http://hq.environmental.usace.army.mil/programs/fuds/fudsinv/fudsinv.html>



The USACE has been designated by the Department of Defense to investigate and remediate FUDS properties; however, limited funding has resulted in a backlog of sites awaiting site investigation and remediation. Therefore, as development and construction is proposed on FUDS sites with a risk of OE, careful safety planning is necessary to minimize risks. The options for addressing remediation of FUDS includes obtaining a RCRA Emergency Permit for situations when UXO is unexpectedly found and must be Blown in Place or obtaining approval of a Removal Action Workplan/Remedial Action Plan (RAW/RAP) to remediate the site. The California H&SC, Division 20, Chapter 6.8, section 25358.9 provides for exemptions from RCRA permit requirements if the removal action activities are incorporated into a RAW/RAP. The RAW/RAP is typically used when it is highly probable that UXO will be encountered and Blown in Place. In the State of California, "Blown in Place" is considered Treatment of a Hazardous Waste pursuant to the RCRA (CCR, Title 22, Section 66261.23). A RAW/RAP must be approved by the DTSC and satisfy the requirements of the California H&SC, Division 20, Chapter 6.8, section 25356.1(h)(3).

#### **1.2.4 Historic Agriculture**

Agricultural activities include the application of fertilizers, herbicides, and pesticides. Soils contaminated by past agricultural activities are a growing concern, generally because of land use changes involving proposed housing developments on former agricultural lands. Investigation of suspected pesticide contamination on properties proposed for development typically includes soil sampling in areas where materials were stored, handled, and mixed in addition to identifying the historical crops grown, pesticides applied and the methods of application. The investigation and any remedial actions related to pesticide contamination focuses on the elimination of human or environmental exposure. A complicated issue relative to pesticide-contaminated sites is the definition of a hazardous waste. Even though the concentrations in soil may exceed the Title 22 levels for a hazardous waste, legally applied pesticides, and the resulting residues in soil, are not regulated as hazardous waste unless transported off the subject property (California H&SC Section 25117). Constituents of concern at former agricultural sites include organochlorine pesticides and metals which may pose a human health risk.

#### **1.2.5 Petroleum**

Petroleum hydrocarbons are the most commonly used group of chemicals in society today. Petroleum hydrocarbons encompass a wide range of compounds including, but not limited to, fuels, oils, paints and non-chlorinated solvents. These compounds are used in all facets of modern life and can cause soil and groundwater contamination if not properly handled.

#### **Underground Storage Tanks (UST)**

An underground storage tank (UST) is defined by law as "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground" (exceptions apply). USTs are common sources of petroleum contamination into soils

and groundwater and the presence of such contamination is typically identified during removal of USTs. Leaking USTs can result in vapor intrusion from Volatile Organic Compounds (VOC) and benzene into homes when chemicals seep down into the soil and groundwater and travel through soil as vapor. These vapors may then move up through the soil into nearby buildings through cracks in the foundation, contaminating indoor air. While vapor intrusion is uncommon, it should be considered when there is a known source of soil or groundwater contamination nearby.

DEH oversees the inspection, monitoring, and plan review of all UST facilities. Two divisions within DEH are responsible for these functions. The HMD performs annual inspections of all regulated USTs, plan review for new installation, repair, upgrade, and closure of USTs. The DEH Land and Water Quality Division (LWQD) is responsible for the inspections of all UST closures, the review of post tank removal workplans, all sampling and analyses, and makes the determination whether a release had occurred and whether further site assessment is required. San Diego County Code, Title 6, Division 8, Chapter 10, Underground Storage of Hazardous Substances, gives DEH the authority to inspect all regulated USTs in San Diego County. Additional information about DEH's UST program is available in Section 2 of DEH's Site Assessment and Mitigation Manual.<sup>4</sup>

### **1.2.6 Hazardous Building Materials**

According to the State and Federal Occupational Safety and Health Administration (OSHA), hazardous chemicals are chemicals that would be a risk to employees, if there is exposure in the workplace. Two hazardous substances commonly encountered during construction and demolition activities are lead-based paint (LBP) and asbestos containing materials (ACM).

#### **Lead Based Paint (LBP)**

Lead is a highly toxic metal that was used up until 1978 in paint and other products found in and around our homes. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Lead exposure is most common in younger children because they are more likely to absorb lead than adults and are more susceptible to its harmful effects. Research suggests that the primary sources of lead exposure for most children are:

- deteriorating lead-based paint;
- lead contaminated dust; and
- lead contaminated residential soil.

LBP has been banned since 1978, but many older structures still have this paint on walls, woodwork, siding, windows, and doors. Construction and demolition workers can be exposed to lead contamination by cutting, scraping, sanding, heating, burning, or blasting LBP from building components, metal bridges, pavement striping, and metal storage tanks. In addition to exposure to workers, LBP debris or dust can also make its

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<sup>4</sup> Available online at [http://www.sdcounty.ca.gov/deh/lwq/sam/manual\\_guidelines.html](http://www.sdcounty.ca.gov/deh/lwq/sam/manual_guidelines.html).

way into soil, potentially contaminating surface waters. Lead contaminated soil can be concentrated in the soils around structures, particularly if paint removal or scraping has occurred over the years. Lead poisoning is a serious human health threat and is especially damaging to young children. It can cause anemia, reproductive disorders, and damage to the kidney, liver, and brain. Lead is absorbed into the bloodstream, soft tissue, and bones and teeth, where it breaks down extremely slowly (from 50 days to 50 years).

### **Asbestos Containing Materials (ACMs)**

Asbestos is a term used to describe naturally occurring incombustible minerals that were formed millions of years ago when heat, pressure, and chemical activity changed the physical and chemical characteristics of pre-existing rock. Unlike other minerals, which consist of tightly bound crystals, asbestos minerals are characterized by the presence of densely packed fibrous bundles.

Asbestos was used extensively in the United States, especially from the 1940s until the late 1970s. During World War II, enormous quantities of asbestos were used in shipbuilding and other industries. Following the war and until the late 1970s, asbestos was widely used in buildings for fireproofing, thermal, and acoustical insulation, condensation control, and decoration. By the 1970s, asbestos had become an integral component of approximately 3,600 commercial products. After 1980, health hazards associated with asbestos exposure became widely recognized, and its use largely discontinued. It has been estimated that approximately 30 million tons of asbestos have been used in the construction and manufacturing industries since the early 1900s. ACMs are commonly found in:

- Insulation (blown, rolled, and wrapped);
- Resilient floor covering (tiles);
- Asbestos cement products;
- Asphalt roofing products;
- Popcorn/acoustic ceilings;
- Ceiling tiles;
- Furnaces and air ducts;
- Insulation inside fuse boxes and old wire insulation; and
- Shingles and siding.

Asbestos can cause a variety of health issues; therefore it is strictly regulated by both USEPA, CalEPA and CalOSHA. Although asbestos is usually safe when it is undisturbed and the ACMs are in good condition, once disturbed (such as during remodeling or demolition) the fibers can become airborne. The USEPA has determined that there is no “safe” exposure level to asbestos. Asbestos fibers can be inhaled and remain in the lungs or travel to the lining of the lungs and abdominal cavity. Diseases caused by asbestos may not develop for 15-40 years. The risk of disease depends upon the intensity and duration of exposure and becomes worse if you smoke. Inhaling asbestos fibers can cause the following diseases:

- Asbestosis: A serious, chronic, non-cancerous lung disease which causes shortness of breath and scarring of the lungs. There is no effective treatment for asbestosis. The disease is usually disabling and can be fatal.
- Mesothelioma: A rare cancer of the thin membranes lining the lungs, chest and abdominal cavity. This type of cancer is always fatal.
- Lung Cancer: Smoking significantly increases the risk of lung cancer by up to 90 times if exposed to asbestos. Lung cancer causes the greatest number of deaths related to asbestos exposure.

The Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP), promulgated under the Clean Air Act, is the regulation most commonly applied to the construction industry. Under NESHAP, some types of ACMs are regulated, while others are not subject to special disposal requirements. Friable ACMs are able to be crumbled under hand pressure and include sprayed-applied fireproofing or insulation. Friable ACMs are always regulated under NESHAP when they are disturbed during demolition or renovation. Non-Friable ACMs are either Category 1 or Category 2. Category 1 Non-Friable ACMs are not regulated ACMs and do not need to be removed prior to demolition or renovation unless they are subjected to sanding, grinding, cutting or abrading, are in poor condition and friable, or if they will be burned. Category 2 Non-Friable ACMs, which includes asbestos cement, must be evaluated on a case-by-case basis. If these materials are likely to be crushed, pulverized, or reduced to powder during demolition or renovation, they must be removed prior to project start or treated as regulated ACM.

Friable asbestos wastes are regulated as hazardous waste (CCR, Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24) and must be transported by a licensed hazardous waste hauler and disposed of in an appropriate landfill.

Demolition or renovation operations that involve asbestos-containing materials must conform to San Diego Air Pollution Control District (SDAPCD) Rules 361.140 – 361.156. To ensure that proper procedures are followed to control the emissions of asbestos into the atmosphere, the SDAPCD must be notified in writing at least 10 days in advance of any demolition and 10 days in advance of any demolition that exceeds threshold amounts (excludes residential buildings with four or fewer dwelling units), regardless of whether asbestos is present or not. Additional information and forms for submitting the required notification are available at <http://www.sdapcd.org/comply/asb/asbestos.html>.

### **1.2.7 Other Contamination**

A variety of historical land uses and conditions could result in site contamination, representing potential hazards to humans and the environment when new land uses are proposed on those lands. Where a site visit identifies historical uses or site conditions that suggest a potential contamination issue, additional investigation of the site conditions will usually be required. Examples of site conditions that may indicate the presence of other sources of contamination or hazard include the presence of stained,

pitted concrete; stained soils; leaking containers/drums, distressed vegetation, and abandoned septic systems.

## **2.0 EXISTING REGULATIONS AND STANDARDS**

Numerous Federal, State, and local regulations have been enacted to prevent or mitigate damage to public health and safety and the environment from the release or threatened release of hazardous substances into the workplace or environment and to protect human health and environmental resources from potential existing site contamination. Although not a complete list of potentially applicable regulations, the regulations below are relevant to the topics of hazardous substance releases and site contamination.

### **2.1 Federal Regulations and Standards**

#### **National Environmental Policy Act<sup>5</sup>**

Federal agencies that implement the National Environmental Policy Act (NEPA) consider potential human health and environmental hazards from the potential release of hazardous substances and from hazards associated with potential onsite contamination when considering the environmental impacts of proposed federal projects.

#### **The Resource Conservation and Recovery Act (RCRA)<sup>6</sup>**

RCRA establishes a framework for national programs to achieve environmentally sound management of both hazardous and non-hazardous wastes. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources. RCRA also promotes resource recovery techniques. The Hazardous and Solid Waste Amendments of 1984 (HSWA) both expanded the scope of RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials including the export of hazardous waste, State programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste.

#### **Uniform Fire Code (UFC)<sup>7</sup>**

The UFC is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The UFC regulates the use, handling and storage requirements for hazardous materials at fixed facilities. The UFC and the Uniform Building Code (UBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include

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<sup>5</sup> As amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982)  
<http://es.epa.gov/oeca/ofa/nepa.html>

<sup>6</sup> US Code; Title 42; Chapter 82 Subchapter 3; <http://www4.law.cornell.edu/uscode/42/ch82schIII.html>

<sup>7</sup> 1997 edition published by the Western Fire Chiefs Association and the International Conference of Building Officials, and the National Fire Protection Association Standards 13 & 13-D, 1996 Edition, and 13-R, 1996 Edition.

construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the UFC employs a permit system based on hazard classification.

### **Chemical Accident Prevention Provisions<sup>8</sup>**

The provisions listed under Part 68 of the Code of Federal Regulations sets forth the list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State accidental release prevention programs approved under Section 112(r). The California Accidental Release Prevention (CalARP) Program described below is the State adaptation of this Federal regulation. The list of federally regulated substances and federally regulated flammable substances and their threshold quantities can be accessed online from the State's Office of Emergency Services' website, <http://www.oes.ca.gov>.

### **The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) of 1986**

On October 17, 1986, the President of the United States signed into law SARA. This act amended the already existing CERCLA law which was also known as "Superfund." SARA reflected EPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA:

- stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites;
- required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations;
- provided new enforcement authorities and settlement tools;
- increased State involvement in every phase of the Superfund program;
- increased the focus on human health problems posed by hazardous waste sites;
- encouraged greater citizen participation in making decisions on how sites should be cleaned up; and
- increased the size of the trust fund to \$8.5 billion.

The law authorizes two kinds of response actions: (1) short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response and (2) long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL) found online at <http://www.epa.gov/superfund/sites/npl/npl.htm>.

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<sup>8</sup> 40 Code of Federal Regulations, Part 68, Chemical Accident Prevention Provisions  
<http://cfr.law.cornell.edu/cfr/cfr.php?title=40>

## **Emergency Planning Community Right-to-Know Act (EPCRA)**

The EPCRA was included under the SARA law and is commonly referred to as SARA Title III. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which more than 2,000 people suffered death or serious injury from the accidental release of methyl isocyanate. To reduce the likelihood of such a disaster in the United States, Congress imposed requirements on both states and regulated facilities. EPCRA establishes requirements for Federal, State and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR 355 Appendix A). The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the CalARP.

## **United States Environmental Protection Agency, Region 9 Preliminary Remediation Goals**

Preliminary Remediation Goals (PRGs) are tools for evaluating and cleaning up contaminated sites. They are risk-based concentrations that are intended to assist risk assessors and others in initial screening-level evaluations of environmental measurements. The PRGs are Agency guidelines, not legally enforceable standards. They are used for site "screening" and as initial cleanup goals, but are not *de facto* cleanup standards.

## **2.2 State Regulations and Standards**

### **California Environmental Quality Act (CEQA)<sup>9</sup>**

CEQA requires lead agencies to consider the potential impacts related to the proposed transport, use, disposal, or release of hazardous substances, particularly in areas where children or other sensitive receptors may be present. CEQA also requires consideration of the location of the project in relation sites with known or potential contamination that could cause an adverse effect to humans or the environment either directly or indirectly.

