

# DOE Oversight Bureau Wildland Fire Response Assistance

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*Please be prepared to discuss the potential issues related to your programs and the types of assistance/oversight your bureau can or should provide in the aftermath of a flood.*

**The DOE Oversight Bureau is limited to monitoring emissions and measuring impacts that operations at DOE facilities might have on human health and the environment.**

## ***Monitoring Particulates in Air***

With respect to the Cerro Grande and the Las Conchas fires we were able to deploy our particulate air monitoring network and equipment and coordinate with other entities (LANL, EPA, and the DOE RAP team) in deploying their resources near the perimeter of LANL and in downwind communities.

Equipment includes a network of fixed particulate air monitors (at LANL, SNL, and WIPP) that cannot be readily moved. The Bureau maintains limited excess capacity in the form of replacement and spare parts allowing limited deployment of redundant capacity.

The Bureau maintains two mobile (trailer mounted) air particulate monitoring stations that can be deployed in off grid locations. The units utilize solar panels to charge deep cycle batteries for continuous particulate sample collection from air. The units do not rely on an external power source and may operate continuously off grid and may be deployed anywhere in the path of the smoke plume. Limitations include collection/replacement of particulate filters and laboratory analysis turn-around time. Analytes of interest are typically radioactive particulates in air. Past measurements indicate that radioactive materials, primarily background and deposition of fall-out constituents from atmospheric testing of nuclear weapons, are present in ash, they have not been measured in levels that are a threat to human health.

## ***Radiation Detection***

The Bureau has a limited number of real time personal radiation detectors (gamma) and an inventory of passive gamma detectors. The passive devices will not allow correlation of radiation exposures with specific times or dates (spikes) but can be used to determine doses over the deployed time interval. Generally speaking, radiation emissions from wildland fires does not present a threat to human health.

## ***Stormwater Monitoring in Watersheds***

The Bureau has extensive knowledge and experience deploying stormwater monitoring equipment in watersheds and has both automated and passive stormwater collection equipment. Automated equipment is not reliant upon an external power supply and can be deployed in off grid locations by utilizing solar panels and deep cycle batteries. The automated equipment may be programmed to collect samples at various times and stages within the hydrograph. Single stage (passive) sampling equipment may be placed in stream courses to collect individual samples. The Bureau maintains flow meters for recording flood stages and multi-function devices for determining field parameters of

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water samples. The Bureau also maintains backpacking equipment that allows staff to carry equipment into and out of remote areas.

### ***GIS and Map Making Capability***

The Bureau has staff and equipment that allow production of maps utilizing GIS data and has the capacity to produce large scale (up to 44 inches wide) full color maps including topographical base layers and satellite imagery. The Bureau maintains GPS equipment that allows accurate locating of points on the earth.

### ***Interpreting Analytical Results***

Bureau staff are well experienced in interpreting analytical data (results). Bureau staff have expertise in geology, hydrology, biology, and watershed geomorphology. Bureau staff are experienced in best management practices with respect to controlling runoff in urban environments.

### ***Community and Public Outreach***

Our relationship with certain community activists and tribes in the vicinity of LANL allowed quick access to community stakeholders and tribal leaders. Bureau staff are experienced in public outreach and presentations.

*Also prepare and bring a list of the individuals in your bureaus with the expertise and ability to assist, either on-site or in a support role, in addressing the anticipated issues, their work and cell phone numbers, and any special supplies or support they might need as part of a response.*

- Dave Englert, Hydrologist, stormwater, watersheds, sample collection, data analysis, presentations. 505-476-6022
- Ralph Ford-Schmid, Environmental Scientist, stormwater, watersheds, sample collection, data analysis, presentations. 505476-6023, Cell 505-690-0872
- Erik Galloway, Hydrologist, NPDES, sample collection, stormwater best management practices in urban areas. 505-476-6024
- Courtney Perkins, Environmental Scientist, stormwater, sample collection, data analysis, presentations. 505-661-2667
- Kim Granzow, Environmental Scientist, stormwater, sample collection, data analysis, database and GIS systems. 505661-4008
- Don Carlson, Environmental Scientist, stormwater, watersheds, sample collection, data analysis, presentations. 505-661-2687
- Bill Bartels, Environmental Scientist, stormwater, watersheds, air monitoring, sample collection, data analysis, presentations. 505-661-2689
- Steve Yanicak, Staff Manager, stormwater, watersheds, sample collection, data analysis, presentations. 505-661-2644, Cell 505-690-9179
- Susan Lucas Kamat, Environmental Scientist, stormwater, watersheds, sample collection, data analysis, GIS, presentations. 505-845-5825
- Chris Armijo, Geoscientist, stormwater, watersheds, air monitoring, sample collection, data analysis, GIS, presentations. 505-845-5824

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- Tom Skibitski, Bureau Chief, sample collection, presentations. 505-845-5932, Cell 505-235-1269
- Julia Marple, Environmental Scientist, air monitoring, sample collection. 575-885-9023
- Tom Kesterson, Environmental Scientist, air monitoring, sample collection, presentations. 575-885-9023

*If you currently have guidance documents related to flood preparation and response (as it relates to your program), please send me a copy before the meeting.*

Sampling analysis plans and protocols for sampling various environmental media.