

Orange County Fire Authority Community Risk Reduction INFORMATIONAL BULLETIN 05-03

Subject: Combustible Soil Gas Hazard Mitigation for Existing Homes Undergoing Expansion in Yorba Linda

The City of Yorba Linda has adopted an amendment to the local fire code that enables the City to enforce measures requiring methane soil gas hazards to be investigated and mitigated. The purpose of this bulletin is to provide an effective and practical method of safeguarding against potential methane soil gas hazards for existing homes undergoing expansion. These requirements are applicable to all proposed new buildings built within oil fields and for existing homes undergoing expansion in the following manner:

- 1. Additions to existing homes constructed with no mitigation are exempt from mitigation requirements unless the footprint of the addition exceeds 1,000 square feet or the expanded portion of the footprint is within 25 feet of a recorded oil well location, whether active or abandoned. Projects that exceed these area and proximity limits are subject to methane gas investigation and possible mitigation. See Orange County Fire Authority (OCFA) Guideline C-03 and City of Yorba Linda Policy #26 for more details.
- 2. Additions to existing structures built with methane gas mitigation features are subject to mitigation.
- 3. New developments in oil production fields require methane gas investigation and mitigation.

Submittal Requirements:

- 1. Soil Gas Investigation: The investigation and report shall be prepared by and conducted under the direct supervision of a Registered Professional. The report shall contain a detailed description of the site, including methodology. The coring sample may be obtained by using a hand auger to a depth of at least five feet.
- 2. Soil Gas Concentrations
 - A. If the soil gas concentration report identifies combustible soil gas concentrations of 5,000 ppm or greater, then the mandatory procedures for sub-slab passive venting and gas membrane barrier shall be required. See OCFA Guideline C-03 for details.

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- B. The applicant may elect to install the combustible gas mitigation system (sub-slab passive venting and gas membrane barrier) without first conducting the investigation.
- 3. Mitigation Plan Approval: All reports, work plans, and mitigation plans shall be subject to the approval of the OCFA prior to installation.

NOTE: Mitigation systems for combustible soil gas are not permitted in the public right of way unless approved per the City Engineer. The Building Division of the Yorba Linda Community Development Department is responsible for screening Building Permit applications and ensuring that all methane gas requirements are met.