### **The California Education Code (CEC)<sup>10</sup>**

On January 1, 2000, two new laws affecting proposed school sites became effective: Assembly Bill (AB) 387 (Wildman) and Senate Bill (SB) 162 (Escutia). The bills amended the CEC sections 17070.50 and 17268, and added sections 17072.13, 17210, 17210.1, 17213.1, 17213.2, and 17213.3. The CEC requires that the DTSC be involved in the environmental review process for the proposed acquisition and/or construction of school properties that will utilize state funding. The intent of regulation is to address concerns over school site properties that are or may be contaminated by hazardous materials and may

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<sup>9</sup> Public Resources Code 21000-21178; CCR, Guidelines for Implementation of CEQA, Appendix G, Title 14, Chapter 3, §15000-15387, [http://ceres.ca.gov/topic/env\\_law/ceqa/guidelines/](http://ceres.ca.gov/topic/env_law/ceqa/guidelines/)

<sup>10</sup> <http://www.leginfo.ca.gov/calaw.html>

pose a health threat to children and school faculty. The CEC requires a Phase I ESA be completed prior to acquiring a school site or engaging in a construction project. Depending on the outcome of the Phase 1 ESA, a Preliminary Environmental Assessment (PEA) and remediation may be required.

The County of San Diego has received comments from the DTSC on certain development projects that would involve children being present; such as day care centers and preschools. The DTSC has made it a practice to comment on all projects that involve congregating children even if they do not propose to utilize state funding with the reasoning that the intent of the bills is to protect the health and safety of children. Although the County is not required to strictly adhere to the requirements of the CEC on projects that do not utilize state funding, all projects involving sensitive receptors such as children should provide adequate documentation and evidence that the project site will not present an adverse human health or environmental effect. The health and safety of children will be protected through the application of requirements comparable to the requirements of the CEC, such as requiring soil testing for potential contamination and remediation, if necessary.

Considering the strict requirements for school safety set by the CEC for school site selection, it is important that where schools already exist or are planned, that new land uses are not permitted that would represent a significant hazard to the safety of children. Prior to the siting of a school, the local education agency is required to consult with local officials to identify facilities within a quarter mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes. Where such facilities are present within one-quarter mile of a proposed school site, the local education agency is required to make a finding either that no such facilities were identified; or that they do exist, but the health risks do not or will not constitute an actual or potential endangerment of public health at the site or that corrective measures will be taken that will result in emissions mitigation to levels that will not constitute endangerment.

### **The California H&SC, Hazardous Materials Release Response Plans and Inventory**<sup>11</sup>

Two programs found in the California H&SC Chapter 6.95 are directly applicable to the CEQA issue of risk due to hazardous substance release. In San Diego County, these two programs are referred to as the Hazardous Materials Business Plan program and the CalARP program. The County of San Diego DEH Hazardous Materials Division (HMD) is responsible for the implementation of the HMBP program and the CalARP program in San Diego County. The HMBP and CalARP Program provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a HMBP or RMP is required pursuant to the regulation. Congress requires the USEPA Region 9 to make RMP information available to the public through USEPA's Envirofacts Warehouse at <http://www.epa.gov/enviro/>.

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<sup>11</sup> California H&SC, Division 20, Chapter 6.95 <http://www.leginfo.ca.gov/calaw.html>



## **The California H&SC, Hazardous Waste Control** <sup>12</sup>

The Hazardous Waste Control Act regulates the generation, treatment, storage and disposal of hazardous waste. Hazardous Waste is any material or substance that is discarded, relinquished, disposed or burned, or for which there is no intended use or reuse, and the material or substance causes or significantly contributes to an increase in mortality or illness; or the material or substance poses a substantial present or potential hazard to human health or the environment. These materials or substances include: spent solvents and paints (oil and latex), used oil, used oil filters, used acids and corrosives, unwanted or expired products (pesticides, aerosol cans, cleaners, etc.). If the original material or substance is labeled danger, warning, toxic, caution, poison, flammable, corrosive or reactive, the waste is very likely to be hazardous.

## **The California H&SC, Underground Storage Tank (UST) Regulations** <sup>13</sup>

Chapter 6.7 of the H&SC outlines the requirements for USTs, identifies requirements for corrective actions, cleanup funds, liability, and the responsibilities of owners and operators of USTs.

## **California Human Health Screening Levels (CHHSLs or “Chisels”)**

The CHHSLs or “Chisels” are concentrations of 54 hazardous chemicals in soil or soil gas that the CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of CalEPA, and are contained in their report entitled “Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil”. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in a million ( $10^{-6}$ ) and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/industrial CHHSLs) at the site.

## **2.3 Local Regulations, Programs and Standards**

### **San Diego County Air Pollution Control District**

The mission of the San Diego County Air Pollution Control District is to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement, and develop and implement cost-effective programs meeting State and Federal mandates, considering environmental and economic impacts. The Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subpart M is enforced locally under San Diego Air Pollution Control District Regulation XI, Subpart M - Rule 361.145). This regulation

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<sup>12</sup> California H&SC, Division 20, Chapter 6.5. <http://www.leginfo.ca.gov/calaw.html>

<sup>13</sup> California H&SC, Division 20, Chapter 6.7. <http://www.leginfo.ca.gov/calaw.html>

requires the owner or operator of a demolition or renovation to submit an Asbestos Demolition or Renovation Operational Plan<sup>14</sup> at least 10 working days before any asbestos stripping or removal work begins (such as, site preparation that would break up, dislodge or similarly disturb asbestos containing material).

### **San Diego County Board Policy I-132 Valley Center Mitigation Policy<sup>15</sup>**

This policy was developed to ensure that the mitigation outlined in the Environmental Impact Report (EIR) for the Valley Center Septic Moratorium/Board of Supervisors Policy I-78 Amendment is enforced. One aspect of this Board Policy includes a requirement to investigate for the existence of contaminated soils or hazardous operations in the area covered by the EIR. Specifically, the policy states, "A hazardous materials assessment shall be conducted by a certified entity for any parcel proposed for development with the potential for the existence of contaminated soils or hazardous materials such as parcels historically utilized for agricultural operations. The purpose of the hazardous materials assessment would be to identify the presence/absence of hazardous materials and identify remediation measures that shall be implemented prior to development of the project site". A map of the area covered by policy I-132 and a copy of the Board of Supervisors Policy can be found in Attachment A.

### **County of San Diego Consolidated Fire Code<sup>16</sup>**

The County of San Diego is unique within the State of California in having 17 fire protection districts within its boundaries. For the purposes of prescribing regulations in the unincorporated area of the County of San Diego, the applicable fire code is known as the County Fire Code and includes the Consolidated Fire Code and adopts by reference the California Fire Code, 2001 edition (CCR T-24 part 9). The Consolidated Fire Code consists of local fire protection district ordinances that have modified the Fire Code portion of the State Building Standards Code and any County modification to the Fire Districts' amendments. The purpose of the Code is for the protection of the public health and safety which includes permit and inspection requirements for the installation, alteration or repair of new and existing fire protection systems, and penalties for violations of the code. The Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems and vegetation management. Additionally, the fire code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases.

### **San Diego County General Plan, Public Facilities Element (Part XII)<sup>17</sup>**

Hazardous substances are addressed in the Public Facilities Element of the General Plan in the discussion of Fire Protection and Emergency Services. Fire Protection and Emergency Services are charged with the emergency response to hazardous materials incidents through the Hazardous Incident Response Team (HIRT).

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<sup>14</sup> Notice of Intention <http://www.sdapcd.org/comply/asb/Asbform.doc>.

<sup>15</sup> <http://www.sdcounty.ca.gov/cob/policy/>

<sup>16</sup> County H&SC §13869.7. Includes Ordinances of the 17 Fire Protection Districts as Ratified by the San Diego County Board of Supervisors.

