



## MAKE RADIATION VISIBLE Petition

To: The Nuclear Regulatory Commission,  
EPA Office of Air and Radiation

*Protect Americans from radioactive pollutants by requiring visible dye releases with emergency radioactive plume releases, public health alerts for routine and accidental radiation releases, and by providing real-time radiation monitoring online – covering the 50 mile radius danger zones around commercial U.S. nuclear plants where one in three Americans now live.*

Radiation is odorless and invisible, undetectable by human senses. Sadly, Fukushima school children were sent into the path of a radioactive plume, rather than away from it; and it took a Texas school explosion killing nearly 300 students before the law required odors in gas. We want to ensure a plume can be spotted before an emergency occurs. Like odor-markers for natural gas, we ask that visible dyes be dispersed with emergency radiation releases, providing immediate, direct warning about where radioactive plumes are traveling – a critical life-saver for first-responders and the public.

We also request that public health alerts be posted when known radioactive carcinogens and mutagens are released into our biosphere. We have weather alerts, smog alerts, and even pollen alerts, why not radiation alerts? Unfortunately, it has been "out of sight, out of mind." People deserve to know when they are being exposed to these highly toxic elements, not a year later, but when they are actually exposed – so they can protect themselves.

Currently neither EPA nor NRC require comprehensive radiological monitoring and real-time online reporting of on-site releases. The NRC relies on the nuclear plant operators to self-report radioactive releases based on quarterly averages – only once a year. Simply the fox watching the hen house.

We call on the NRC and EPA to upgrade radiation monitoring systems throughout the nation, both on reactor sites and in reactor communities (50 mile radius), with real-time online data about radioactive levels around nuclear facilities. Following the Fukushima explosions in 2011, less than 100 EPA monitors recorded radiation levels as the plumes traveled across the U.S. Since then, hundreds of citizen volunteers across the country have begun providing real-time radiation monitoring online.

The governmental agencies charged with protecting public health and safety by enforcing safety standards and radiation levels have a responsibility to conduct transparent monitoring to ensure safe levels are not exceeded. Currently the United States lacks comprehensive radiation monitoring and the NRC only requires annual operator reports, leaving the underfunded Environmental Protection Agency (EPA) to monitor the rest of the country in real-time. An interagency effort is needed to 'connect the dots' and ensure public oversight.

We call on the NRC and EPA to coordinate and upgrade radiation monitoring systems for compatibility and transparency. The technology is well developed, both for monitoring and for reporting real-time radionuclide data online. The benefits of national radiation monitoring far outweigh the relatively small costs. Without comprehensive monitoring, government regulators cannot, and do not, adequately protect public health or protect our air, food and water from nuclear toxins that bio-accumulate and remain dangerous for generations to come.

Again, we petitioners request the following:

- Dispersal of visible dyes with emergency radiation releases, providing immediate, direct warning of radioactive plume paths.
- Public health alerts for routine and emergency radiation releases into the public biosphere from power plants, mining, incineration, accidental releases, leaks, or spills.
- Real-time radiation monitoring, to coordinate and transparently report multiple-agency radioactive emissions data to the public, and nuclear operators posting real-time on-site monitoring data to the interagency monitoring website and upgrading area dosimeters to real-time radionuclide monitors.