SUPPLEMENTAL CORRECTION SHEET FOR METHANE SEEPAGE REGULATIONS DIVISION 71 STRUCTURAL PLAN CHECK

This is intended to provide uniform application of the codes by the plan check staff and to help the public apply the codes correctly.

Plan Check No. _____ **PCIS #:**_____-_____-_____

Checked by:_____ **Telephone:**_____

Revise plans and provide notes to show compliance with the following attached handouts ☒:

☐ **P/BC 2002-101 Site Investigation Standards For Methane**	☐ **Standard Plan - Methane Hazard Mitigation**	☐ **P/BC 2002-102 Methane Hazard Mitigation Standard Plan: Simplified Method For Small Additions**

A. APPLICATION

1 Permit valuation for methane mitigation system only is based on $5.00 per square foot of building footprint.

2 Based on City maps, this project is located within the Methane Zone / Methane Buffer Zone. It shall comply with Minimum Methane Mitigation requirements of Chapter 71, Table 71 and Section 91.7103.

3. Prior to building permit issuance, clearance from the Los Angeles Fire Department is required for the gas detection and mechanical ventilation systems. 91.7106

B. PLANS

Compliance with items identified by "*" on this "Supplemental Correction Sheet" may be demonstrated by incorporating the LADBS "Standard Plan - Methane Hazard Mitigation" into your plans.

1 To use the "Methane Hazard Mitigation Standard Plan" select either of the following :

c) Avoid testing and construct components for Site Design Level V shown on Tables 1A or 1B in the "Methane Hazard Mitigation Standard Plan."

d) Conduct site testing and construct components according to Tables 1A and 1B on Standard Plan Sheet 4.

e) Identify the required components by drawing a circle around the appropriate column based on the findings of the test report in Tables 1A or 1B on Standard Plan Sheet 4. If site testing is performed in accordance with Information Bulletin # P/BC 2002-101, then the license or registered individual shall complete Form 1 on Standard Plan Sheet 3.

2 *"Certificate of Compliance for Methane Test Data," Form 1 on Standard Plan Sheet 3, shall be filled in, stamped, and signed by a registered Civil Engineer, Soils Engineer, or Geologist. Form shall be affixed to the plans.

3 Provide a floor plan of the lowest level showing the layout of the following systems below slab:

a) De-watering System
b) Sub-slab Vent System
c) Extend of Impervious Membrane
d) Pressure Sensors below Impervious System
e) Trench Dams

4 Provide a floor plan of the lowest level showing the layout and location of the following systems above slab:

a) Vent Risers
b) Mechanical Extraction System
c) Gas Detection System
d) Mechanical Ventilation System
e) Alarm System
f) Control Panel
g) Conduit or Cable Seal Fittings
h) Impervious Membrane identification sign

5 *Specify Gravel Blanket thickness on the plans as per Table 1A for Methane Zone or 1B for Methane Buffer Zone on Standard Plan Sheet 4.

6 *Provide specifications for aggregate used as Gravel Blanket on plans. Refer to Tables 3 and 4 on Standard Plan Sheet 4.

7 *The location of the sign listing the Fire Department

telephone number and the emergency plan procedures shall be shown on the building permit set of plans. The location of the signs shall be approved by the Fire Department. Single Family Dwellings are exempted. 91.7107

8 *Provide Impervious Membrane specifications and include the Los Angeles research report product approval number on the plans. 91.7104.2, Table 71

9 *The Impervious Membrane shall be placed on the exterior surface of walls from the finished grade level to a minimum of 6 inches below the bottom of the adjoining building slab. See Methane Hazard Mitigation Standard Plan, Section VI A 3 a ii.

10 *The upper surface of the gas membrane barrier shall be protected by a minimum 2" sand layer or 1" thick lean concrete placed between the floor slab and the membrane. See Methane Hazard Mitigation Standard Plan, Section VI A. 3 c ii, and Detail 1 on Sheet 7.

11 *Reinforcing steel, piping, forms, etc. shall not be supported directly on the membrane or protective covering and equipment shall not be driven over the membrane or its protective covering.

