

# ENVIRONMENTAL Fact Sheet



**Eastern Michaud Flats Superfund Site, Power County, Idaho**

U.S. Environmental Protection Agency, Region 10

June 2008

## FMC Pond 16S

### Temporary Gas Treatment System Continues to Run While Permanent Solution is Tested

In December 2006, the U.S. Environmental Protection Agency (EPA) issued an Order under the Superfund Act to FMC Idaho, LLC, to install a gas treatment system at closed Pond 16S that will reduce phosphine and other gases to safe levels. An interim gas collection and treatment system was installed and has been operating while a long term Gas Extraction and Treatment System (GETS) was designed and constructed. Construction of the long term treatment system was completed in April, 2008. Shortly after the treatment system was started it had to be shut

down because the carbon filter overheated. The temporary gas extraction system continues operating while the GETS system design and operation is fully evaluated. EPA is reviewing an interim procedures plan to get the system running again. No releases of measurable toxic gases have occurred outside of the Pond 16S boundaries. The risk of potential exposure to toxic gases mostly remains with onsite FMC workers who are covered by their site health and safety plan. Access to the site is restricted from the public.



*FMC Pond 16S. Each Temperature Monitoring Port has various valves and gages to closely monitor the extraction of phosphine gas. From here the gas is piped to the treatment system where the gas is carbon filtered to safe levels prior to discharging to the air. EPA photo*

## Public Information Meetings

**Eastern Michaud Flats  
Superfund Site**

**July 29 in Fort Hall**

**July 30 in Pocatello**

**See back cover for details**

## **Background**

In 1998, the United States and FMC entered into a Consent Decree that addressed a number of alleged hazardous waste violations, including the charge that FMC placed reactive and ignitable phosphorus wastes in ponds at the site including Pond 16S. Pursuant to the Consent Decree, Pond 16S was closed and capped by FMC in 2005 as required by EPA's hazardous waste regulations.

Subsequently, in the summer of 2006, intermittent emissions from the self-ignition of phosphine gas from Pond 16S were visible at two temperature monitoring points installed within the cap covering the pond. Further investigation discovered a build up of phosphine gas at levels of concern for public health. EPA issued an Order that required FMC to design, install and operate a Gas Extraction and Treatment System (GETS) capable of reducing gases to safe levels. Additional requirements to ensure long term health and safety performance of the closed and capped hazardous waste ponds at the FMC site are currently under review.

### **What is a gas extraction and treatment system?**

The required Gas Extraction and Treatment System (GETS) is designed to extract highly toxic and reactive gases from under the cap at Pond 16S and treat those gases through a specialized carbon filter system prior to discharge into the air. Treated and discharged gases are monitored and are required to be below levels that are considered safe for extended exposure by anyone who might be in the immediate vicinity of the discharged gas. Gases extracted and treated will be replaced by injecting a blanket of inert nitrogen gas under the Pond 16S cap so that additional air is not pulled in under the cap. The system includes a series of automatic shut-downs and devices to ensure that no gases are released to the environment that have not been treated to safe levels.

### **Why did the gas extraction and treatment system design take so long?**

EPA, in coordination with the Shoshone-Bannock Tribes and the Idaho Department of Environmental Quality, went through a thorough technical and engineering evaluation of FMC's proposed design for construction and operation of the gas extraction and treatment system. EPA had dozens of comments and requirements at various stages of the design process that FMC was required to respond to or incorporate into their design. The final design represents a technically state-of-the-art system to address a very complex engineering problem.

### **What happened at start-up of the system?**

At initial start-up and shake-down of the gas extraction and treatment system in May, 2008, a problem with overheating of the carbon in the carbon treatment units occurred that resulted in a short-term release of toxic gas above an acceptable level. The system was immediately shut down. No levels of toxic gas were detected in ambient air, either in the vicinity of Pond 16S or at the FMC facility boundary. FMC is presently going through a series of tests to determine the exact nature and cause of the problem. EPA is reviewing an interim procedures plan to get the system running again.

### **What is happening with the gases under the cap? Is there a risk to the public?**

Pond gases are continuing to generate at Pond 16S. While the tests of the long term system are ongoing, the smaller scale mobile treatment system is continuing to operate and treat pond gases. The mobile system extracts and treats gases at a much lower rate as compared to the rate when the long term gas extraction and treatment system is in full operation. Additionally, FMC is conducting daily monitoring of ambient air and the system discharge to ensure that no gases are released that represent a risk to on-site workers or the public.

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*FMC Pond 16S. The large square vessels are the carbon filters that treat the gas to safe levels before discharging to the air. EPA photo*

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### **What is EPA's next step?**

FMC is expected to complete tests of the gas extraction and treatment system in June, after which EPA will evaluate the information and decide how to proceed. Modifications of the long term system and/or additional operational requirements may be required to get the system into full operation as quickly as possible while continuing to ensure that no gas is released that presents a risk to on-site workers or the public.

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### **Where can I get more information?**

Sue Skinner,  
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or

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*FMC Pond 16S SE Idaho Update  
Closed FMC Facilities, Eastern Michaud Flats Superfund Site,  
Power County, ID*

## **Save the Dates of July 29 and July 30 for Public Informational Meetings !!!**

As a part of EPA's overall update of all activities at the Eastern Michaud Flats Superfund Site, Pond 16S will be discussed at upcoming public informational meetings to be held in July. Informational updates of ongoing and future actions will include Pond 16S, the FMC RCRA (Resource Conservation and Recovery Act) status, and ongoing FMC and Simplot Don Plant and Off Plant area superfund work

This is your opportunity to learn about the latest activities at the Eastern Michaud Flats Superfund site and to meet the EPA team members

**July 29, 2008:** Fort Hall Business Council Chambers, Fort Hall, Idaho

**July 30, 2008:** Pocatello City Hall Chambers, Pocatello, Idaho

**5:30 pm to 6:45 pm** –Educational Poster Sessions with One-to-One Opportunities

**6:45 pm** – EPA presentations and Q & A

**9:00 pm** - Adjourn

\*\*\* light refreshments will be available\*\*\*

For information about these meetings, please contact Sue Skinner, Community Involvement Coordinator, at 208-282-4326 or email [skinner.susan@epa.gov](mailto:skinner.susan@epa.gov)

*Alternative formats are available. For reasonable accommodation, please call Sue Skinner at 208-282-4326. TTY users, please call the Federal Relay Service at 800-877-8339.*

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