LOCAL ADOPTION OF THE LATEST CALIFORNIA BUILDING STANDARDS CODE AND UNIFORM HOUSING CODE

August 29, 2022

This document includes text using the “Track Changes” feature of Microsoft Word. It is used to distinguish between existing Municipal Code text and revised text. Deletions are represented by strikeout language, and insertions represented by underlined language. Please note the color of the altered text is not significant, and only indicates a different editor made the changes.

PREPARED BY

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FOOTNOTE:

1. E = Existing chapter/section with no changes
   A = Altered chapter/section
   D = Deleted chapter/section
   N = New chapter/section

Please note: Only chapters and their associated sections with known amendments being presented at the August 29, 2022 BEAC meeting are included in this document. Chapters and sections with additional anticipated amendments, to be presented at a future BEAC meeting, have been excluded from the table of contents and this document, as a whole, and will be addressed in the supporting documentation for upcoming BEAC meetings. The use of ellipses (…) in this document represent the omission of text within a chapter or section.

Omitted text is anticipated to remain unchanged and may be found in the 2020 Long Beach Municipal Code at [https://library.municode.com/ca/long_beach/codes/municipal_code](https://library.municode.com/ca/long_beach/codes/municipal_code).

RATIONALE AND FINDINGS:

A description of the specific rationale and findings for the amendments referenced in this document can be found in the separate “Findings” document prepared for BEAC Public Hearing 5.
PROPOSED AMENDMENTS:

18.01.040 – Work not in scope.

The provisions of this title shall not apply to any of the following:

1. Swings and other playground equipment accessory to detached one- and two-family dwellings.

2. (Reserved)

3. Towers or poles supporting public utility communication lines, antennas, or power transmission lines.

18.04.020 – Exceptions Exemptions from permit.

B. Building permits not required. Building permits are not required for any of the following, provided the work is not in violation of Title 21 Zoning Regulations:

1. Where the work regulated by this title is valued at five-seven hundred fifty dollars ($500.00-$750.00) or less, unless it affects the fire life-safety, structural stability or required accessible route of a building or structure, or public safety, or is done to make a building conform to the requirements of this title for a change in occupancy or use.

18.40.080 – Amend CBC 903.2—Where required.

Section 903.2 of the California Building Code is amended to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12 and Sections 903.2.14 through 903.2.21.

All new commercial, industrial and or in new nonresidential buildings and structures where that require two or more exits are required or exceeds that are greater than 3,000 square feet (279 m²) shall be protected by an automatic sprinkler system. This shall not apply to existing buildings.

18.40.120 – Amend CBC Section 903.4.2—Alarms.

Section 903.4.2 of the California Building Code is amended to read as follows:

903.4.2 Alarms. One exterior approved audible device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Visible alarm notification appliances shall not be required except when required by Section 907. The exterior alarm device shall be a horn and strobe device, located on the address side of the building, 10 feet above grade with no building obstructions and closest to the location of the fire department connection.

903.4.2.1 Alarms. At least one (1) additional horn and strobe device is required on the interior of a building at the main entrance or in a location as approved by the Fire Code Official.
903.4.2.2 Manual pull station. At least one (1) manual pull station is required on the interior of a building at the main entrance or in a location as approved by the Fire Code Official.

18.40.620 – Amend CBC Section 3007.6.1—Access to smokeproof enclosure.

Section 3007.6.1 of the California Building Code is amended to read as follows:

3007.6.1 Access to a smokeproof enclosure. The enclosed fire service elevator lobby shall have direct access from the enclosed elevator lobby to a smokeproof enclosure with an interior exit stairway or ramp complying with Section 909.20.

Exception: Access to a smokeproof enclosure with an interior exit stairway or ramp shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The wall and floor/ceiling assemblies of the protected path shall comply with the requirements of Section 3007.6.2 and doors opening into the protected path shall comply with the requirements of Section 3007.6.3. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section 716.2.2.1.

18.47.020 – Amend CALGreen Section 4.106.4.2.1—Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.

Section 4.106.4.2.1 of the California Green Building Standards Code is amended to read as follows:

4.106.4.2.1 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1. EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as “EV CAPABLE” in accordance with the California Electrical Code.

Exceptions:

1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.

2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.

3. Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems.

Notes:
a. Construction documents are intended to demonstrate the project’s capability and capacity for facilitating future EV charging.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2. EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems.

18.47.030 – Amend CALGreen Section 4.106.4.2.2— Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.

Section 4.106.4.2.2 of the California Green Building Standards Code is amended to read as follows:

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1. EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as “EV CAPABLE” in accordance with the California Electrical Code.