<sup>17</sup> [http://ceres.ca.gov/planning/counties/San\\_Diego/plans.html](http://ceres.ca.gov/planning/counties/San_Diego/plans.html)

### **San Diego County, Local Enforcement Agency (LEA)**

The LEA is the lead agency required to investigate and inspect active, closed, illegal and abandoned waste disposal sites in the unincorporated County of San Diego and incorporated cities, with the exception of the City of San Diego. The LEA is responsible for inspection and permitting of active solid waste disposal sites as a certification responsibility required by the CIWMB and pursuant to their enforcement responsibilities of the CCR, Title 27, Environmental Division 2, Solid Waste Standards relating to the protection of public health, safety and the environment. The LEA, in coordination with the RWQCB and CIWMB, can review Work Plans, Site Assessment Reports, and issue no further action letters related to the remediation of burn dump sites.

### **San Diego County, Site Assessment and Mitigation (SAM) Program**

San Diego County SAM Program, within the Land and Water Quality Division of the DEH, consists of project managers, field technicians, supervisors, and support staff, whose primary purpose is to protect human health, water resources, and the environment within San Diego County by providing oversight of assessments and clean-ups in accordance with the California H&SC and the CCR. The SAM's Voluntary Assistance Program (VAP) also provides staff consultation, project oversight, and technical or environmental report evaluation and concurrence (when appropriate) on projects pertaining to properties contaminated with hazardous substances. SAM maintains an environmental assessment case listing at <http://www.co.san-diego.ca.us/deh/lwq/sam/index.html>.

### **County of San Diego, Underground Storage Tank (UST) Program**

The DEH HMD, UST Program administers and enforces Federal and State laws and regulations and local ordinances for the construction/installation, modification, upgrade, and removal of USTs in San Diego County. If contamination is discovered or likely to be present, owners or operators of USTs are required by law to report the contamination to the DEH HMD and SAM Programs and to take corrective action.

## **3.0 TYPICAL ADVERSE EFFECTS**

Typical adverse effects related to hazardous substances and existing contamination relate to the potential for site conditions, site contamination or improper handling of hazardous substances to result in adverse human or environmental effects. For example, the improper handling of ACM and LBP during building demolition may result in worker exposure to hazardous substances. Potential pathways of exposure to contaminants include direct ingestion of contaminated soils, inhalation of volatiles and fugitive dusts, potential explosion hazards associated with landfill gas, ingestion of contaminated ground water caused by migration of chemicals through soil to an underlying potable aquifer, dermal absorption, ingestion of homegrown produce that has been contaminated via plant uptake, and migration of volatiles into basements and slabs (USEPA, 1996). Potential exposure to contaminants can occur to construction workers during site development and to the residents or workers that occupy the ultimate land use approved on the site. Similarly, the siting of a facility that could result in a

significant hazard to sensitive land uses in the event of a hazardous substance release could represent a potentially significant impact, particularly for facilities that handle certain highly toxic substances near schools or day care facilities.

#### 4.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

The following significance guidelines should guide the evaluation of whether a significant impact related to hazardous substances and existing contamination will likely occur as a result of project implementation. A project will generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect related to hazardous substances and existing contamination, absent specific evidence of such an effect:

##### 4.1 Hazardous Substance Handling

- a. *The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC and the project will not be able to comply with applicable hazardous substance regulations.*
- b. *The project is a business, operation, or facility that would handle regulated substances subject to CalARP RMP requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility<sup>18</sup>*

In general, a project that proposes hazardous substances subject to the stated regulations, should not exceed these significance guidelines because in doing so, it would be in conflict with regulation designed to protect human health and the environment. A project would be required to either redesign so that it can demonstrate compliance with the applicable regulation or the project would be denied based on the inability to comply with existing hazardous substance regulation and the resulting potential human health and environmental risks associated with non-compliance.

Guideline 4.1.a addresses projects that will handle hazardous substances as part of a business. This guideline is based on compliance with existing hazardous substance regulations. The applicable regulations will differ depending on the type of use proposed

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<sup>18</sup> This guideline addresses accidental release; hazardous air emissions are addressed in the Guidelines for Determining Significance for Air Quality available online at <http://www.sdcountry.ca.gov/dplu/Resource/docs/3~pdf/AQ-Guidelines.pdf>. The determination that a release could affect children's health may either be assumed or verified through the preparation of an offsite consequence analysis, as detailed in Section 5.1.

and the types and amounts of substances proposed, however they may include the California H&SC, Chapter 6.95 Hazardous Materials Business Plan Requirements, California H&SC Chapter 6.5 Hazardous Waste Management Requirements, California H&SC Chapter 6.7 Underground Storage Tank Requirements, Hazardous Substance Fire Code regulation, regulatory requirements of the CIWMB, SDAPCD or other agency standards. Given the complexity of hazardous substance regulation and the numerous agencies that have regulatory enforcement responsibilities over projects that handle hazardous substance, applicable regulations will vary on a project-by-project basis.

Guideline 4.1.b addresses the potential for facilities that handle specified quantities of certain regulated substances to represent a significant hazard to children when located within one-quarter mile of a school or day care. Regulated substances are chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable or explosive. Regulated substances are subject to CalARP RMP requirements when handled at the threshold quantities listed in Tables 1, 2 and 3 of the CCR, Title 19, Section 2770.5. The one-quarter mile distance is used as the screening criteria based on its reference in the CEQA Guidelines, Appendix G, VII.c) and in the CEC Section 17213, in relation to evaluating site safety in association with school site selection.

#### **4.2 Projects with Existing Onsite Contamination**

- a. The project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5<sup>19</sup> or is otherwise known to have been the subject of a release of hazardous substances, and as a result the project may result in a significant hazard to the public or the environment.***
- b. The project proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and as a result, the project would create a significant hazard to the public or the environment.<sup>20</sup>***
- c. The project is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash); and as a result, the project would create a significant hazard to the public or the environment.<sup>21</sup>***

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<sup>19</sup> Includes the EnviroStor database; the List of Leaking Underground Storage Tank Sites by County and Fiscal Year from Water Board GeoTracker database; the list of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit; the list of "active" Cease and Desist Orders (CDO) and Cleanup Abatement Orders (CAO) from Water Board; list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the H&SC, identified by DTSC. See <http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm>.

<sup>20</sup> Hazards near landfills include potential gas migration into structures and migration of landfill gas via subsurface utilities that act as a conduit for landfill gas, however other proposed uses could also be adversely affected by landfill gas.

<sup>21</sup> Hazards associated with being located near a burnsite include the potential for soils contaminated with

- d. The project is proposed on or within 1,000 feet of a FUDS and it has been determined that it is probable that munitions or other hazards are located onsite that could represent a significant hazard to the public or the environment.**
- e. The project could result in human or environmental exposure to soils or groundwater that exceed EPA Region 9 PRG's, Cal/EPA CHHSL's, or Primary State or Federal Maximum Contaminant Levels (MCLs) for applicable contaminants and the exposure would represent a hazard to the public or the environment.<sup>22</sup>**
- f. The project will involve the demolition of commercial, industrial or residential structures that may contain ACM, LBP and/or other hazardous materials and as a result, the project would represent a significant hazard to the public or the environment.<sup>23</sup>**

Guideline 4.2.a addresses the requirement that information about the location of hazardous materials release sites, included on the list prepared pursuant to Government Code section 65962.5 be disclosed in CEQA documents (referred to as the Cortese List). The guideline uses the Cortese list as a screening tool to identify sites that may have been subject to a release and is inclusive of other sites from other data sources (i.e. DEH SAM's Environmental Assessment Case listing) that are known to or have may have been the subject of a release. The determination that a project could result in a significant hazard to the public or the environment will typically be based on the results of a Phase I Assessment, soil testing, or other analyses.

