Custom Weather Monitoring for Hazardous Waste Management

**Summary**
US Ecology’s Grand View, Idaho facility treats and disposes hazardous waste, non-hazardous industrial waste, and low-activity radioactive material. USEI utilizes Columbia Weather Systems equipment for their day-to-day operations. Applications in the facilities include:

- Monitoring one-hour rolling wind speed and direction
- Determining dust dispersion
- Overall compliance with environmental regulations

**Challenge**
Conditions of USEI’s operating permit requires constant observation of weather conditions at the facility. This entails monitoring the one-hour rolling wind speed and direction average to meet a specific compliance requirement to help control the dispersion of dust on-site.

**Solution**
Columbia Weather Systems offers software and hardware customization for applications whose weather monitoring requirements aren’t met by our standard systems.

Starting with an Orion Weather Station™, the required parameters were added to the Weather Master™ and MicroServer™ software and firmware that USEI purchased.

“We are pleased with the work CWS has done for us and plan to use them in the future for any weather monitoring needs we may have.”

- Grae Harper, USEI Environmental Engineer
With this change, the user can monitor the one-hour rolling wind averages through the MicroServer user interface, as well as Weather Master “Display” and “Trend” screens.

The Orion Weather Station offers an all-in-one sensor module with ultrasonic wind speed and direction, as well as temperature, barometric pressure, and humidity.

**Operational Decision-Making**

“The customized weather monitoring application from CWS installed at our facility allows USEI to track the rolling one-hour average wind speed when placing treated waste in our landfills,” Environmental Engineer Grae Harper reports. “When this average wind speed reaches a permit-specified upper limit, automatic email alerts are sent out by the Weather Master software, and landfill operations are temporarily suspended.”

“USEI uses the weather monitoring equipment and software in other capacities that help USEI comply with important environmental regulations and promote our industry-leading Health and Safety Program,” he adds. “We are pleased with the work CWS has done for us and plan to use them in the future for any weather monitoring needs we may have.”

**Professional Weather Stations. Professional Weather Monitoring.**

Integrating cutting-edge technology in met sensor and monitoring options, at Columbia Weather Systems, our job is to make weather monitoring easy so professionals like Grae at USEI can focus on doing their job in the most effective way possible. We offer fixed-base, vehicle-mount, and portable weather station configurations for professional, industrial, and government applications.

Call or email to find out how we can help make weather monitoring easy for you: 1 888 508-7375 / info@columbiaweather.com

For additional information visit: ColumbiaWeather.com

Sources: https://www.usecology.com/Home.aspx

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