Exceptions:

1. When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

2. Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems.

Notes:

a. Construction documents shall show locations of future EV spaces.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2. EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.
### Exception: Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems.

#### 3. EV Chargers

Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

### Exception: Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems.

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18.47.040 – Amend CALGreen Sections 4.408.1 through 4.408.5—Construction waste reduction, disposal and recycling.

Sections 4.408.1 through 4.408.5 of the California Green Building Standards Code is deleted in its entirety and replaced to read as follows:


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18.47.050 – Amend CALGreen Section 5.106.5.3—Electric vehicle (EV) charging.

Section 5.106.5.3 of the California Green Building Standards Code are amended to read as follows:

5.106.5.3 Electric vehicle (EV) charging. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:

1. On a case by case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:

   a. Where there is no local utility power.

   b. Where the local utility is unable to supply adequate power.

   c. Where there is evidence suitable to the local enforcement agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Areas of parking facilities served by parking lifts or parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.

18.47.060 – Amend CALGreen Section 5.408.1—Construction waste reduction, disposal and recycling.

Section 5.408.1 of the California Green Building Standards Code is deleted in its entirety and replaced to read as follows:

5.408.1 General. Covered projects meeting the threshold of Section 18.67.020 of Title 18 of the Long Beach Municipal Code shall comply with Chapter 18.67 Construction and Demolition Recycling Program of Title 18 of the Long Beach Municipal Code.

18.47.0760 – Amend CALGreen Section 5.303.1—Meters.

Section 5.303.1 of the California Green Building Standards Code is amended to read as follows:

5.303.1 Meters. Separate submeters or metering devices shall be installed for the uses described in Sections 5.303.1.1 through 5.303.1.3.

18.47.0870 – Add CALGreen Section 5.303.1.3—Mixed-use occupancy.

Section 5.303.1.3 is added to Chapter 5 of the California Green Building Standards Code to read as follows:

5.303.1.3 Mixed-use occupancy. In new buildings with mixed-use occupancies, separate metering devices shall be dedicated solely to each residential and nonresidential uses. The plumbing system downstream of the meters for the residential and nonresidential uses shall be independent of the other and not cross-connected.

18.47.080 – Amend CALGreen Sections 5.408.1 through 5.408.1.4—Construction waste reduction, disposal and recycling.

Sections 5.408.1 through 5.408.1.4 of the California Green Building Standards Code are deleted in its entirety and replaced to read as follows:

5.408.1 General. Covered projects meeting the threshold of Section 18.67.020 of Title 18 of the Long Beach Municipal Code shall comply with Chapter 18.67 Construction and Demolition Recycling Program of Title 18 of the Long Beach Municipal Code.

18.48.045 - CFC Chapter 1, Section 103.1 – Creation of Agency.

Section 103.1 of Chapter 1 of the California Fire Code is amended to read as follows:

103.1 Creation of agency. The Long Beach Fire Prevention Bureau and the official in charge therof shall be known as the fire code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.
18.48.130 – CFC Chapter 1, Section 105.65—Required operational permits.

Section 105.6-5 of Chapter 1 of the California Fire Code is amended by the addition of Sections 105.6.62-5.55 through 105.6.67-5.7069 to read as follows:

105.6.62-5.55 Airport, heliport and helistop. An operational permit is required to operate an airport, heliport and helistop.

105.6.63-5.56 Battery systems. An operational permit is required to operate battery storage systems exceeding the threshold quantities found in Table 1206.21207.1.1 of this code.

105.6.64-5.57 Bulk storage facility. Above ground bulk storage of flammable and combustible liquids for each 225,000 BBL or major fraction thereof.

18.49.025 – Amend CEBC Section 502.5—Existing structural elements carrying lateral load.

Section 502.5 of the California Existing Building Code is amended to read as follows:

502.5 Existing structural elements carrying lateral load. Where the addition is structurally independent of the existing structure, existing lateral-load carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the existing structure and its addition acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the California Building Code using full forces. For the purposes of section 502, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.3.1 for the applicable risk category, shall be deemed an acceptable procedure to demonstrate compliance with the requirements of Section 1613 of the California Building Code. Alternative procedures to demonstrate compliance with Sections 1609 and 1613 of the California Building Code, as determined by the Building Official, may be used. Where the existing lateral system consists of unreinforced masonry, refer to Appendix A1 or 18.68 of the Long Beach Municipal Code.