Guideline 4.2.b addresses the potential safety risks associated with occupied land uses being located near landfills. The 1,000 foot screening guideline reflects the distance

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burn ash to migrate onsite. When a project is located near a parcel known to contain a burnsite, the DEH LEA and the DPW Solid Waste Division (for County managed site) will need to be contacted to determine the accuracy of the delineated boundaries of the burnsite and to verify whether the project could be subject to a potential hazard.

<sup>22</sup> This Guideline addresses the potential for undocumented site contamination, based on the a Phase I ESA or other similar site assessment, to represent a potentially significant impact to humans or the environment. Site contamination may have been the result of historic agriculture, petroleum spills, aerially deposited lead on lands adjacent to freeways, or other contaminated media. Where contamination may have impacted groundwater resources, reference to the Primary State or Federal MCLs is consistent with the Guideline included in the Guidelines for Determining Significance for Groundwater Resources, but is included in this document to recognize that groundwater quality can be affected by hazardous materials. The PRGs, CHHSLs, and MCLs are screening criteria and not legally enforceable standards. A project could exceed a screening level but not have a significant hazard impact, if data demonstrates that the site would not pose health or safety hazards. For example, certain chemicals such as arsenic, dioxins and furans have a very low PRG and many sites will exceed set screening levels based solely on background levels. However, depending on the levels found onsite, a hazard to the public or the environment may or may not be present.

<sup>23</sup> Buildings constructed after 1980 would not typically contain these hazardous building materials because asbestos and LBP was banned in 1978. Polychlorinated biphenyls (PCBs), found in light ballasts, transformers, and other commercial products, were banned from sale in 1979.

included in CCR Title 27 Section 21190, Postclosure Land Use which addresses requirements of construction within 1,000 feet of the boundary of any disposal area. The guideline is intended to address the potential impacts of landfill gas migration into structures designed for human occupancy and landfill gas migration that can occur via subsurface utilities. The determination of a potentially significant impact from landfill gas would be based on consultation with the DEH LEA regarding results of landfill gas monitoring. If existing data from landfill gas monitoring does not adequately demonstrate that no impact to the site from landfill gas would occur, additional landfill gas screening may be required to determine if there is a landfill gas migration issue.

Guideline 4.2.c addresses the potential risks from burnsites because certain locations in the County were historically used to burn trash and as a result, these sites may be contaminated with heavy metals and/or other contaminants. Unknown or undocumented burnsites may also exist in the County. The 250 foot screening criteria is adequate because burn ash does not typically move significantly from its source, does not produce gas, and generally does not produce impacts at a significant distance from its location. The determination that a project could result in a significant hazard to the public or the environment due to burnsite proximity is based on a review of burnsite records and consultation with the DEH LEA, DPW Solid Waste Division (if a County managed site), a Phase I ESA, soil testing, or other analyses. If it is found that the burnsite would not pose a hazard to the proposed use, then the impact would not be considered significant.

Guideline 4.2.d is included because the County of San Diego is home to several FUDS properties that may present a hazard to the public or environment. Some FUDS have been investigated by the USACE and findings are available to identify the level of risk that remains. For FUDS sites that have not been fully evaluated or where the evaluation indicates a risk to life or property due to the presence of munitions or other hazardous wastes, a potentially significant impact could occur. The determination of significance will typically be based on the results of a Phase I ESA or other assessment.

Guideline 4.2.e links the significance of site contamination to the PRGs and CHHSLs established by CalEPA. PRGs and CHHSLs are tools for evaluating and cleaning up contaminated sites. PRGs are risk-based concentrations, derived from standardized equations combining exposure information assumptions with EPA toxicity data and are considered by the EPA to be protective of humans (including sensitive groups), over a lifetime. Chemical concentrations above the PRG does not automatically trigger a response action; however, exceeding a PRG suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in a million ( $10^{-6}$ ) and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA.

Guideline 4.2.f addresses the potential release of hazardous substances that can occur during site construction and demolition. Asbestos, LBP and/or other hazardous materials such as mercury-containing switches, PCB-containing light ballasts, and transformers that

may be encountered during site development and demolition activities represent a risk to humans, if not properly handled and disposed.

## **5.0 STANDARD MITIGATION AND PROJECT DESIGN CONSIDERATIONS**

The standard mitigation and design factors for hazardous substance impacts are intended to either prevent a release of hazardous substances or to mitigate for an existing hazardous condition. Depending on whether the proposed project will handle hazardous substances or whether onsite contamination exists, Section 5.1 and Section 5.2 discuss the standard mitigation and design factors for each situation. The adequacy of incorporating one or more of the measures listed below to reduce the significance of a project's potential impact will be evaluated on a case-by-case basis.

### **5.1 Standard Mitigation and Project Design Considerations for Projects Handling Hazardous Substances**

Most projects that include the handling of hazardous substances as a project component (i.e. businesses) would not require project specific mitigation since the project would be required to comply with existing regulatory requirements related to hazardous substance handling. These regulations may include the Hazardous Materials Business Plan requirements of the HSC, Fire Code storage and containment requirements, or other applicable regulatory requirements. The regulations are intended to prevent accidental releases of hazardous substances and to minimize risks should an accident or spill occur. Through effective implementation of existing hazardous substance regulation for businesses that routinely use, transport or store hazardous substances, the potential impacts associated with accidents or releases of hazardous substances can usually be minimized.

A notable exception would include projects that would handle certain highly hazardous substances within the vicinity of a school or day care. Regulated substances subject to CalARP requirements are those substances that pose a major threat to public health and safety or the environment because they are highly toxic, flammable or explosive. Facilities that would handle regulated substances subject to CalARP and are located within one-quarter mile from a school or day care will be required to prepare a hazard assessment to determine the effects of the regulated substance on surrounding land uses in the event of a release. The hazard assessment is usually conducted through a Process Hazard Analysis and Offsite Consequence Analysis. An Offsite Consequence Analysis looks at the possible effects of a regulated substance. Computer models are used to determine what area would be impacted by a release. Both a worst-case scenario and an alternative scenario are addressed in an Offsite Consequence Analysis. The worst-case scenario assumes that the largest container holding a regulated substance releases its entire contents within 10 minutes. The atmospheric conditions are assumed to maximize the hazardous effects of a release. An alternative scenario is a much more realistic release that would happen during an accident. Typical alternative scenarios include valve failures, pipe leaks, and delivery accidents. Both scenarios are used to determine how far the released regulated substance will travel



and still be at a high enough concentration to affect human health. This concentration is called a toxic endpoint. The CalEPA Office of Environmental Health Hazard Assessment has developed a list of toxic endpoints for the most common regulated substances. EPA guidance can be found in the document titled, "Risk Management Program Guidance for Offsite Consequence Analysis"<sup>24</sup>

By identifying the offsite consequences of a release, it is possible to determine whether a school or day care in the project vicinity would be adversely affected in the event of a release. Should the Offsite Consequence Analysis identify low potential risk to the school or day care, then the results of the Offsite Consequence Analysis would need to be disclosed in the environmental document with a determination of a less than significant impact related to hazardous substance release. However, should a school or day care be located in an area that would be adversely affected in the event of a release, a potentially significant impact would need to be identified in the CEQA document, and feasible mitigation measures explored. Mitigation may include alternative site selection or incorporation of alternative technologies that reduces the risk posed by the facility or process. Facilities most commonly subject to RMP requirements in San Diego County include drinking water and water reclamation plants, power plants, and ammonia refrigeration.

### **5.1.1 Drinking Water and Water Reclamation Plants**

Facilities most commonly subject to CalARP RMP requirements in San Diego County are drinking water treatment and water reclamation plants that handle chlorine gas. Chlorine is commonly used to remove contaminants from sewage and to disinfect drinking water sources. Chlorine gas is a powerful chemical that can burn the eyes and skin, inflame the lungs, and is fatal in high concentrations. Fortunately, there are alternatives to the use of chlorine gas in drinking water and water reclamation plants that can be used as a means to mitigate a potentially significant impact. Sodium hypochlorite is a safer chemical option to replace chlorine gas in drinking water and water reclamation plants; however, it tends to significantly increase Total Dissolved Solids (TDS) in reclaimed water, which limits its use for landscape irrigation. Another option is the use of ultraviolet light, which is a physical process that breaks down disease-causing microorganisms. Initial installation costs are high, but projected operation and maintenance costs are lower than either chlorine gas or sodium hypochlorite, because no chemicals are needed.

Where a project includes a drinking water or water reclamation plant within one-quarter mile of a school or day care and either an Offsite Consequence Analysis shows that children would be adversely affected or the project proponent chooses to forego the analysis to assume the risk would occur, mitigation could include the use of a safer alternative to chlorine gas to mitigate potential adverse effects or relocating the wastewater treatment plant to a safer location.

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<sup>24</sup> Available online at [http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/oca-all.PDF/\\$File/oca-all.PDF](http://yosemite.epa.gov/oswer/ceppoweb.nsf/vwResourcesByFilename/oca-all.PDF/$File/oca-all.PDF).

## **5.2 Standard Mitigation and Project Design Considerations for Projects With Existing Onsite Contamination**

When it has been determined that a site has an existing hazardous condition through the completion of soil sampling or other environmental assessments, remediation may be required under the oversight of the DEH VAP or other applicable oversight agency such as the Regional Board or DTSC. This may include in-situ remediation of contaminated soils, capping contaminated sites, excavation and removal of contaminated soils, or other remediation measures, such as engineering controls (sub slab vapor barriers, venting systems, etc). Site specific treatment measures may be required that would be determined based on the conditions present and anticipated exposure at each site. Project design considerations to reduce adverse effects would include a variety of project conditions to ensure remediation is carried out to the satisfaction of the DEH VAP program (or other applicable oversight agency) and that human health and safety is protected during the remediation process and after the project is built.

If onsite contamination is identified, a project will be required to remediate the site prior to implementation of the proposed use. Site remediation is typically accomplished most cost effectively and efficiently when timed with site development activities. Therefore, to ensure projects carry out the required mitigation, one or more of the following conditions will typically be required of a project to ensure safe and timely site remediation occurs prior to project implementation. Examples of potential project conditions that would be applied as mitigation for onsite contamination are discussed below in Section 5.2.1 through 5.2.7.

### **5.2.1 Requirement for DEH VAP Oversight**

For projects with site contamination that requires DEH VAP oversight (or oversight from another applicable oversight agency) for remediation activities, the following project mitigation measures may apply:

1. "Prior to recordation of a Final Map, or on the Final Map, whichever comes first,  
or  
Prior to recordation of a Parcel Map, or on the Parcel Map, which ever comes first,  
or  
Prior to obtaining any building or other permit pursuant to this Major Use Permit, and prior to commencement of construction or use of the property in reliance on this Major Use Permit, the applicant shall:

Provide evidence of application to the DEH VAP Program (or other applicable oversight agency) to address onsite contamination including (*describe site condition that required remediation*). Evidence shall include the following:

- a. a copy of the accepted DEH VAP application  
([http://www.sdcounty.ca.gov/deh/lwq/sam/pdf\\_files/vap\\_app-rev.pdf](http://www.sdcounty.ca.gov/deh/lwq/sam/pdf_files/vap_app-rev.pdf));
- b. proof of payment of fees for enrollment in the DEH VAP;"

2. "Prior to use and or occupancy (for permits)  
or  
Prior to Rough Grading Sign-off (for maps)

Provide evidence that all site contamination has been remediated under the oversight of an appropriately licensed environmental professional to the satisfaction of the DEH VAP or other applicable oversight agency such as the DTSC or the RWQCB. Evidence of satisfaction of the above condition shall include a concurrence letter from the DEH VAP (or other applicable oversight agency) indicating that site remediated has been carried out in accordance with applicable regulatory requirements."

Projects with site contamination that obtain oversight from the DEH VAP (or other applicable oversight agency) may be required to prepare other plans to complete the remediation process safely and in accordance with applicable regulations. These plans would not typically be applied as a project specific condition because the requirement for DEH VAP oversight ensures that the appropriate plans and assessments will be completed based on the level of contamination and potential exposure. Other plans that may be required include, but are not limited to:

### **Health Risk Assessment**

A Health Risk Assessment is used to estimate the chance that contact with chemicals from a site will harm people now or in the future. It is a risk based assessment based on the potential for exposure and a toxicity assessment, which together allow for risk characterization to define the risk of cancer or other illnesses in the general population.

### **Community Health and Safety Plan**

Depending on the level of site contamination and potential risks for human exposure, a Community Health and Safety Plan may be required to promote public health and safety during corrective actions. The primary objective of a Community Health and Safety Plan is to promote a safe and healthy environment for the public by minimizing community exposures to hazards from site activities and/or releases, which may migrate offsite and by assuring community awareness. The 'community' refers to all persons not conducting specific activities related to site remediation, such as construction workers and other persons who could be affected by the clean up activities. All persons conducting onsite activities are required to be familiar with the content and responsibilities described in the Community Health and Safety Plan.

### **5.2.2 Soil Management Plan**

For projects with no visible site contamination identified, but where grading could uncover buried contamination, underground storage tanks, or other unknown contamination or hazards, a project condition to prepare a Soil Management Plan may be required to ensure proper procedures are followed to identify unknown or buried hazards and to ensure all hazardous conditions found during site development activities

are properly handled. The recommendation for a soil management plan is typically included in a Phase I assessment based on the nature of historical uses and likelihood of encountering unknown or buried hazards. The requirement to prepare a soil management plan would become a project condition, for example:

“Prior to issuance of a grading permit, a Registered Engineer or Professional Geologist shall complete a Soil Management Plan that provides guidance and procedures for identifying contaminated soils, segregating and sampling soil generated during demolition and construction activities, public access, and defining soil disposal requirements for soil transported offsite. The plan shall specify that if contamination is encountered during grading, remediation must be carried out under the oversight of the DEH VAP program. Evidence of satisfaction of the above condition shall consist of the following:

- a. A letter from the DEH VAP (or other applicable oversight agency) providing concurrence on the content of the plan; and
- b. A letter from a Registered Engineer or Professional Geologist indicating that they will provide appropriate oversight to ensure implementation of the plan during site development activities.”

### **5.2.3 Hazardous Building Materials Survey and Abatement**

If hazardous building materials could be disturbed during project development (e.g. from building demolition), surveys may be required to determine the location, presence and quantities of these materials. Proper handling and treatment or disposal of hazardous building materials is essential to minimize risks during site development. Asbestos and lead based paint are two commonly encountered hazardous building materials, addressed specifically below.

