ORDINANCE NO. 955

AN ORDINANCE OF THE CITY OF SANTA FE SPRINGS AMENDING SECTION 117.131 OF THE CITY CODE RELATING TO SOIL GASES

THE CITY COUNCIL OF THE CITY OF SANTA FE SPRINGS DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Section 117.131 of the City Code is hereby amended to read as follows:

- (A) A soils gas investigation shall be required as part of the granting of a subdivision map, conditional use permit, development plan approval, or building permit for construction of a new building, when the property in question falls within the methane zone of the city.
- (B) A soil gas investigation shall be required when the level of total petroleum hydrocarbon contamination in the soil exceeds 20,000 parts per million.
- (C) A soils gas investigation shall also be required for all existing structures within the methane zone when there is a change of ownership of the property, or when new construction takes place which is equal to or greater than 25% of the assessed value of the building.
- (D) The methane zone is that area depicted on the attached map found in division (M) of this section. The methane zone encompasses land in the city which is within 1,000 feet of a landfill or within 250 feet of an existing or abandoned oil well.
- (E) On all properties where a soils gas investigation is required the following minimum mitigation measures shall be implemented:
 - (1) New construction.
 - (a) Prior to construction, install a minimum of two soil gas monitoring wells. Depending on the size of the lot, the Fire Chief may require the installation of additional wells;
 - (b) Perform initial monitoring of the subsoil to determine levels of soil gases. For initial monitoring, each of the wells shall be sampled at least two times within a period of seven days.
 - (c) If the initial monitoring reveals methane levels of less than 25% of the Lower Explosive Limit (i.e., 1.25% by volume in air or 12,500ppm/v), a cross ventilation system shall be installed in the new building. VENTILATION is defined as vents in the roof area and near the floor. There shall be four roof vents and four wall vents for the first 10,000 square feet of building space and one roof vent and one wall vent for each additional 10,000 square feet or fraction thereof. As an option, the building owner may install a passive venting system that provides a rate of four air changes per hour or a methane barrier. All office space shall be mechanically or naturally ventilated per the requirements of the city's Building Code. Permanently installed monitoring wells shall be monitored quarterly for one year.

- (d) If the quarterly monitoring reveals methane levels of less than 25% of the Lower Explosive Limit (i.e., 1.25% by volume in air or 12,500ppm/v) during the first year, the system shall be monitored annually thereafter. In cases where methane levels are less than 2.5% of the Lower Explosive Limit (i.e., 125% by volume in air or 1250ppm/v) the Fire Chief may waive by request the annual monitoring requirement.
- (e) If the initial monitoring reveals methane in excess of 25% of the Lower Explosive Limit {i.e., 1.25% by volume in air or 12,500ppm/v), or if these levels are detected while the building is under construction or after it has been completed, a protective mitigation system shall be installed. The proposed system shall be recommended and presented by a registered engineer to the Fire Department for approval. Protection may take the form of an active venting system, or a mechanical air exchange system that provides a rate of four air exchanges per hour. If feasible, a methane barrier may be installed. Other alternatives, at the discretion of the registered engineer, may also be submitted for approval. Permanently installed monitoring wells shall be monitored quarterly for one year;
- (f) In extraordinary cases, e.g., where methane in excess of 25% of the Lower Explosive Limit {i.e., 1.25% by volume in air, or 12,500ppm/v) can be demonstrated to be a non-repetitive incident, a registered engineer may request a waiver by the Fire Chief for the installation of a protective mitigation system. The granting of the waiver shall be at the discretion of the Fire Chief.

(2) Existing structures.

