

POLICIES, PROCEDURES, AND GUIDELINES

Subject

GAS HAZARD MITIGATION POLICY AND STANDARDS

Effective Date:

Page(s):

January 1, 2020

Page 1 of 3

Approved By:

Requirements

The County of Los Angeles Building Code (Building Code) prohibits the issuance of building permits for new buildings, enclosed structures, additions, or conversions of a building or structure to habitable or occupiable space in the presence of an unmitigated potential gas hazard. Potential gas hazards exist within 1,000 feet of fill sites containing decomposable materials (Building Code Section 110.3), within 300 feet of nearby oil and gas wells (Building Code Section 110.4), and on contaminated soils (Building Code Section 110.5).

Policy and Guidelines

Los Angeles County Public Works, as the Building Official for the unincorporated areas of the County and 19 contract cities, has adopted these Gas Hazard Mitigation Policy and Standards for the protection of buildings and enclosed structures from methane and other gas hazards in compliance with the Building Code.

What is a methane gas hazard?

A methane gas hazard is defined by the California State Department of Toxic Substance Control as an accumulation, or the potential accumulation, of methane in the subsurface [ground] immediately beneath the footprint of an existing or proposed building, including associated improvements, at concentrations in excess of 5,000 parts per million by volume. Elevated levels of methane gas in enclosed, unventilated locations expose buildings and occupants to explosive combustion and fire risks. Sources of methane gas include solid waste landfills, oil and gas wells, and contaminated soils.

What constitutes a contaminated soil?

As used by the Building Code, "contaminated soil" shall mean contaminated soil as defined by Title 14 of California Code of Regulations Section 17361 (b). "Contaminated soil" shall also include soil containing harmful concentrations of any additional organic or inorganic compounds that the Building Official determines to be hazardous or potentially hazardous to the health and safety of building occupants.



POLICIES, PROCEDURES, AND GUIDELINES

Subject Effective Date: Page(s):

January 1, 2020 Page 2 of 3

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The Building Code sections applying to gas hazards prevent the construction, addition, or conversion of a building or structure, unless it is designed with an approved natural or artificial protective system in accordance with recommendations contained in a report prepared by a registered design professional, such as a licensed civil engineer or a licensed petroleum engineer.

Based on public records, soil surveys, and sampling results showing that potential gas generation, migration, or other hazards, exists at a site, a gas protection system becomes necessary. The following measures shall be taken to protect buildings, enclosed structures, and occupants from methane and other gas hazards:

- Gas mitigation and control system, which prevent the intrusion of gases, including methane and other volatile compounds from entering a building or enclosed structure.
- Gas monitoring system, which monitors the presence or absence of gases in the subsurface soil or air.
- Gas monitoring program to ensure the safety of the structure throughout the life of the structure.
- Contingency plan to be implemented in the event of a failure in the gas control and/or monitoring system.
- Covenant and agreement to alert future owners and occupants of potential gas hazards and the owner's responsibility to maintain the integrity of the gas mitigation monitoring system.

The Gas Hazard Mitigation Policy and Standards packet provides a guide to the requirements, processes, and standards for the mitigation of potential hazards arising from the presence of methane gas and other volatile compounds. The following information is also provided in the packet to assist residents and businesses in complying with the Building Code.

- Gas Protection System Requirements
- Design Engineer's Responsibilities
- General Construction Requirements



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Page(s):

January 1, 2020

Page 3 of 3

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- Membrane Installation Requirements
- Gas Monitoring Probe Requirements
- Passive Gas Control Systems Requirements
- Active Gas Control System Requirements
- Waiver of Gas Mitigation Standard Requirements
- Termination of Gas Monitoring Program Requirements
- Report Submittal Standards
- Gas Hazard Mitigation Plan Submittal Requirements

Digital versions of these documents are available at the Public Works website: https://pw.lacounty.gov/epd/swims/OnlineServices/methane-mitigation-standards.aspx