Exceptions:

1. Except for unreinforced masonry buildings or structures, any existing lateral load-carrying structural element whose demand-capacity ratio with the addition is not more than 10 percent greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the California Building Code. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

2. Buildings of Group R occupancy with not more than five dwelling units used solely for residential purposes where the existing building and the alteration together comply with the conventional light-frame construction methods of the California Building Code or the provisions of the California Residential Code.

18.49.026 – Amend CEBC Section 503.4—Existing structural elements carrying lateral load.

Section 503.4 of the California Existing Building Code is amended to read as follows:

503.4 Existing structural elements carrying lateral load. Except as permitted by Section 503.13, where the alteration increases design lateral loads, results in a prohibited structural irregularity as defined in ASCE 7, or decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall meet the requirements of Sections 1609 and 1613 of the California Building Code. Reduced seismic forces, as determined by the Building Official, shall be
permitted provided the reduced seismic load is not less than the original building permitted seismic loads. For the purposes of section 503, compliance with ASCE 41, using a Tier 3 procedure and the two level performance objective in Table 303.3.1 for the applicable risk category, shall be deemed an acceptable procedure to demonstrate compliance with the requirements of Section 1613 of the California Building Code and using the performance objective in Table 303.3.2 for the applicable risk category, shall be deemed to meet the requirements of reduced seismic loads. Where the lateral system consists of unreinforced masonry, refer to Appendix A1 or 18.68 of the Long Beach Municipal Code.

Exceptions:
1. Except for unreinforced masonry buildings or structures, any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the California Building Code. Reduced seismic forces shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.
2. Buildings of Group R occupancy with not more than five dwelling units used solely for residential purposes where the existing building and the alteration together comply with the conventional light-frame construction methods of the California Building Code or the provisions of the California Residential Code.

18.49.050 – Amend CEBC Section 506.45.3—Change of occupancy, seismic loads.

Section 506.45.3 of the California Existing Building Code is amended to read as follows:

506.45.3 Seismic loads (seismic force-resisting system). When a change of occupancy results in a building or structure being assigned to a higher risk category, the change is from a Group S or Group U occupancy to any other than Group S or Group U, or the change includes Groups A, E or I occupancies in a building or structure constructed prior to January 9, 1934 and is within the scope of Chapter 18.68 of the Long Beach Municipal Code, the building or structure shall satisfy the requirements of Section 1613 of the California Building Code for the new risk category assigned to the changed occupancy using full seismic forces.

Exceptions:

1. Where the area of the new occupancy is less than 10 percent of the building area, the occupancy is not changing from Group S or Group U occupancy, and the new occupancy is not assigned to Risk Category IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
2. When a change of use results in a building or structure being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.
3. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B, shall be permitted to use Appendix Chapter A1 of this code or Chapter 18.68 of the Long Beach Municipal Code.
4. Where the change is from Group S or Group U occupancy and there is no change of risk category, use of reduced seismic forces shall be permitted.
5. Specific seismic detailing requirements of Section 1613 of the California Building Code for a new structure shall not be required to be met where the seismic performance is shown to be
equivalent to that of a new structure. A demonstration of equivalence shall consider any irregularities, overstrength, redundancy and appropriate ductility (R-value) of the structure.

6. For the purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.3.1 for the applicable risk category, shall be deemed an acceptable procedure to demonstrate compliance with the requirements of Section 1613 of the California Building Code. Alternative procedures to demonstrate compliance with Section 1613 of the California Building Code, as determined by the Building Official, may be used.

For a change of occupancy from an existing commercial or industrial use to a residential use that does not result in a higher risk category, refer to Section 503 and Chapter 18.63 of the Long Beach Municipal Code for Alternative Building Standards for Adaptive Reuse Projects.

18.79.010 – Purpose.

This Chapter sets forth the minimum requirements of the City of Long Beach for control of methane gas intrusion emanating from geologic formations. The requirements do not regulate flammable vapor that may originate in and propagate from other sources, which include, but are not limited to, ruptured hazardous material transmission lines, underground atmospheric tanks, or similar installations.

18.79.020 – Scope

The provisions of this Chapter shall govern methane gas mitigation systems for all buildings and structures. Additional requirements shall apply as follows:

1. Methane gas mitigation system submittal documents shall be required for any project with a methane gas mitigation system in accordance with Section 18.05.030.

2. Methane gas mitigation inspection and plans examination fees shall be required for any project with a methane gas mitigation system in accordance Sections 18.06.010 and 18.06.020.

3. Methane gas mitigation inspections shall be required for any project with a methane gas mitigation system in accordance with Section 18.07.050. A preconstruction meeting shall be scheduled with the Building Official or a duly appointed representative prior to installation of the methane gas mitigation system.

