

**CITY COUNCIL  
COMMUNICATION:**

**ITEM \_\_\_\_\_**

**OFFICE OF THE CITY MANAGER  
CITY OF DES MOINES, IOWA**

**99-421**

**SYNOPSIS -**

**AGENDA:**

SEPTEMBER 27, 1999

**SUBJECT:**

PUBLIC HEARING  
FOR WASTEWATER  
RECLAMATION  
FACILITY RISK  
MANAGEMENT  
PROGRAM

**TYPE:**

**RESOLUTION  
ORDINANCE  
RECEIVE/FILE**

**SUBMITTED BY:**

WILLIAM STOWE  
PUBLIC WORKS  
DIRECTOR  
DESIGNEE

The U.S. Environmental Protection Agency (EPA) promulgated regulations under the Clean Air Act Amendments of 1990, which requires facilities that use certain substances to develop a Risk Management Program (RMP) to reduce the likelihood of an accidental release of these substances into the atmosphere. The RMP then reduces the likelihood of serious harm to the public and the environment. The President of the United States signed legislation, Public Law 106.40, on August 5, 1999, which requires said facilities to hold a public meeting by February 1, 2000. By Roll Call No. 97-3160 on September 22, 1997, the City Council approved a contract with CH2M Hill to conduct a study of the Wastewater Reclamation Facility (WRF) to determine any requirements necessary to comply with the EPA and Occupational and Safety Health Administration (OSHA) regulations. Roll Call No. 98-1687 on June 1, 1999, amended the contract to perform an offsite hazard assessment and to develop the RMP and Process Safety Management (PSM) plan. The plan was submitted to the EPA on June 21, 1999, and has been approved. The City as the Operating Agency for the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) has adopted the plan. The last action necessary is to hold a public hearing on the plan on October 18, 1999, 5:30 PM, and authorizing the City Clerk to publish the appropriate notice.

**FISCAL IMPACT -**

There is no economic impact of this portion of the program.

**RECOMMENDATION -**

**Approval.**

## **BACKGROUND -**

The EPA passed the Clean Air Act Amendments of 1990, which required facilities that handle or store certain chemicals over threshold quantities to develop RMP to reduce the probability of an accidental release into the atmosphere and harm to the general public or environment. OSHA similarly requires PSM to protect the employees of such facilities.

The WRF has three chemicals used in the process that fall under these regulations. The digester gas produced as a byproduct of the sludge stabilization process contains over 60 percent methane. The threshold quantity for this gas is 10,000 pounds and the WRF stores about 33,000 pounds including the high-pressure storage sphere. The gas is used to run engine driven generators that produce approximately \$300,000 of electricity per year.

Chlorine gas in one-ton cylinders disinfects the final effluent discharged into the Des Moines River to protect full recreational users downstream and in the Red Rock Reservoir. The threshold quantity for this gas is 2,500 pounds and the facility stores up to 76,000 pounds. Sulfur dioxide then removes any remaining chlorine in order to protect the aquatic life in the river from the chlorine. The threshold quantity for this gas is 5,000 pounds and the facility stores up to 32,000 pounds on site.

The RMP includes an assessment of the facilities current safety programs and noted any further requirements to comply with the applicable laws. The second part of the program included conducting detailed modeling to determine the off-site consequences of the worst case scenario and more likely scenarios. The final effort included developing the complete program including procedures and recommendations to make the operation as safe as reasonable. The staff at the WRF concluded that the RMP provides the means to protect the community safety and the facility's employees and operation.