

**PGE**  
FOR INTRA-COMPANY USES

S.P. 460.21-4  
EXHIBIT A  
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DIVISION OR DEPARTMENT    GAS DISTRIBUTION  
FILE NO.                460.21  
RE LETTER OF  
SUBJECT                Volatile Combustible Material in Soil

September 19, 1973

DIVISION GAS SUPERINTENDENTS:

One problem that may occur in connection with leak surveying is the discovery of combustible vapor other than our own pipeline gas. While we are indeed eager to fulfill our responsibility for our facilities and product, there may be instances where we will not have the responsibility for hazardous conditions that exist due to the presence of inflammable vapor. When we find such conditions, the matter should be promptly referred to the public agency that has jurisdiction, and a record made of the notification.

If pipeline gas is not involved, the most likely materials will be gasoline, fuel oil, liquefied petroleum gas, cleaning solutions, paints, adhesives, fumigants, insecticides, fertilizers and naturally occurring combustible gases.

The gas detection instruments that we use in the field do not identify the vapor being tested. Our local leak surveyors must assume that indications are our responsibility unless proved otherwise. If the situation develops that there is (1) no leak in our pipes and (2) there is another likely source of combustible vapor, then the Department of Engineering Research should be asked to analyze the escaping material. These requests should be made through the Division Gas Superintendents' offices. Under certain circumstances these analyses may be made at the site, but normally Department of Engineering Research personnel will collect samples of the unknown gas, and also of the gas being supplied to the area, for analysis in the laboratory. After the analyses are made, the process of drawing conclusions therefrom concerning the source of the unknown gas, should include the opinion of the Gas Utilization Department.

If the combustible gas is not ours, then the local fire department, public works department or other involved parties such as a property owner, owners of other underground facilities, etc., shall be notified. If they need and seek further assistance, they should be referred to the various consultants in this field. The situation must be followed up to keep informed about the eventual abatement of the hazard, and to continue to survey our facilities knowledgeably according to the schedule prescribed for the location per Standard Practice No. 460.21-4.

Division Gas Superintendents

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September 19, 1973


Supervisors must ensure that their operating personnel are trained and that such training includes an awareness of sources of combustible gas other than our own. To this end, the attached articles are enclosed for your use in your local training discussions. Please note, however, our views on two of Mr. Joseph B. Whitecavage's points in his "Gas Age" article:

- (1) Where he states: "...only a mass spectrometer analysis will conclusively prove..." we would also include analysis by means of a gas chromatograph, which is a method used by our Department of Engineering Research to ascertain the constituents of a sample of gas.
- (2) Regarding the absence of ethane as an indicator of the source: A total lack of ethane, not even a trace, would indicate other than pipeline gas. However, confusion can arise on our system in this regard, since if there is less than 0.1 percent of any constituent, including ethane, in our sources, we list that component as "none." The fact is that there will most probably be at least a trace (i.e., less than 0.1 percent) or more of ethane in any and all of our sources. Nine of the present 68 California fields have less than 0.1 percent ethane and consequently, are listed as "no" ethane, although analysis will show a trace.

The problem of "marsh gas" is one that has occurred in San Jose, East Bay, Stockton and Sacramento Divisions. Sewer gas and leaking gasoline storage tanks may occasionally occur at any location. We recommend that you contact the appropriate local safety officials and give them copies of the enclosed articles for their information.

A word of caution in closing: This letter is not in any way intended to lessen our acceptance of responsibility for leaking gas. On the contrary, it adds the responsibility to identify foreign gas and to report it. Finally, the probability of combustible gas indications not being from our pipes is very low; foreign gas is not to be blamed for every leak that is hard to find. The point of this letter is that the situation is infrequent enough that there may be a question of how to handle it.

  
J. A. FAIRCHILD

cc:   
EBLangley, Jr.  
EFSibley  
RFCayot  
RWWhite  
Division Managers  
Managers, Gas Operations

Attachments