12 *A gas migration barrier (Trench Dam) shall be installed in all utility trenches that extend beneath the foundation from areas outside the perimeter of the building. 91.7104.2.3 and Methane Hazard Mitigation Standard Plan, Section VI C 1 and Detail 14 on Sheet 8.

13 *The gas migration barrier (Trench Dam) shall be installed in the utility trench immediately adjacent to the exterior of the building foundation. See Methane Hazard Mitigation Standard Plan, Section VI C 1

14 *The gas migration barrier (Trench Dam) shall consist of one of the following:

a) A minimum 2-foot continuous length of Sand Slurry consisting of a mixture of 4% Type II Cement, and 2% powdered bentonite by weight. The slurry shall extend from the bottom of the trench to a level of 6-inches above the base of the adjacent footing.

b) A minimum 5-foot continuous length of native soil backfill compacted to at least 90% Relative Compaction in accordance with ASTM D-1557 testing procedures. The compacted soil backfill shall extend from the bottom of the trench to a level at least 6" above the base of the adjacent footing.

See Methane Hazard Mitigation Standard Plan, Section VI C 1

15 *Vent Riser penetrations through fire rated walls, ceiling, floors, and roof assemblies shall be protected. Specifications for sealant shall be shown on the plans.

16 *Note and show on plans and details that the Vent Riser outlet shall be:

a) 10 feet above grade.
b) 10 feet away from any window opening or air intake into the building.
c) 3 feet above the roof line.
d) 4 feet away from the property line.
e) 5 feet away from any electrical wiring.

See Methane Hazard Mitigation Standard Plan, Section VI A 2 d iii

17 *Buildings With Raised Floor Construction. Underfloor ventilation openings in the underfloor area shall comply with the following requirements:

a) The top of the opening shall be located not more than 12 inches below the bottom of the floor joist.
b) The openings shall be distributed approximately equally and located to provide cross ventilation, for example, by locating the opening along the length of at least two opposite sides of the building.
c) The openings shall be the larger of: 1.5 square feet for each 25 linear feet or fraction of exterior wall; or openings shall be equal to 1% of underfloor area.
d) The openings may be covered with corrosion resistant wire mesh with mesh openings of greater than 1/4 inch and less than ½ inch in dimension.

91.7404.3.2

18 *Buildings with Natural Ventilation are exempted from the construction requirements of Table 71 provided they comply with the following:

q) The unobstructed openings shall exchange outside air.
r) The size of the unobstructed openings shall be the larger of: 25% of the total perimeter wall area of the lowest level of the building, or at least 25% of the floor area of the lowest level of the building.
s) The unobstructed openings shall be evenly distributed and located within the upper portion of at least two opposite exterior walls of the lowest level of the building.
t) They are provided with Trench Dams and Cable or Conduit Seals. 91.7404.3.3

19 *Narrow Buildings, as defined in 91.7102, may substitute Pressure Sensors below the Impermeable Membrane in lieu of the Gas Detection System and Mechanical Ventilation, if the installation of the Pressure Sensors below the Impervious Membrane is not required per Table 71 and the Narrow Building is constructed with a minimum two feet wide landscaped area covering at least 50 percent of the ground immediately adjacent to the exterior building walls. 91.7104.3.1

20. Place a note on the plans that testing of the gas detection and mechanical ventilation system shall be performed in accordance with the manufacturer's instructions by someone certified by the Los Angeles Fire Department. 91.7106.

C. METHANE HAZARD MITIGATION, SITE TESTING

1 Site Testing of subsurface geological formations shall be conducted in accordance with P/BC 2002-101 Site Investigation Standards For Methane.

2 Site Testing is not required for buildings designed to the requirements of Site Design Level V as described in Table 71, or for buildings designed using the exceptions set forth in Section 91.7104.3.2 or 91.7104.3.3

3 Proposed building is located in both Methane and Methane Buffer Zones. Therefore, methane mitigation design system shall be based on the Methane Buffer Zone. 91.7104.3.6

D. MATERIALS.

1. *All materials used for methane mitigation system shall be an approved material as described in the Building, Electrical, Mechanical or Plumbing Codes.

E. SUPPLEMENTAL CORRECTIONS.