18.79.030 – Definitions.

The following terms shall have the following meanings, unless otherwise clearly apparent from the context:

"Combustible soil gas" means flammable gas within soil pores.

"Development Projects" means newly constructed buildings or structures, additions to existing buildings or structures, or alterations of fifty (50) percent or greater to the existing foundations, slabs-on-grade, or raised floors of existing buildings or structures.

"Flammable Gas" means a gaseous substance capable of sustaining combustion or explosion, as defined in the California Fire Code adopted in Chapter 18.48.
"Gas Membrane Barrier" means a manufactured membrane barrier designed to prevent the transmission of methane with a minimum dry thickness of fifteen (15) mils and a gas transmission rate (GTR) of less than forty (40) milliliters per square meter day (ml/m²-D), when tested in accordance with the American Society for Testing and Materials D1434 standard.

"Methane Gas" means the hydrocarbon substance commonly known as "natural gas," chemical formula CH₄. For the purpose of this definition, natural gas from the distribution system of a utility company is exempt and excluded from the scope of this Chapter.

"Methane Gas Detection and Alarm System" means one or more electrical devices capable of continuous monitoring for the presence of methane gas in accordance with Section 18.79.070. Alarm systems shall consist of audible and visual alarms capable of alerting occupants that a hazardous atmosphere exists.

"Methane Gas Mitigation System" means a collection of building systems designed to mitigate the accumulation of methane gas to less than hazardous levels within a structure. This includes a designed collection system of piping components located beneath a structure to vent combustible soil gas to the atmosphere; heating, ventilation, and air conditioning (HVAC) systems to introduce outdoor air into a structure to ventilate accumulated methane; and sensors and alarms to detect concentrations of methane gas, activate HVAC and/or active methane mitigation, and alert occupants to the presence of methane gas.

1. **Active Methane Gas Mitigation System**: The complete designed piping system originating below a building or structure and terminating above the building or structure with a motorized evacuation device to exhaust accumulated gases;

2. **Passive Methane Gas Mitigation System**: A non-powered piping system originating below a building and terminating outside of the building using natural air flow for venting accumulated gases.

"Qualified Professional" means a California Registered Professional Civil Engineer, Petroleum Engineer, or Geologist with experience in the design and construction of methane gas mitigation systems.

"Site Design Level" means a designated level assigned to a project site based on the concentration and pressure of methane gas detected during shallow and soil gas probe testing or as indicated in Section 18.79.060.

"Soil Gas Investigation" means a scientific investigation performed in accordance with Section 18.79.060 conducted under the direction of a Qualified Professional for the purpose of determining the locations and concentrations of combustible soil gas.

"Subslab Vent Piping" means polyvinyl chloride (PVC), high-density polyethylene (HDPE), acrylonitrile butadiene styrene (ABS), or strip composite perforated piping, or equivalent, with a minimum diameter of three (3) inches.

"Vertical Vent Risers" means cast-iron or galvanized steel piping with a minimum diameter of three (3) inches connecting subslab piping to the atmosphere.

**18.79.040 – Applicability.**

The methane gas mitigation requirements of this Chapter shall be required for all development projects, unless exempted by Section 18.79.050, located in the following areas:

**A.** All areas overlying petroleum-bearing formations and within the limits of a petroleum reservoir's boundary, as mapped by the State Geological Energy Management Division (CALGEM, or any successor agency). Properties or parcels which partially fall into the areas described herein are
fully subject to the methane gas mitigation measures required by this Chapter, for the entire property.

B. All areas three hundred (300) feet or less from any active oil or gas well, or one hundred (100) feet or less from any idle and/or abandoned oil or gas well.

C. All areas one thousand (1,000) feet or less from the refuse footprint of any existing or new landfill or disposal site.

D. Where the building official determines a significant hazard exists from methane gas intrusion at any location within the City, the Building Official is authorized to enforce the requirements of Chapter 18.79 as required to prevent a potential fire or explosion due to methane gas concentrations.

18.79.050 – Exemptions.

The following development projects are exempt from the provisions of this Chapter:

1. Buildings or structures with permanent natural ventilation, such as but not limited to, open parking structures, carports, patio covers or similar open structures.

2. Buildings or structures with raised foundations providing adequate underfloor ventilations.

3. Alterations to existing buildings or structures where less than fifty (50) percent of the existing foundations, and slabs-on-grade or raised floor are replaced.

4. Newly constructed buildings or structures accessory to an existing one- or two-family dwellings that are less than fifty (50) percent of the area of the existing one- or two-family dwelling.

