

ENVIRONMENTAL Fact Sheet



Closed FMC Facilities, Eastern Michaud Flats Superfund Site, Power County, ID

U.S. Environmental Protection Agency, Region 10

December 2006

EPA orders FMC to address gases from former waste pond

The U.S. Environmental Protection Agency (EPA) has issued a legal order to FMC Idaho, LLC, to install a gas treatment system for reducing phosphine and other gases to safe levels at closed Pond 16S. The work is expected to take several months. It will be conducted with oversight from EPA, in coordination with the Shoshone-Bannock Tribes and the Idaho Department of Environmental Quality. This interim action is needed to reduce potential risks to human health and the environment from the build up of gases beneath the pond's cap.

What is the problem?

In 1998, the United States filed a legal complaint against FMC alleging a number of hazardous waste-related violations, including the charge that FMC placed reactive and ignitable phosphorus wastes in Pond 16S. After a follow-up legal agreement in 1999 between EPA and FMC, Pond 16S was permanently capped by FMC in 2005, as required by EPA's hazardous waste regulations

During the summer of 2006, intermittent emissions from the self-ignition of phosphine gas were visible at two temperature-monitoring points located on the cap. Further investigation found a build up of phosphine gas and hydrogen sulfide gas at levels of concern for public health

What are the potential impacts to health and safety?

The Order includes findings that phosphine gas and hydrogen sulfide gas have been measured at levels of concern at temperature-monitoring ports located on top of the Pond 16S cap. Also low levels of hydrogen sulfide gas have been measured in ambient air at and surrounding Pond 16S. EPA conducted air sampling the week of Thanksgiving and found elevated concentrations of phosphine and hydrogen sulfide gas that potentially endangers onsite FMC personnel, workers or visitors. Both gases are highly toxic and flammable. The Order requires FMC to identify and characterize any other gases that may also need treatment, and requires ambient monitoring in the vicinity of the closed pond.

What is Phosphine Gas?

Phosphine is a colorless, flammable, and explosive gas at ambient temperature that has the odor of garlic or decaying fish. Phosphine gas is extremely flammable and produces a dense white cloud of phosphorus pentoxide when it burns. Phosphorus pentoxide is a severe respiratory tract irritant. Check out this website for more on phosphine gas.

<http://www.atsdr.cdc.gov/tfactsx7.html#>

What is Hydrogen Sulfide Gas?

Hydrogen sulfide is a highly toxic and flammable gas that is characterized by the odor of rotten eggs. Exposure to even low concentrations of hydrogen sulfide may cause irritation to the eyes, nose and throat, and may cause difficulty in breathing for asthmatics.

<http://www.atsdr.cdc.gov/tfacts114.html>

What happens next?

This legal order requires FMC to design, install, and operate a gas treatment system capable of reducing gas to safe and sustainable levels. This interim removal action addresses an immediate problem. Additional requirements to ensure long-term health and safety performance of the closed and capped hazardous waste ponds may be needed.

continued



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Where can I get more information?

An information repository that includes the Administrative Record leading up to the decision to issue the Order will soon be available locally in two places: at the IDEQ Office located at 444 Hospital Way, #300 in Pocatello, Idaho, and at the Shoshone-Bannock Library located at the Fort Hall Tribal Business Center on Pima Drive, Fort Hall, Idaho. Later supporting documents, as required of FMC in the Order, will be added as they become available. EPA will publish a notice of the availability of the Administrative Record in local newspapers when the repository is officially established.

Site History

The FMC site is located in southeastern Idaho on Highway 30 in Power County, about 2.5 miles northwest of Pocatello, Idaho. From the late 1940's until December 2001, the site was used to manufacture elemental phosphorus from phosphate ore. This site is part of the Eastern Michaud Flats Superfund site that was listed on the National Priorities List of the nation's most contaminated sites in 1990. Various surface impoundments, including Pond 16S, were used to manage process wastewater containing elemental phosphorus. After the plant closure at the end of 2001, FMC dismantled and removed the manufacturing plant.

Contact Information: For more information or to add your name to the *Southeast Idaho Update* mailing list, please contact:

Sue Skinner, EPA Community Involvement Coordinator,
208-478-1680 or skinner.susan@epa.gov.

Interested in a public meeting?

If you are interested in a public informational meeting, let us know. If so, contact **Sue Skinner** by January 8, 2007.



Alternative formats are available. Please call Sue Skinner. TTY users, please call the Federal Relay Service at 800-877-8339 and give the operator Sue Skinner's phone number.

