



## **Meanwhile, Back at the Ranch**

Newsletter of the  
Frontier Fertilizer Superfund Oversight Group

September 2011

---

### **USEPA IS HEATING SOIL AND GROUNDWATER AT THE NEARBY FRONTIER FERTILIZER SUPERFUND SITE TO REMOVE CONTAMINANTS—LEARN MORE AT THE UPCOMING PUBLIC MEETING.**

A public meeting to discuss remedial clean-up actions at the Frontier Fertilizer Superfund Site in Mace Ranch will be held on Wednesday, October 12, 2011 at 7 p.m. in the City of Davis Police Station at 2600 Fifth Street in Davis.

**Please plan to attend this important meeting. Issues to be discussed at the meeting include the following:**

**Thermal Treatment.** The Environmental Protection Agency (EPA) operates a thermal treatment clean-up system for the Frontier Fertilizer Superfund Site in Mace Ranch that removes the large mass of contaminants in the area of highest contamination, the source area, where dumping occurred prior to 1983 (see Background section below). The system applies electrical energy to underground electrodes to heat soil and groundwater to approximately 100 degrees Centigrade (212 degrees Fahrenheit) to 90 feet below ground surface. Heat destroys some of the chemicals below ground. Others are volatilized for capture and treatment above ground. EPA provides weekly data updates on contaminant removal and temperature data for the heating system to the FFSOG for evaluation. To date, the system has removed approximately 15 pounds of constituents of concern (pesticides and a solvent). The system is running well and on schedule. EPA representatives will discuss the heating system and results at the community meeting.

The thermal treatment began operation in March of 2011 and will continue for about one and one half years. EPA will then evaluate the effectiveness of the thermal treatment and need for further efforts. A groundwater remediation system will continue to collect and clean the contaminated ground water until drinking water standards are met.

**PUBLIC HEALTH AND SAFETY.** With input from the FFSOG, EPA developed Air monitoring and Community Notification plans that are designed to ensure community safety, especially the near-by Mace Ranch neighborhood, and site workers. Both plans document protocols to minimize risk from unlikely vapor release during heating and to protect the neighborhood in case of a problem such as system failure or loss of power. EPA collects weekly ambient air samples and provides these data to the FFSOG for evaluation. To date, there have been no detects that would trigger action and/or notification of the community. At the meeting, EPA and the FFSOG will discuss the air sampling and results and the protocol to be followed in case of detections of constituents of concerns in the air samples.

**TARGET.** EPA sampled soil gas and continues to monitor the groundwater quality near Target. These actions were prompted by the determination of groundwater concentrations above the action levels for trichloropropane (TCP), a key constituent of concern, in 2009. Target is required to conduct sub-foundation air sampling under the store footprint to ensure that there is no danger of TCP entering the store. EPA will discuss recent monitoring results and plans at the community meeting.

**Background.** From 1972 to 1983, workers at Frontier Fertilizer, a pesticide distributor for local growers, routinely dumped residual pesticides from drums and tanker trucks on the ground and into unlined pits at the site. These chemicals sank into the ground resulting in a mass of highly contaminated soil and groundwater beneath what is now a Federal Superfund site. This mass serves as a continual source of contamination to a plume of contaminated groundwater that stretches from the source area where dumping occurred to underneath homes in Mace Ranch north of the Site. Contaminants (constituents of concern) in the soil and groundwater include pesticides and a solvent, carbon tetrachloride. A groundwater remediation system removes and treats the groundwater contamination, but unless the mass of contaminants in the soil is removed, the pump and treat system will have to operate for many decades. The heat treatment will remove most of the contaminant mass feeding the plume and reduce time required for remediation.

*Please help us in our efforts. Make your tax-deductible contribution payable to FFSOG.*

☐ Add me to your mailing list.

☐ I would like to make a donation in the amount of: ☐ \$10 ☐ \$25 ☐ \$100 ☐ Other.

☐ I cannot make a donation at this time, but would like future information.

Name  Address   
Phone  email

Please contact the FFSOG at 3010 Loyola Drive, Davis, CA 95618, (530) 756-6856 or [pnieberg@dcn.davis.ca.us](mailto:pnieberg@dcn.davis.ca.us). Please include your name and contact information.

Check out our website at [www.dcn.davis.ca.us/go/ffsogT](http://www.dcn.davis.ca.us/go/ffsogT).

Thank you for supporting FFSOG.

The FFSOG is a non-profit, public benefit corporation formed in the State of California. The FFSOG is formed as a community oversight group dedicated to keeping the larger community informed of progress in EPA's clean-up activities at the Frontier Fertilizer Superfund Site and to facilitating meaningful public input into the process.

FFSOG Board of Directors  
Wendy Cohen, Chris Hawkes, Pam Nieberg, Helene Wagner  
FFSOG Technical Advisor: Steve Deverel, PhD, PG





