

PXP

PXP 2009 Community Alert Notification (CAN) System

Baldwin Hills CSD Conditions
E.1.a & L.1.b

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1 Introduction

The Baldwin Hills Community Standards District (CSD) was adopted by the Los Angeles Planning Department on October 28, 2008 and became effective on November 28, 2008. Plains Exploration & Production Company (PXP), operator of the Baldwin Hills Oil Field (a.k.a. Inglewood Oil Field) located in the Baldwin Hills District, will comply with the requirements of the CSD. The goal of the CSD is to ensure that oil field operations are conducted in a safe manner and are compatible with the surrounding uses.

1.1 Operations Overview

At the Baldwin Hills location, PXP is drilling for sweet crude oil. Sweet crude oil is a type of petroleum. Petroleum is considered "sweet" if it contains less than 0.5% sulfur, compared to a higher level of sulfur in sour crude oil. Sweet crude oil contains small amounts of hydrogen sulfide and carbon dioxide. High quality, low sulfur crude oil is commonly used for processing into gasoline and is in high demand, particularly in the industrialized nations. "Light sweet crude oil" is the most sought-after version of crude oil as it contains a disproportionately large amount of these fractions that are used to process gasoline, kerosene, and high-quality diesel. The term "sweet" originated because the low level of sulfur provides the oil with a mildly sweet taste and pleasant smell.

Two types of wells are drilled in the oil field; injection and production wells. Injection wells are used to pump fluids into the oil bearing geologic formation at depth, forcing the oily water in the formation to migrate to nearby production wells for recovery.

Wells are drilled by erecting temporary well derricks, or drilling rigs and related components, and drilling to total depth. API Guideline 14B (Offshore Drilling Operations) requires that H₂S and methane gas detectors be located near the well hold during drilling operations. Currently each drilling rig used at the Baldwin Hills Oil Field is outfitted with these devices, which provide an early warning to any gas leak that could result in a fire.

1.2 CSD Requirement

CSD Section E.1.a states:

The operator shall maintain and test on an annual basis a CAN for automatic notification of area residences and businesses in the event of an emergency arising at the oil field that could require residents or inhabitants to take shelter, evacuate, or take other protective actions.

CSD Section L.1.b requires that a Community Alert Notification (CAN) be developed as follows:

Within 120 days following the effective date, or at such later date as may be approved by the fire chief for good cause shown, the operator shall submit to the fire chief for review and approval a design for the CAN System referred to in subsection E.1.a. The operator shall take such actions as may be necessary for the CAN system design to be approved by the fire chief. The CAN system shall be operational within one year following approval of the CAN system design by the fire chief, or at such later date as may be approved by the fire chief for good cause shown.

2 Site Conditions

As noted in Section 1.1, the Baldwin Hills Oil Field operations involve drilling wells and extracting oil and gas. Although unlikely due to the numerous safety features in place, these processes could potentially result in fire and emergency response threats to the surrounding areas. The purpose of the CAN system is to provide notification to the surrounding areas in the event of an emergency that would require area residents and businesses to take shelter, evacuate, or take other protective actions.

3 CAN Options

A Community Alert Notification (CAN) system is a system that enables an emergency alert, message or notification to people within a specified area. As this pertains to the PXP operations at the Baldwin Hills Oil Field, the CAN system is intended to notify area residents and business of an emergency situation that requires action related to self-preservation. From a basic standpoint, there are two primary types of CAN systems: 1) a horn/siren-based system that sends out a tone to alert area occupants of an emergency situation; and 2) a reverse dialing system

that sends pre-recorded voice messages to all residents in the area registered with the service provider. Both of these system types are discussed in the following sections.

3.1 Horn/Siren System

This type of CAN system would incorporate a series of horns or sirens around the oil field. If an emergency situation occurred, the appropriate procedures would be followed and if the decision was made to activate the CAN system, the horns or sirens would emit a tone or series of tones signifying the nature of the emergency such that area occupants could react accordingly.