#### **Asbestos Survey Requirement**

If structures located onsite with the potential to contain asbestos containing materials will be renovated or demolished, the project would be conditioned to require the following:

“Prior to issuance of a building permit that includes demolition of onsite structures and prior to commencement of demolition or renovation activities, a facility survey shall be performed to determine the presence or absence of ACMs located in *(describe the location of buildings onsite)*. Suspect materials that will be disturbed by the demolition or renovation activities shall be sampled and analyzed for asbestos content, or assumed to be asbestos containing. The survey shall be conducted by a person certified by Cal/OSHA pursuant to regulations implementing subdivision (b) of Section 9021.5 of the Labor Code, and shall have taken and passed an EPA-approved Building Inspector Course. Should regulated asbestos containing materials be found, it shall be handled in compliance with the San Diego County Air Pollution Control District Rule 361.145 – Standard for Demolition and Renovation. Evidence of completion of the facility survey shall consist of a signed, stamped statement from the person certified to complete the facility survey indicating that the survey has been completed and that

either regulated asbestos is present or absent. If present, the letter shall describe the procedures that will be taken to remediate the hazard.”

### **Lead Survey Requirement**

If structures with the potential to contain hazardous quantities of lead will be renovated or demolished, the project would be conditioned to require the following:

“Prior to issuance of a building permit that includes demolition of onsite structures and prior to commencement of demolition or renovation activities, a survey shall be performed by a California Department of Health Services (DHS) certified lead inspector/risk assessor to determine the presence or absence of lead based paint (LBP) located in *(describe the location of buildings onsite)*. All lead containing materials scheduled for demolition must comply with applicable regulations for demolition methods and dust suppression. Lead containing materials shall be managed in accordance with applicable regulations including, at a minimum, the hazardous waste disposal requirements (Title 22 California Code of Regulations [CCR] Division 4.5), the worker health and safety requirements (Title 8 California Code of Regulations Section 1532.1), and the State Lead Accreditation, Certification, and Work Practice Requirements (Title 17 CCR Division 1, Chapter 8).”

### **5.2.4 Underground Storage Tank (UST) Removal/Closure**

If one or more USTs are located onsite that will no longer be used as part of the project, they must be closed under permit from the DEH. The following project condition may be required: “Prior to approval of a grading permit the underground storage tank(s) located *(include description of UST location(s))*, must be closed under permit and approval from the DEH.”

### **5.2.5 Septic System closure**

If septic systems are located onsite that will no longer be used as part of the project, they must be removed under permit from the DEH. The following project condition may be required: “Prior to approval of a grading permit, the septic system(s) located *(include description of septic system location(s))*, must be removed under permit and approval from the DEH.”

### **5.2.6 Burnsite Post Closure Maintenance and Monitoring Plan**

For projects proposed on a site contaminated with burn ash that proposes the capping and consolidation of burn ash (burn ash would remain onsite), a Post Closure Maintenance and Monitoring Plan will be required. The LEA will conduct ongoing monitoring and inspection of the cap to ensure that it continues to function properly and is not being eroded. A long-term Post Closure Maintenance and Monitoring Plan will be required per CCR Title 27, 21830 to ensure the site is maintained in an appropriate manner. The LEA will also be required to continue routine inspections of the site.

## 5.2.7 Projects Located Near Landfills

Where a project is proposed within 1,000 feet of a landfill and a potential hazard related to gas migration into structures has been identified, one or more of the following project design and mitigation measures may be incorporated to reduce the significance of the effect:

1. installation of a geomembrane or equivalent system with low permeability to landfill gas between the concrete floor slab of the building and subgrade;
2. installation of a permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches between the geomembrane and the subgrade or slab;
3. utilization of a geotextile filter to prevent the introduction of fines into the permeable layer;
4. installation of perforated venting pipes within the permeable layer, designed to operate without clogging;
5. installation of a venting pipe that can be connected to an induced draft exhaust system;
6. installation of automatic methane gas sensors within the permeable gas layer, and inside the building to trigger an audible alarm when methane gas concentrations are detected; and
7. periodic methane gas monitoring inside all buildings and underground utilities in accordance with Article 6, of Subchapter 4 of this chapter (section 20920 et seq.).

The DEH LEA will provide technical oversight in the review and approval of specific design measures intended to mitigate for impacts related to gas migration. In addition, if active engineering controls (methane detectors, routine interior methane monitoring, etc.) are required for gas mitigation, routine reporting to the LEA will be required (reporting of any methane detector alarms, monitoring exceedance, actions taken) and a long term monitoring and maintenance plan will be required.



## 6.0 REFERENCES

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**[Attachment A]** Valley Center Mitigation Area Policy I-132 and Map

<b>COUNTY OF SAN DIEGO</b>		
<b>BOARD OF SUPERVISORS POLICY</b>		
<b>Subject</b>	<b>Policy Number</b>	<b>Page</b>
Valley Center Mitigation Policy	I-132	1 of 4
<p>Purpose</p> <p>To ensure that the feasible mitigation measures identified in the Environmental Impact Report for the Valley Center Septic Moratorium/Board of Supervisors Policy I-78 Amendment project are enforceable.</p> <p><u>Background</u></p> <p>On June 16, 1999, the Board of Supervisors adopted revisions to the County Code of Regulatory Ordinances that lifted the moratorium on septic systems in the Central Valley area in the vicinity of Valley Center enacted in 1980 by the adoption of Ordinance No. 5900. This action was addressed in an Environmental Impact Report (ER 98-08-023) certified by the Board of Supervisors on June 16, 1999.</p> <p>The Environmental Impact Report determined that this project would have significant environmental impacts and identified mitigation measures to reduce these impacts to below a level of significance. The California Environmental Quality Act requires that mitigation measures be fully enforceable through permit conditions, agreements or other measures. The Valley Center Septic Moratorium/Board of Supervisors Policy I-78 Amendment project includes no permits or agreements in which the mitigation measures could be included as conditions. Therefore, it was necessary to have another mechanism to ensure that the mitigation measures would be implemented in the future.</p> <p><u>Policy I</u></p> <p>It is the policy of the Board of Supervisors that:</p> <p>All future discretionary permits, including but not limited to Site Plan review, Tentative Maps, Tentative Parcel Maps, Major and Minor Use Permits, Specific Plans, Specific Plan Amendments, etc., issued for projects in the area shown on the attached map shall include as Conditions of Approval the following mitigation measures, when applicable, to the proposed project:</p> <ol style="list-style-type: none"><li>1. Noise<ol style="list-style-type: none"><li>a. The construction hours for construction activities on sites adjacent to residences, schools and other noise-sensitive uses shall be reviewed and adjusted to avoid construction-generated noise in excess of County standards for interior (CNEL = 45 dBA) and exterior (CNEL = 60 dBA) that may impact the adjacent noise-sensitive uses.</li></ol></li></ol>		