5. Addition to existing buildings or structures that are less than fifty (50) percent of the floor area of the existing building or structure.

6. Any development project where methane soil gas testing indicates that methane gas concentrations and pressures on the project site are less than those required for a Site Design Level I classification in accordance with Section 18.79.060.

18.79.060 – Methane soil gas investigation.

A. Methane soil gas testing shall be required for all development projects when required by located within any area as indicated in Section 18.79.040. Testing shall be in accordance with the policies and criteria established by the Building Official.

Exceptions. Methane soil gas testing is not required for any of the following:

1. One- and two-family dwellings that comply with the Site Design Level I methane gas mitigation system requirements.

2. Any development projects that comply with the Site Design Level III methane gas mitigation system requirements.

3. Any development projects that comply with Chapter 18.78 Construction in the Vicinity of Abandoned Oil Wells and Site Design Level III methane gas mitigation system requirements.

B. Methane soil gas investigation shall be classified the development project into one of the following Site Design Levels:
Level I: Concentrations of methane soil gas less than fifty-thousand (50,000) ppmv and greater than one-thousand (1,000) parts per million by volume (ppmv), and measured pressure less than two (2) inches of water column (WC) and greater than zero (0) inches WC.

Level II: Concentrations of methane gas up to fifty-thousand (50,000) ppmv, and measured pressure greater than two (2) inches of water column (WC), or concentrations of methane gas between fifty-thousand (50,000) ppmv and three-hundred thousand (300,000) ppmv, at all pressures.

Level III: Concentrations of methane gas greater than three hundred thousand (300,000) ppmv.

18.79.070 – Methane gas mitigation design requirements.

The development project shall provide a methane gas mitigation system with the required mitigation features indicated in Table 1 of this Section.

<table>
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<th>TABLE 1</th>
<th>METHANE GAS MITIGATION SYSTEM DESIGN REQUIREMENTS</th>
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<td>MITIGATION FEATURE REQUIREMENTS</td>
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<tr>
<td>Perforated Subslab Vent Piping</td>
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</tbody>
</table>

a. Methane gas mitigation features, as required in this Table, shall be designed and detailed in accordance with the policies and criteria established by the Building Official.

b. Site Design Level shall be determined by a methane soil gas investigation in accordance with Section 18.79.060.

18.79.080 – Operation and maintenance plan.
An operation and maintenance plan shall be required for development projects with methane mitigation features provided for Site Design Levels II or III. The plan shall be prepared by a Qualified Professional.

Specification for the repair of the methane gas mitigation system shall be provided to the property owner or authorized agent of the property owner for development projects with mitigation features provided for Site Design Level I.

A. The operation and maintenance plan shall contain the following information:

1. An emergency response procedure including, but not limited to, an outlined procedure for emergency response to methane gas intrusion, contact information for the Fire Department and other individuals critical during emergency response, and requirements for conspicuous posting of emergency contact information and emergency response procedures.

2. The locations of equipment and components of the methane gas mitigation system, including, but not limited to the control panel, methane gas detection and alarm system components and any other related equipment or components.


4. Specification of the required frequency of methane gas detection and alarm system testing. The frequency of testing shall not exceed twelve (12) months.

B. The property owner or authorized agent of the property owner shall be provided with detailed operation and maintenance instructions for the methane gas mitigation system.

C. Testing records shall be maintained by the property owner for a period determined by the Building Official. Such records shall be made available to the Building Official upon request.

18.79.090 – Qualified professional project certification.

After completion of testing of the methane gas mitigation system and prior to final inspection, a final testing report and project certification of the methane gas mitigation system, signed by the Qualified Professional, shall be provided to the Building Official. The project certification shall be provided upon a form prescribed by the Building Official, including a written statement from the Qualified Professional indicating the structure is free from methane gas and can be safely occupied.

18.79.100 – Covenant and agreement.

Prior to the final inspection, the property owner shall file with the Building Official on a form prescribed by the City an agreement binding such property owner, heirs and assignees, to maintain and operate the methane gas mitigation system in accordance with the requirements specified on the construction documents approved by the City. Such agreement shall be recorded in the County Recorder’s Office.

18.79.110 – Reference Standards.


18.79.120 – Adoption of administrative rules.

The City Manager, or designee, is authorized and directed to promptly adopt administrative rules, which may be in the form of information bulletins, supplemental to the provisions of this Chapter as necessary or appropriate to implement this Chapter. The provisions of this Chapter and the rules adopted by the City Manager, or designee, shall be provided to property owners, developers, potential developers, and
other interested members of the public to the widest extent practical. No person shall fail to comply with any such information bulletin, rule or regulation.