This type of system would require an education process for the area residents and business informing them on the presence of such a system and what the alert tones/notifications signify. For example, a flyer could be provided to area residents or community meetings could be organized to disseminate the information.

3.2 Reverse Dialing System (Reverse 911)

A reverse dialing, or reverse 911, system is a mass notification system that enables the emergency calls to a designated group of telephone subscribers. Individuals using non-landline cellular and Voice-Over-Internet-Protocol (VoIP) phones can also register their numbers online to receive the emergency calls. Reverse 911 systems deliver a recorded voice message and can redial if there is no answer or a busy signal. Note that telephone users who add telephone “zappers”, used to stop telemarketers, can hamper or disable the Reverse 911 system. The system must be able to handle a secondary message. The majority of the systems and services that are available offer these features.

There are several manufacturers/service providers for these systems. Two of the most widely used systems are:

- CodeRED (<http://www.coderedweb.net/Default.aspx>)
- PlantCML (<http://www.plantcml.com/>)

Features of these three systems include:

- i. TTY/TDD Calling
- ii. Remote Activation
- iii. Remote Back up
- iv. Multiple Devices, pagers, cell phones. Landlines, VOIP Phones, etc.
- v. GIS Mapping for the community

- vi. WEB Based interface
- vii. WEB Based entry by a dedicated staff or by each residents, allows for easy updating by the home or business owner
- viii. High Call Volume (Estimated at 60,000 numbers per hour.)

The reverse 911 systems provide for a more accurate and effective means of communication to area residents and businesses in the form of voice messages that can be sent in multiple languages to provide instructions in the event of an emergency.

3.3 System Preference

Due to the testing requirement identified in CSD Section E.1.a, PXP's preferred CAN system option is to incorporate the use of a reverse dialing system to provide area notification of an emergency. This type of system will provide for ease of operation and testing and will not result in potential community concerns that could arise during a periodic test of a horn/siren-based system.

4 CAN System Activation

The nature of the operations at PXP is such that manual verification is required to assess emergency situations. Several operational procedures exist to mitigate potential emergencies; for example, drilling operations can be shut down to prevent a hazard alarm from becoming a serious emergency. Due to these oil field-related practices, it is proposed to follow a specified procedure for the activation of the CAN system as generally identified in Figure 1.

This type of process flow chart enables PXP personnel to assess the situation, notify the appropriate management personnel and/or authorities and activation the CAN system only when necessary. This process is crucial to accurately notifying the surrounding community only during true emergency situations and will limit, if not eliminate, false activations of the system.

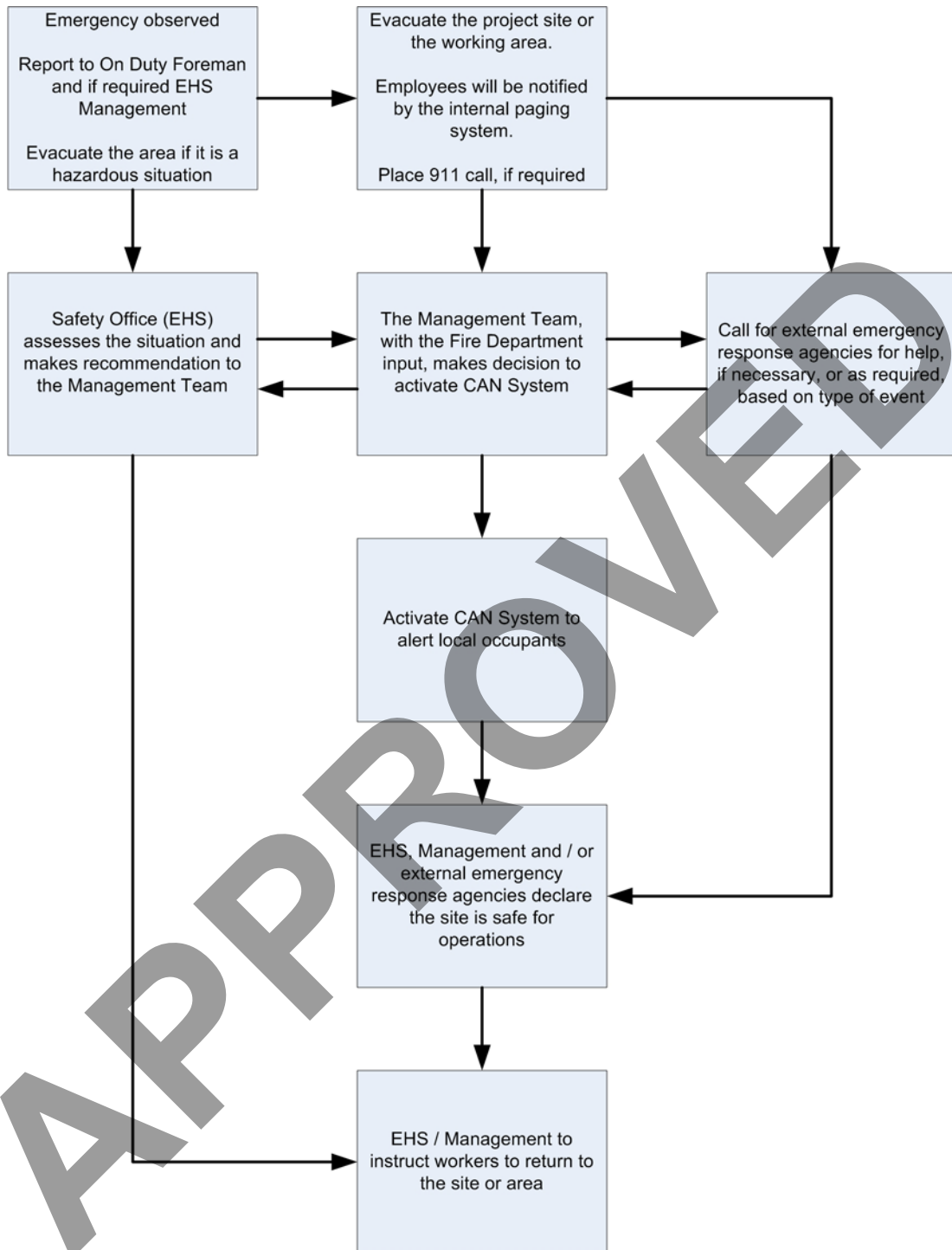


Figure 1 Typical Process Flow Chart

5 Conclusion

A Can System is required to be developed for the Baldwin Hill Oil Field operated by PXP. A reverse dialing (reverse 911) system will be developed for the site. There are several vendors that offer this type of service and it would not require the design or installation of specialized equipment at the oil field site. This type of system would be activated by PXP management (likely the Environmental, Health and Safety Team) according to procedures that are defined by PXP Management.

The details of the specific system will be coordinated between PXP and the Los Angeles County Fire Department based upon the detailed system information obtained from the chosen system/service vendor.

APPROVED

Salway, Candace

From: Ledesma, Frank
Sent: Thursday, February 18, 2010 4:00 PM
To: Salway, Candace
Cc: Flath, Troy; Pitts, Glen
Subject: Confirming email

February 18, 2010

I received a request for my signature in relation to omissions from the minutes of the MACC on September 17, 2009.

Rather than sign and forward the note, I am sending you this email with a near replication of your note. I hope this will suffice.

In the sending of this email, I am providing my concurrence of the following:

- o Fire Protection Capabilities Audit -- Approved
- o Community Alert Notification System Plan -- Approved -- to be installed by 09/17/2010
- o Gas Plant Audit and Seismic Assessment -- Approved, Completed and on file. Monthly corrective action updates have been submitted for October (30 day) and November (60day) and January (120 day) and March (180day) updates will be submitted accordingly.
- o Detection of Tank Bottom Leak Program -- Approved

Captain Frank J. Ledesma
Petroleum-Chemical Unit
Fire Prevention Division, Prevention Services Bureau
Los Angeles County Fire Department