TO:

JAMES L. APP, CITY MANAGER

FROM:

ED MOLDREM, WASTEWATER SUPERINTENDENT

SUBJECT:

FEDERAL RISK MANAGEMENT PLAN

DATE:

JANUARY 18, 2000

Needs:

For the City Council to hear a presentation by Ronald Baschiere of Base Associates regarding the mandatory Public Meeting for the Federal Risk Management Plan (RMP).

Facts:

- 1. The Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (PL 106-40) became law on August 15, 1999.
- 2. This law amends the Clean Air Act to remove flammable fuels from the list of substances with respect to which reporting and other activities are required under the risk management plan program, and for other purposes.
- 3. The Clean Air Act, Section 112(r), requires facilities with more than a threshold quantity of a listed extremely hazardous substance to submit an RMP to the Environmental Protection Agency (EPA). Paso Robles houses such a facility.
- 4. The new Public Law (PL 106-40) further requires these same facilities announce and hold a public meeting regarding the RMP by February 1, 2000, and certify to the FBI by June 5, 2000 that the meeting was held.

Analysis and

Conclusion:

The City of Paso Robles is required to hold a public meeting as required by the new Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (PL 106-40). Base Associates is prepared to describe and discuss the local implications of the Risk Management Plan submitted by Paso Robles at this public meeting to be held at the regular City Council meeting of January 18, 2000.

Policy

Reference:

Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (PL 106-40)

Fiscal

Impact:

None

Options:

- A. That the City Council hear the Risk Management Plan presentation by Ronald Baschiere of Base Associates, which shall serve as the public meeting as required by PL 106-40.
- B. That the City Council amend, modify or reject the above option.

Attachments: (1)

- 1) Memorandum from Ron Baschiere
- 2) RMP Public Notice Instructions
- Chemical Safety Information, Site Security and Fuels Regulatory Relief Act: Public Meetings and Other Notifications (information and instructions)
- 4) U.S. Pub. L. 106-40 (Internet Printout)
- 5) Risk Management Plan for Federal Accidental Release Program

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Accidental Release Prevention and Emergency Response Policies

The City of Paso Robles' Wastewater Treatment Plant (WWTP) located at 3200 Sulfur Springs Road.in Paso Robles, California, uses chlorine, which is a hazardous material and regulated substance, that is considered in the Risk Management Plan (RMP). The properties of chlorine make it necessary to observe safety precautions in handling chlorine to prevent human exposure, and to reduce the threat to the facility's workers and nearby members of the community. It is the facility's policy to adhere to all applicable Federal and State rules and regulations. Safety depends upon the safe procedures used to handle chlorine, the safety devices and systems designed and constructed into the facility; and the training of the pertinent personnel.

Stationary Source and Regulated Substances Handled

The WWTP uses chlorine to disinfect the treated wastewater to prevent the spread of pathogenic organisms. The chlorine is used in the final treatment step to disinfect the effluent prior to its storage for eventual discharge to the Salinas River.

Chlorine is delivered to the WWTP by a commercial supplier in one ton containers for use at the WWTP. Off-loading of the one ton containers from the commercial delivery vehicle is accomplished with a hoist. All the one ton containers are placed in the chlorine storage area. They are connected to the chlorine system when needed as the source of chlorine.

The WWTP has administrative procedures in place to limit the amount of chlorine in one ton containers at the facility. Delivery of the one ton containers is during normal working hours. The facility has adequate room for the delivery and parking of the delivery vehicle during the off-loading of the full one ton containers, and the loading of the empty one ton containers.

The chlorine building is locked after normal working hours and the area is fenced. No unauthorized personnel are allowed entry into the chlorine building. The container storage and handling is conducted pursuant to per Sections 2.6, 2.7, and 2.8 of the Chlorine Institute's Chlorine Manual.

The WWTP operates twenty four hours per day, seven day a week. The chlorine gas is withdrawn from the one ton containers by vacuum. This vacuum is created by an injector. This vacuum opens the vacuum regulator diaphragm, and withdraws gas from the one ton containers at a controlled feed rate set by the operators at the chlorinators. The chlorine gas is injected into the feed water line, where it becomes a chlorine/water solution and is feed where it is needed in the treatment process. The container storage room has an exhaust system, leak detector, and alarm system. Each chlorinator is vented to the outside if there is a diaphragm malfunction.

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Worst Case Release Scenario

The Worst Case release scenario must consider the largest quantity of a regulated substance handled on site in a single vessel at any time, taking into account administrative controls on the vessel's contents and usage as per 40 CFR Part 68 Section 68.25. The one ton container of chlorine is the largest vessel in the treatment system and has 2,000 lbs. of liquid chlorine. The Worst Case release scenario for the one ton container of chlorine is the release of the 2,000 lbs. of chlorine at the rate of 200 lbs/min for 10 minutes. The distance to the endpoint for the Worst Case scenario will extend beyond the boundaries of the stationary source.

Alternative Release Scenario

The Alternative Release scenario for the one-ton container of chlorine is a leakage rate of 2 lb/min occurring in the packing material around the valve stem of the gas valve on the one ton container. There are no active or passive mitigation measures that are considered to reduce the amount of chlorine released or treatment system to which released chlorine would be directed and treated. It is assumed that the release would continue for a period of sixty minutes. During that time a total of 120 pounds of chlorine would be released. In this scenario, the distance to the endpoint would extend beyond the boundaries of the stationary source.

Administrative Controls

Administrative controls exist to restrict to a minimum, the amount of chlorine lost from the one ton container if accidental release were to occur. This administrative control is inherent in the operational procedures for the chlorine process system and the training provided of the operators of the process system.

Mitigation Measures

Mitigation measures to limit the distances for each reported scenario exist to restrict the amount of chlorine released to a minimum if a release were to occur. The mitigation measures are based upon the design, inspection, testing, and maintenance of the chlorine process systems; their related equipment and components.

General Accidental Release Prevention Program

The facility complies with all applicable federal and state codes and regulations. There are safety meetings and safety training. The Process Safety Management (PSM.) program implemented at the facility for the chlorine process system and the related activities and equipment represents the facility's main active commitments to an accidental prevention program.

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Five Year Accident History

There has been no accidental release of chlorine in the last five years.

Emergency Response Program

The Emergency Response Program is based upon alerting personnel at the facility to evacuate the facility and await the arrival of responders from the Fire Department at the evacuation assembly location if a release occurs that causes the evacuation to be initiated. The San Luis Obispo County Environmental Health can incorporate this response into the Area Plan for the Local Emergency Planning Committee.

Planned Changes to Improve Safety

There are commitments under the Process Hazard Analysis element of the Process Safety Management (PSM) that are planned to be implemented. Current applicable codes and regulations are reviewed as part of the PSM to determine if other commitments need to be made to achieve increased operational safety for the regulated chlorine process system. These commitments will be prevention and mitigation measures for the accidental releases of the regulated substance.

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