WIPP 700-C FAN RESTART

Quick Facts

WHAT'S GOING ON?
DOE plans to conduct initial short duration testing, approximately 4 hours in time, of the 700-C ventilation fan.

WHAT IS THE 700-C FAN?
The 700-C fan is a large exhaust fan that is used to a draw a high volume of unfiltered air from the underground.

WHY?
Use of the 700-C ventilation fan will help WIPP improve the work environment for the workforce until the Safety Significant Confinement Ventilation System (SSCVS) comes online.

ARE THERE ANY DRAWBACKS?
Initial short duration testing of the fan could result in the release of trace levels of detectable radioactive materials into the immediate environment. The estimated maximum release would be approximately 2,000 times below Environmental Protection Agency (EPA) enforced limits.

What is the Exposure Risk?
The potential dose received by an individual near the fan outlet would be much less than the dose one would receive from natural background radiation standing at the Sandia Peak for one hour.

Details

The 700-C ventilation fan will increase airflow to the underground and aid in the reduction of air quality challenges that currently exist in the mine.

The 700-C fan will only be used during activities that will benefit from more airflow such as mining, installation of rock bolts, and maintenance cycles.

The fan will not be used during underground waste emplacement operations. Waste Emplacement Operations will continue to be conducted with underground ventilation configured to pass through HEPA filtration prior to being released.

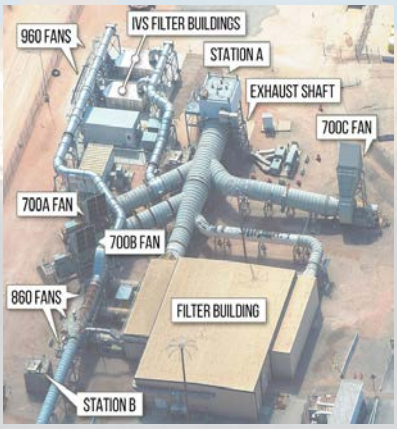
This potential release is expected to occur during the start-up test after the fan's operational hiatus, however, radiological monitoring will be ongoing.

All testing data will be thoroughly reviewed before a final decision regarding the full resumption of the 700-C Fan is made.

Your Safety and the Safety of Our Environment is our Foremost Priority

NWP has developed a conservative Radiological Monitoring Plan (RMP) that will be strictly adhered to during the testing and start-up of the 700-C fan to ensure the health and safety of the workforce, environment, and surrounding community is maintained.

The Carlsbad Environmental Monitoring and Research Center, an independent organization managed by New Mexico State University-Carlsbad, and WIPP will conduct normal air monitoring activities during the restart of the 700-C fan.



Aerial photo showing the 700-C Fan.

The Low Down on Millirems

WHAT IS A MILLIREM?

A millirem is a unit of absorbed radiation dose by a human being.

MILLIREMS AND YOU

The WIPP permitted limit (measured in dose) is 10 millirem per year to the Maximally Exposed Offsite Individual (MEOSI). This means that the WIPP facility cannot release an amount of radiation that would cause an individual at the site boundary line to receive a radiological dose above 10 millirem in a year.

In 2018, the calculated MEOSI dose from WIPP operations was 0.0000931 millirem for the year, well below the EPA limit and even less than the radiological dose you get from taking a cross country flight.

Radiation in Your Every Day Life

WHAT IS BACKGROUND RADIATION?

Background radiation exists all around us, no matter where we live. Most background radiation occurs naturally. It mainly comes from natural minerals, some of which are even found in the human body.

DOES THIS MEAN THE AVERAGE AMERICAN IS EXPOSED TO RADIATION EVERY DAY?

Yes. In fact, according to the National Council on Radiation Protection and Measurements, the average American is exposed to 620 millirem per year, about half of which comes from natural background radiation.

The Amount of Radiation Absorbed By a Person is Measured in Dose

To ensure the safety and protection of workers and the public, a world-wide body of experts has established basic principles to safely regulate radiation exposure. These global principles date back to 1928 and are part of the International Atomic Energy Agency's (IAEA) Basic Safety Standards for Radiation Protection. The IAEA's standards are published jointly with the World Health Organization, the International Labour Organization, and the Organization for Economic Cooperation and Development's Nuclear Energy Agency.

The Department of Energy and Environmental Monitoring

The U.S. Department of Energy works hard to ensure communities near our facilities maintain safe and healthy environments while meeting national and state environmental standards. To do this, the U.S. Department of Energy extensively monitors the environment in and around WIPP, by collecting and testing various samples. Samples are collected at differing frequencies, in order to assess the impact that site operations may have on public health or the environment.

The Department of Energy is committed to working with the community and the state to ensure the safety, health and protection of our workforce, the general public and the environment.

Relative Doses from Radiation Sources