- (a) Install a minimum of two soil gas monitoring wells. Depending on the size of the lot, the Fire Chief may require the installation of additional wells;
- (b) Perform initial monitoring of the subsoil to determine levels of soil gases. For initial monitoring each of the wells shall be sampled at least two times within a period of seven days;
- (c) If the initial monitoring reveals methane levels of less than 25% of the Lower Explosive Limit (i.e., 1.25% by volume in air or 12,500ppm/v), monitor for methane quarterly for one year;
- (d) If the quarterly monitoring reveals methane levels of less than 25% of the Lower Explosive Limit (i.e., 1 .25% by volume in air or 12,500ppm/v) during the first year, the system shall be monitored annually thereafter. In cases where methane levels are less than 2.5% of the Lower Explosive Limit (i.e .. 125% by volume in air or 1250ppm/v) the Fire Chief may waive by request the annual monitoring requirement;
- (e) If the initial or subsequent monitoring reveals methane in excess of 25% of the Lower Explosive Limit (i.e., 1.25% by volume in air or I 2,500ppm/v), a protective mitigation system shall be installed. The proposed system shall be recommended and presented by a registered engineer to the Fire Department for approval. Protection may take the form of an active venting system that provides a rate of four air exchanges per hour, a gas detection system, or a cross ventilation system with vents in the roof area

and near the floor. For cross ventilation there shall be four roof vents and four wall vents for the first 10,000 square feet of building space and one roof vent and one wall vent for each additional 10,000 square feet or fraction thereof. Permanently installed monitoring wells shall be monitored quarterly for one year;

- (F) Based on the results of the soils gas investigation or on information available on surrounding properties, property owners shall take such other mitigation measures as required by the Fire Chief.
- (G) Where gas detection systems are used, they shall be designed by and installed under the supervision of registered engineers. The design and installation shall be inspected and approved by the Fire Department. Following installation, a readily visible sign shall be posted which reads:

"Gas Detection Alarm. In the event of an alarm, evacuate the building and call the Fire Department, 911. Do not disconnect under penalty of law."

- (H) The property owner shall provide access for the Fire Department to the alarm panel and the building in which it is installed as well as the alarm reset code by means of an approved key box system. Keys shall be clearly and permanently identified.
- (I) The building owner shall be responsible for assuring that annual inspections of the permanent monitoring wells and gas mitigation systems are completed. Reports of these inspections shall be conducted and submitted by a registered engineer. A fine shall be charged, as established by resolution of the City Council, for each gas mitigation system found to be inoperative or where the required identifying sign has been removed.
- (J) Where new development takes place in the methane zone and which incorporates sensitive land uses (e.g., places of public assembly, hospitals, restaurants, schools, and the like), a methane barrier or other venting system may be required regardless of the methane levels detected. Invoking this requirement is at the discretion of the Fire Chief.
- (K) Residential properties located within the methane zone are exempt from the provisions of this section, except in cases where the public health and welfare are threatened, methane protection may be required. Invoking this requirement is at the discretion of the Fire Chief.
- (L) For properties where soil gas investigations are required, the property owner shall submit a soil gas work plan to the Fire Department for review, approval and permitting prior to commencing any work, and prior to issuance of building permits. The design of systems for property within 1,000 feet of a landfill shall be in accordance with the requirements of the County Department of Public Works and City Fire Department. All other systems shall be designed in accordance with the requirements for the Fire Department. A fee shall be charged, as set forth in the Building Code or by resolution of the City Council, for the service provided in this section.
- (M) All methane monitoring reports required by this section shall be sent to the Fire Chief with copies to the Department of Planning and Development.

- (N) The city methane gas map is adopted by reference as if set forth in full in this section. A copy of the city methane gas map is available for public inspection at city offices during regular business hours.
- Section 2. The City Clerk shall certify to the adoption of this Ordinance, and shall cause the same to be posted in at least three (3) public places in the City, such posting to be completed not later than fifteen (15) days after passage hereof.

Gustavo R. Vilises

PASSED AND ADOPTED THIS 8th day of April 2004.

AYES: Councilmembers Gonzalez, Kernes, Putnam, Serrano, Mayor Velasco

NOES: None

ABSENT: None

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ATTEST: