

Statement by George Anastas

Before the Defense Nuclear Facilities Safety Board (DNFSB)

Regarding the Department of Energy (DOE) Order 140.1 “Interface with the Defense Nuclear Facilities Safety Board” to Limit the DNFSB in Overseeing the Operations at Department of Energy Facilities

February 21, 2019

(About 5 years after the two Preventable Accidents at WIPP that cost the Taxpayers ~\$2,000,000,000)

Welcome to New Mexico. I am a resident of New Mexico and a Professional Nuclear Engineer, a Certified Health Physicist, a Board-Certified Environmental Engineer in Radiation Protection, a Fellow of the Health Physics Society and a Fellow of the Australasian Radiation Protection Society. For more than five decades I have been engaged in nuclear, radiation, occupational and environmental protection in industry, academia and government. For a good fraction of that time I have been involved with DOE and its predecessor agencies on a variety of issues, most recently the safety at the Waste Isolation Pilot Plant (WIPP) including the preventable accidents that occurred in February 2014, plans by the DOE to bury 30-60 tonnes of weapons grade plutonium at the WIPP and criticality issues at Los Alamos National Laboratory.

I am strongly opposed to any curtailment of the Board’s review functions of DOE facilities because of significant public health, occupational health, environmental protection, national security and public policy reasons, several of which are addressed in this Statement. There is no need for a Memorandum of Understanding between the Board and the self-regulating Department of Energy. The Board’s enabling legislation speaks unambiguously to the Board’s charge and the role of DOE and its many contractors. DOE Order 140.1, promulgated by a self-regulating agency I might add, severely hinders the intent of Congress to provide an independent set of eyes on the goings on at DOE nuclear facilities and the needs of the public. Order 140.1 as written (and applied by DOE) portends disastrous implications to transparency of DOE actions and to the mission of the DNFSB. Trust but independently verify is an important mantra when dealing with the DOE.

DOE Order 140.1 will change the interface between the Board and the DOE and contractor employees, places obstacles in the Board's access to information and curtails the Board's jurisdiction.

My question for DOE, "What is DOE planning to shield from independent review?", another Fernald, another Rocky Flats, another burping tank at Hanford, additional groundwater contamination, ...

On the contrary, I strongly support increased, independent of DOE and DOE contractors, review and analysis of DOE and DOE contractor planning and operations. The increased review must include, at a minimum, increased DNFSB staffing, increased funding and increased visibility before Congress, state governments, regulatory agencies, the media and the public. I implore the Board, the public and Congress to eliminate the not very well disguised DOE attempt to curtail the very important, and critical, functions of the DNFSB.

"Those who cannot remember the past are condemned to repeat it". Jorge Santayana, 1863-1952)

One only has to review the history of the establishment of the DNFSB to recognize that DOE today wants to return to the pre-1985 DOE mind set and operational practices. For example, prior to the establishment of the DNFSB:

- 1) DOE had relied almost exclusively on private sector contractors to identify safety concerns and propose remedial actions due to the superior expertise held in these areas by contractors instead of DOE personnel, that DOE's management approach to the mix of production and safety responsibilities fell short of reasonable expectation;
- 2) A study of DOE operations also revealed that individual DOE contractors developed their own standards and testing methods for hazardous waste disposal with none of these methods receiving DOE approval.¹
- 3) I will not dwell on the Rocky Flats experience where EPA and the FBI raided the facility in 1989 because of patently unsafe and illegal practices, known by DOE.
- 4) Nor will I dwell on all the many issues at Hanford and the many professionals that have raised significant safety concerns.

- 5) Nor will I dwell on the Fernald site, a 1,050-acre uranium-processing complex, that was shut down in December 1984 “after DOE disclosed that excessive quantities of uranium dust and oxides had been released through the ventilating system in a recent three-month period.”²

An American Hero, John Glenn, introduced S. 1085, the Senate version of the DNFSB legislation, on April 23, 1987, as the Nuclear Protections and Safety Act of 1987. Testifying at a subsequent hearing, Glenn stated that the proposed defense nuclear safety agency would have six primary functions³:

1. Ensuring the implementation of current DOE health and safety standards.
2. Issuing advisory recommendations in the content and application of DOE standards.
3. Investigating events at DOE facilities that the agency considers important due to their potential or actual adverse impact on public health or safety.
4. Recommending specific measures to prevent the occurrence of such events.
5. Issuing periodic unclassified public reports with its recommendations and the decision to implement corrective steps at DOE facilities.
6. Making recommendations and being consulted with to ensure that design, construction, health, and safety standards at DOE facilities are appropriate and comparable to those standards at comparable private sector nuclear facilities.

I believe Senator Glenn is looking down at DOE and shaking his head in disbelief at this attempt by DOE to hamstring the DNFSB. Order 140.1 makes it so very easy for DOE and its contractors to hide any information (facts hidden in the shadows) they do not want to come to light.

In 1989 after the DNFSB Legislation was passed a Senate Governmental Affairs Committee study was completed, *Early Health Problems of the U.S. Nuclear Weapons Industry and Their Implications for Today*. Findings from the report demonstrated that high-level AEC officials were aware of serious public health problems arising from worker exposure to highly radioactive particles and gases at AEC facilities such as Hanford between 1947 and 1954. The report also determined that a Centers for Disease Control (CDC) panel learned that the DuPont Company found Savannah River Plant workers experiencing excessive leukemia rates, that Oak Ridge National Laboratory workers faced increased risk of cancer death due to radiation exposures, that cancer deaths of Rocky Flats workers rose with increasing plutonium exposures, and that DOE's long-standing

concern over legal liability had been an important deterrent affecting its health and safety research.⁴

A quote comes to mind from the Wizard of Oz and it perfectly fits Order 140.1: “Do not look behind the curtain”, indeed DOE is attempting to place an opaque curtain between what it and its contractors are doing thus shielding what is going on from scrutiny by the DNFSB, Congress, regulatory agencies, states, the media and the public.

One only has to look at the recent past to vigorously and strongly support significant increased independent oversight of DOE and its contractors: Hanford workers illnesses, WIPP accidents costing taxpayers an additional \$1 to \$2 billion, DOE and its contractor wanting to recalculate the volume of waste buried at WIPP and thus ignore DOE statements and promises that the volume of waste is the volume of the container and hide the fact that the VOCs in the head space of the waste drum is integral to the waste buried at WIPP, DOE’s “plan to place 30 to 60 metric tonnes of weapons grade plutonium in the WIPP (a proposal well outside the environmental, safety and public policy assessments of WIPP), the huge cost over-runs at the Mixed Oxide Fuel Fabrication facility, exploding waste drums in the DOE complex, significant criticality near misses and issues at Los Alamos, and much more.

The disclosures of the sad state of safety at WIPP was highlighted by the numerous reports relating to the February 2014 preventable accidents. One would have hoped that DOE and the WIPP contractor would learn from these costly preventable accidents and their precursor observations. However, that is patently not the case. Five years after the 2014 accidents one only has to glance at the 2017-2018 DNFSB technical staff Monthly Reports on the WIPP to garner the unsafe conditions at the world’s only deep dump for transuranic waste, a dump that has accepted, with full knowledge by DOE, spent nuclear fuel and reprocessing high level waste.

The DNFSB might uncover additional unsafe conditions if it had more frequent technical staff inspections at WIPP. A DNFSB technical staff presence in Albuquerque, with frequent technical staff assignments (week long or more) at WIPP might be an option for Board consideration. An added bonus of these more frequent DNFSB independent inspections could very well be reasonably prompt corrections of the many unsafe conditions at WIPP identified by DNFSB staff.

A significant public policy issue is that the DOE claims to be self-insured. That is totally false. We, the taxpayers, foot the bill for DOE mis-steps, and I for one am tired in providing deep pocket insurance for DOE, a \$ Billion here and a \$ Billion there, a \$70 million fine here, paying millions to whistleblowers, pretty soon we are talking about a huge amount of money which DOE burdens the taxpayer with, money that can be better used for much needed independent oversight of DOE.

It is inescapable that the independence of the DNFSB must be protected and enhanced by Congress. The media and the public should highlight the attempt by DOE to shroud its operations under the opaque mantel of the proposed DOE Order 140.1.

Moreover, states should have independent oversight of DOE facilities. For example, New Mexico has three large and complex DOE facilities: Los Alamos, Sandia, and the Waste Isolation Pilot Plant (WIPP). States should have a cadre of nuclear, radiation, engineering and environmental professionals capable to critically evaluate the planned and underway DOE operations. In New Mexico, the Environmental Evaluation Group (EEG) work on WIPP for more than 25 years (1979-2004) is an example of that kind of technical oversight. EEG or a similar organization should be re-established in view of the obvious continuing need for such oversight. Further, since there is often a cross impact of DOE Sites and operations, close coordination/liaison between states will be important. A working group of independent state representatives could meet periodically to share information about their work, DOE plans and operations, and identification of DOE activities that might impact the other states. Additionally, independent groups could provide independent assessments of DOE planning and operations to state governments, Congress and the public.

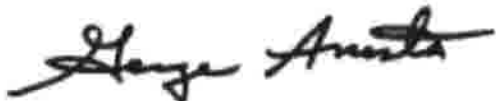
Trust but independently verify is an exceedingly important mantra when dealing with the DOE.

The DNFSB may use all or any portion of this Statement in eliminating the opaque curtain of Order 140.1 that the DOE desires to place on the DNFSB and thus on Congress, states, regulatory agencies, the media and the public.

I am available to answer any questions the Board might have.

References

- 1) *Safety Issues at the Defense Production Reactors*, vii, 76, 78, 80-82. See also U.S. Department of Labor, Occupational Safety and Health Administration, *Evaluation of the U.S. Department of Energy's Occupational Safety and Health Program for its Government-Owned Contractor-Operated Facilities* (Washington, DC: Government Printing Office, 1990), i-iv, 1-10, 55-58 (SuDoc no: L 35.2: Ev 1) for another detailed assessment of DOE occupational safety practices. For documentation of separate DOE contractor hazardous waste disposal standards and test methods, see U.S. Congress, House, Committee on Interior and Insular Affairs, *The Department of Energy's Failure to Police Standards for Radioactivity in Hazardous Waste*, 102nd Cong., 2nd sess., Committee Print (Washington, DC: Government Printing Office, 1992), 7 (SuDoc no: Y 4.111 8114: En 216).
- 2) See U.S. Congress, Senate, Committee on Governmental Affairs, *Environmental Issues at Department of Energy Nuclear Facilities*, 100th Cong., 1st sess., March 17, 1987, 1-15
- 3) Senator John Glenn, "The Nuclear Protections and Safety Act of 1987," *Congressional Record* 133, no. 63 (April 23, 1987): S5421-S5426.
- 4) U.S. Congress, Senate Committee on Governmental Affairs, *Early Health Problems of the U.S. Nuclear Weapons Industry and Their Implications for Today*, 101 st Cong., 1st sess., Committee Print (Washington, DC: Government Printing Office, 1989), I, 13-1 5 (SuDoc no: Y 4.G 7419:S.prt. 10 1-63).



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