

PROCEDURES WHEN HAZARDOUS AND CONTAMINATED MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION OR GEOTECHNICAL/GEOLOGICAL EXPLORATION

INTRODUCTION

This bulletin provides procedures when hazardous and contaminated materials are encountered during construction or geotechnical/geological exploration. Contaminated materials, in general, are regulated by local, state, and federal agencies. The City of Los Angeles is involved in dealing with contaminated materials, primarily through the Los Angeles Fire Department (LAFD).

Possible sources of contamination may yield various substances and levels of hazard. The type and extent of the contamination will dictate the remediation appropriate for the site and agencies to be notified, who would then assume oversight of the cleanup mitigation. Experts in the field of toxic waste cleanup must work with the appropriate lead agency(s) to classify the type and source of hazard, areal extent of suspected contamination as well as devise and implement a mitigation plan.

LEAD AGENCIES

The LAFD is designated as the enforcement agency for the City that regulates hazardous materials. Where the LAFD's authority or ability is exceeded, the case is referred to the appropriate County, State or Federal agency. These other agencies include, but may not be limited to the following:

California Department of Conservation – Geologic Energy Management Division (CalGEM)
Los Angeles Regional Water Quality Control Board – State of California (LARWQCB)
Health Hazardous Materials Division – Los Angeles County Fire Department (HHMD) - Site Mitigation Unit
South Coast Air Quality Management District (SCAQMD)
Department of Toxic Substances Control – State of California (DTSC)

OIL WELLS AND FIELDS

Some areas within the City of Los Angeles are underlain by gas and oil deposits. In these areas, it is possible for natural gas, crude oil and hydrogen sulfide to work their way to the surface or infiltrate structures and cause potential fire and health hazards. The City Bureau of Engineering's Navigate LA Maps show some oil wells and oil field areas. **CalGEM** is the lead agency that regulates oil wells. **CalGEM** should be contacted to obtain information regarding the location(s) of oil wells, mitigation of well-related seeps, issues regarding proposed construction in the vicinity of an oil well, and oil well abandonment. The current **CalGEM** contact is:

Southern District of Geologic Energy Management Division (CalGEM)

3780 Kilroy Airport Way, Suite 400, Long Beach, CA 90806

Phone: (562) 637-4400

Fax: (562) 424-0166

Email: CalGEMSouthern@conservation.ca.gov

METHANE

Methane gas mitigation, which generally originates from old landfills or other natural sources, is required in Chapter 71 of the 2023 LA City Building Code. Potential hazards are also discussed in the following department information bulletins: P/BC 2023-039 (demolition); P/BC 2023-101 & 102 (methane mitigation). Specific guidelines are provided in these bulletins.

HAZARDOUS MATERIALS (CONTAMINATED SOILS/GROUNDWATER)

Hazardous materials are generally regulated by the Federal and State codes. Contaminants from past processes on a site or area may include hydrocarbons, volatile organic compounds (VOC's), solvents, metals and/or various other substances. The type, extent and potential toxicity of the contamination will dictate the proper agency to be contacted for appropriate remediation.

Environmental site assessments in general are usually categorized and conducted in phases. A Phase 1 assessment identifies potential or existing environmental contamination liabilities. These assessment reports are typically prepared for real estate holdings, lending institutions or as part of property transfers. Depending on the conclusions of the Phase 1 assessment, a Phase 2 assessment (detailed drilling & sampling to define the extent and level of toxicity) may be conducted and submitted to the regulating agency. Based on the agency's concurrence, the assessment will proceed to Phase 3 which will include remediation and closure, also with agency concurrence. In the majority of cases involving commercial scale development, a Phase 1 site assessment is the first step in the process of environmental due diligence.

When unanticipated contamination is detected, required action may include the following: work stoppage; temporary site closure; and notification to appropriate agencies. Significant contaminated sites will likely require the assessments described above. Department personnel must cooperate for this purpose with the owner/developer, various agencies and private experts/consultants.

DETECTION PROCEDURES

Not all discolored or odorous soils fall within the legal definition of chemically contaminated soils. For example, the soil surrounding and associated with private sewage disposal systems, is not considered contaminated unless the system has been used to dispose hazardous substances other than human waste.

Sampling and laboratory testing to identify contaminants in soil or groundwater requires protocol during investigations, including monitoring and protection for personnel health and safety. Such protocol is beyond the Department's expertise. However, the environmental consultants that specialize in these tasks are expected to be familiar with such protocols.