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- b. Construction routes shall be established where necessary and practicable to avoid construction-generated noise in excess of County standards for interior (CNEL = 45dBA) and exterior (CNEL = 60 dBA) that may impact the adjacent noise-sensitive uses.
    - c. Setbacks from roadways or granting of a Noise Protection Easement shall be required over proposed development sites when existing or future traffic or stationary noise will exceed County standards for interior (CNEL = 45dBA) and exterior (CNEL = 60 dBA). Development within the Noise Protection Easement can be allowed upon approval of a grading permit or Site Plan showing, to the satisfaction of the Director of Planning and Land Use, that traffic noise and/or stationary noise impacts will not exceed the County standards for interior (CNEL = 45dBA) and exterior (CNEL = 60 dBA) that may impact the proposed noise-sensitive uses.
- 2. Hazards
  - a. A hazardous materials assessment shall be conducted by a certified entity for any parcel proposed for development with the potential for the existence of contaminated soils or hazardous materials such as parcels historically utilized for agricultural operations. The purpose of the hazardous materials assessment would be to identify the presence/absence of hazardous materials and identify remediation measures that shall be implemented prior to development of the project site.
- 3. Cultural Resources
  - a. Any area proposed for development that has not been previously surveyed or has not been surveyed within the last five years and in the opinion of a qualified professional has a potential for cultural resources shall be surveyed to identify the presence/absence of cultural resources. All identified prehistoric sites that will be impacted by proposed development shall be tested under the County of San Diego Resource Protection Ordinance and California Environmental Quality Act Guidelines to determine significance. Testing through subsurface excavation provides the necessary information to determine site boundaries, depth, content, integrity and potential to address important research questions.
  - b. Sites identified as significant under the California Environmental Quality Act Guidelines shall be mitigated through either of the following:

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<p>(1) Avoidance and preservation through the dedication of open space easements or capping; or</p> <p>(2) Completion of a data recovery program in compliance with the County of San Diego California Environmental Quality Act Guidelines.</p> <p>All artifacts, samples, photographs, maps, field notes, reports or other records resulting from surface collection, subsurface testing, monitoring and data recovery excavations shall be curated according to current professional repository standards at a curation facility within the County of San Diego.</p> <p>(3) Archaeological monitoring to be conducted for any proposed development that may impact or affect subsurface soils, including removal of existing buildings. If significant resources are encountered during monitoring, then mitigation shall be accomplished through implementation of measures as identified in Measure 3.b.(2) above.</p> <p>(4) Any site identified as a historic site shall be evaluated to determine eligibility to local, state and national registers prior to development in these areas. The evaluations shall address the potential for project-specific impacts and mitigation of impacts. Potential significant impacts from development to any historic site evaluated as significant under the California Environmental Quality Act shall be mitigated by avoidance and/or application of the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer, 1995).</p> <p>(5) Property owners shall be advised of preservation incentives, such a financial advantages under the Mills Act and possible application of the Historic Building Code in an effort to encourage preservation of historic structures.</p> <p>c. Sites identified as significant under the County of San Diego Resource Protection Ordinance shall be mitigated through compliance with the provisions of the Resource Protection Ordinance.</p>		

**COUNTY OF SAN DIEGO  
BOARD OF SUPERVISORS POLICY**

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Policy II

It is also the policy of the Board of Supervisors that:

As a condition of any future development of a site within the project area shown on the attached map, where there is reasonable evidence of known contamination from hazardous materials, a hazardous materials assessment shall be conducted by a certified entity. The purpose of the hazardous materials assessment would be to identify the presence/absence of hazardous materials and identify remediation measures that shall be implemented prior to development of the project site.

Policy III

It is also the policy of the Board of Supervisors that:

Because this policy implements a requirement of the California Environmental Quality Act, this policy shall not be waived or repealed, irrespective of Board Policy AA-1.

Sunset Date

This Policy will be reviewed for continuance by December 31, 2012.

Board Action

6-16-99 (8)

6-22-05 (21)

1. Department of Planning and Land Use
2. Department of Public Works
3. Department of Environmental Health




# Valley Center Mitigation Policy I-132 Area

Valley Center  
Community Planning Area



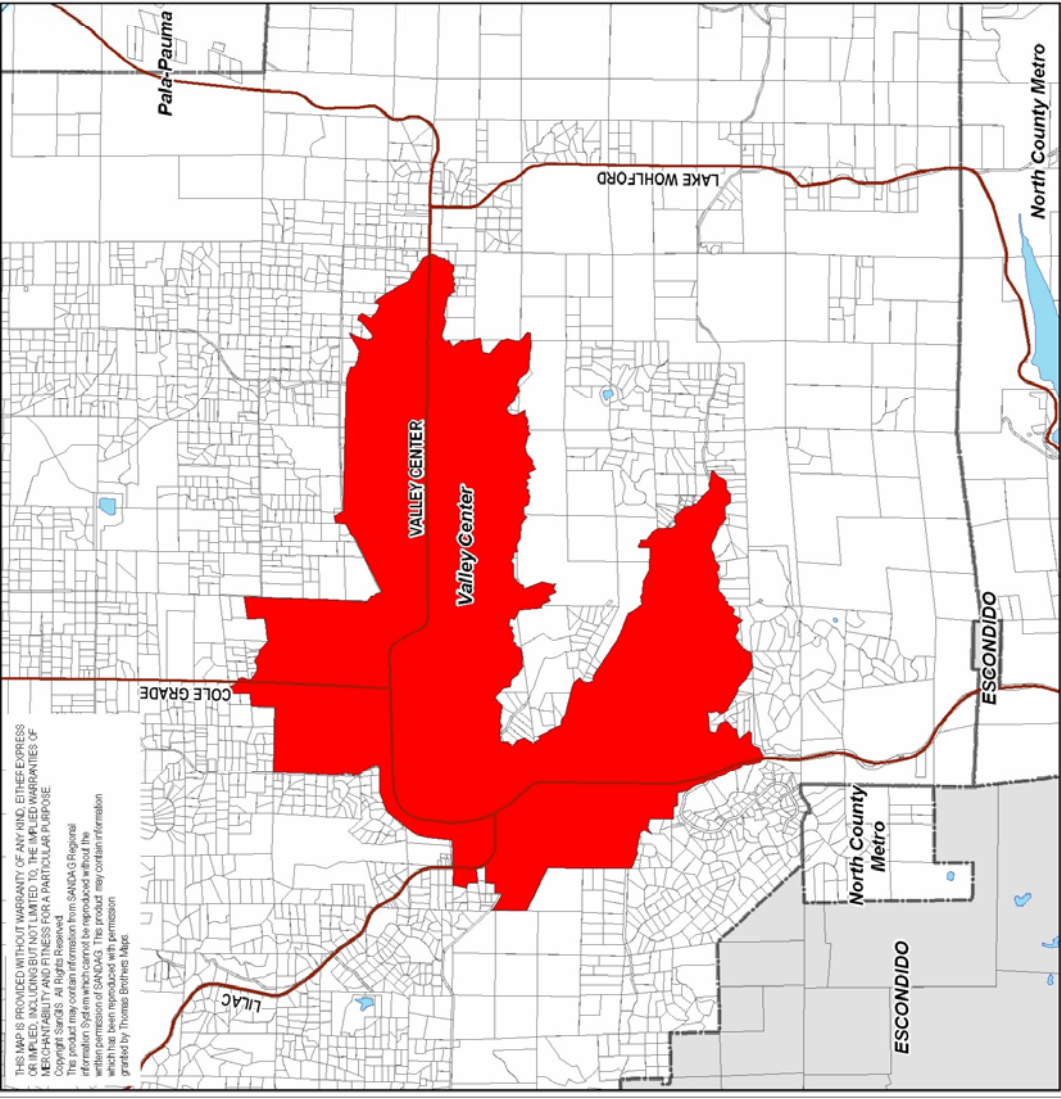
1:3,500,000

## Legend

-  Roads
-  Site
-  Parcels



Date: 6/13/2007  
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