Occasionally, unanticipated evidence of soil contamination is discovered during site geologic/geotechnical exploration, based on visual or olfactory observations. The presence of hazardous materials may also be discovered during grading or construction, which may present dangerous conditions, such as explosive (fire) and health hazards. Contractors, geotechnical observers and other workers should notify the site superintendent immediately after such observations are made. The LADBS inspector should also be notified.

DEPARTMENT ACTION

Environmental issues are not within the primary purview of the Department or the Grading Division of the Department. However, if reports submitted to the Department indicate the presence of contamination or hazardous materials, the owner and appropriate lead agencies may be contacted.

If contamination is discovered after construction has started, the Department and the appropriate lead agency shall be contacted immediately. The Department inspector may issue a Stop Work Order so that the area of contamination can be isolated, pending further investigation.

LEAD AGENCY DESIGNATION

In California, several hazardous material environmental programs are consolidated into one regulatory program referred to as the Unified Hazardous Materials Program under which, the California Environmental Protection Agency (CalEPA) delegates most of the inspection and enforcement activities to certified local agencies, called Certified Unified Program Agency (CUPA).

If contamination is encountered on a former or current underground storage tank (UST) site, then the LAFD CUPA is the first point of contact and lead agency. Contact LAFD's CUPA, USTs & Plan Check Unit – **213-978-3708** (direct) or **213-978-3700** (general questions). If the scope of work exceeds the LAFD's authority or ability then the case may be referred to another appropriate agency.

If a UST is found during excavation or during grading, a Specific Project or Action Permit from LAFD is required in order to remove the UST. Additional information can be obtained at

<https://www.lafd.org/fire-prevention/cupa/ust-tank-abandonment-guidelines>

In cases, where the contamination is non UST-related, the primary lead agency with jurisdictional authority in the City of Los Angeles will be the HHMD – Site Mitigation Unit – <http://www.fire.lacounty.gov/hhmd/site-mitigation/> **323-890-4106** (general information).

In certain cases, the HHMD may refer the case to the LARWQCB or DTSC. For DTSC, contact the Regulatory Assistance Office (DTSC)

Toll-Free in CA: 800-728-6942 or 800 72-TOXIC

Outside CA: 916-324-2439

Email: RAO@dtsc.ca.gov

SPECIAL PROCEDURES

In the event Department inspection discloses the possibility of explosive gas conditions or similar imminent hazards, the inspector should stop the job and immediately notify the LAFD. If an oil well is discovered, the Department will immediately notify **CalGEM and the Petroleum Administrator** for inspection and guidance to abandon the well properly. In either case, the area should be cordoned off to prevent injury to workers or the general public. This condition will prevail until a clearance is received in writing from the appropriate agency.

When the presence of volatile organic compounds (VOC) from contaminated soil is suspected, which would generally be detected initially by a strong odor, the SCAQMD shall be contacted (see also SCAQMD Rule 1166 for petroleum hydrocarbons). Upon notification, the SCAQMD may dispatch personnel to test the level of VOC or require sampling in accordance with the SCAQMD site mitigation plan by a qualified environmental consultant. If the VOC levels exceed 50 parts per million (ppm), appropriate action will be required which may include the use of soil vapor suppressants, isolation, covers over and below the soil, containerization or removal etc. of the contaminated material.

Contact the Site Mitigation Supervisor at the Toxic Asbestos Unit of the SCAQMD at **909-396-2000** or **webinquiry@aqmd.gov**.

CONSTRUCTION DEWATERING

When temporary dewatering is required as part of construction, industrial wastewater discharge permits are required by the City of Los Angeles Bureau of Sanitation for discharge of the pumped water into the public sewer system. If the water is to be discharged into the public sewer system, the City of Los Angeles Bureau of Sanitation is concerned with: (1) the quality of the discharge; and (2) the capacity and hydraulics of the public sewer system to accept the discharge. Contact **Lonnie Ayers*** for permits at **323-342-6098**. Seepage Pits (sewage systems) are taken care of by **Hyginus Mmeje*** at **323-342-6241**.

If temporary dewatering pumps are to discharge into the storm drain system (which eventually discharge directly into surface waters such as streams or oceans), National Pollutant Discharge Elimination System (NPDES) permits are required from the LARWQCB. Contact **Augustine Anijelo*** (anijelo,augustine@waterboards.ca.gov) at **213-576-6657**. If the discharge will be on to adjacent land, permits are required from the LARWQCB. Contact **Dr. Don Tsai*** (Don.Tsai@waterboards.ca.gov) at 213-576-6683. For all matters pertaining to UST sites at the LARWQCB, contact **Dr. Yue Rong*** (yrong@waterboards.ca.gov) at (213) 620 2253.

Note: *The contact person(s) cited in this bulletin may be replaced.