



Department of Energy

Oak Ridge Office of Environmental Management
P.O. Box 2001
Oak Ridge, Tennessee 37831

April 5, 2019

The Honorable Andrew R. Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Wheeler:

APPEAL OF U.S. ENVIRONMENTAL PROTECTION AGENCY'S REGION IV POSITION REGARDING WATER DISCHARGE LIMITS FOR RADIONUCLIDES

Reference: Letter from Mary S. Walker to John A. Mullis II and David W. Salyers, dated March 21, 2019

The purpose of this letter is to elevate a dispute between the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency's (EPA) Region IV for your resolution. As you may be aware, EPA Region IV Acting Regional Administrator Mary Walker issued a written position on March 21, 2019, regarding the setting of protective and legally sufficient effluent limits for certain radioactive materials. DOE disagrees with the position of Region IV. Consistent with Federal Facility Agreement protocol, DOE requests an opportunity to discuss these issues with you prior to resolving the dispute.

DOE does not challenge EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) statutory authority to make final, protective remedy selections for the Oak Ridge Reservation. Fundamentally, the Region IV position challenges the protectiveness of Atomic Energy Act (AEA) authorized discharge limits employed by DOE, the Nuclear Regulatory Commission (NRC), and the vast majority of national and international bodies who manage radiological protection. To be clear, DOE stands by AEA-authorized discharge limits as protective of human health and the environment. In fact, EPA and NRC already have an agreement that directly speaks to the safety and protectiveness of NRC's similarly established AEA-authorized discharge limits. Region IV is now promoting use of radionuclide discharge limits at DOE sites that are much more stringent than limits in place for long-standing radiological protection programs at governmental and commercial nuclear facilities across the nation (see enclosure).

DOE also sees the Region IV position as problematic for the consistent application of the Clean Water Act (CWA) with respect to AEA-authorized discharge limits. As you may know, CWA regulations (promulgated by EPA) "except" AEA-regulated radionuclide materials from the definition of

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pollutant; the CWA regulations by nature defer to AEA-authorized limits. If upheld, the Region IV position would result in disparate CWA implementation, by requiring CERCLA cleanup sites be held to much more stringent standards than other facilities regulated under AEA authority.

While recognizing EPA's ultimate authority to determine a remedy's protectiveness, DOE requests that your written resolution of this matter acknowledge the protectiveness of DOE's AEA-material discharge criteria. In DOE's view, consistency and uniformity in radiological material discharge regulation is paramount in building and keeping public trust in the safety and protectiveness of CERCLA cleanup activities on DOE facilities. Our agencies should work together, relying on these protective limits, to avoid extensive and unnecessary cleanup requirements that do not yield a measurable benefit in public safety. In light of the potential unintended consequences of questioning the safety and protectiveness of current practices, and further fostering public confusion about our mutual commitment to public safety, I would ask you to strongly consider resolving this appeal in favor of DOE's position.

The Oak Ridge Reservation Federal Facility Agreement between our Agencies only leaves a short window of time to meet and seek resolution on this matter. DOE requests that, prior to resolving this dispute, you meet with the Secretary of Energy or his designee to discuss these issues under dispute. DOE is preparing additional materials to support this discussion, and will provide these to EPA in advance of the meeting.

Sincerely,

A handwritten signature in blue ink, appearing to read "John A. Mullis II".

John A. Mullis II
Manager

Enclosure

cc w/enclosure:

Mary S. Walker, EPA Region IV, Atlanta
David W. Salyers, TDEC, Nashville
Dan R. Brouillette, S-2, FORS
Paul M. Dabbar, S-4, FORS
Theodore J. Garrish, GC-1, FORS
Anne Marie White, EM-1, FORS

**Comparison of EPA Proposed Discharge Limits
with DOE, Tennessee Department of Environment and Conservation (TDEC),
and Nuclear Regulatory Commission (NRC) Effluent Concentration Values**

ISOTOPE	EPA Proposed Daily Maximum Effluent Value (a)	TDEC Division of Radiological Health Table II, Water Effluent Concentrations based on 50 mrem/yr dose (b)	NRC Annual Limits on Intake Effluent Concentrations based on 50 mrem/yr dose (c)	DOE Std-1196 Derived Concentration Standards from Ingested Water based on 100 mrem/yr dose (d)
All in units of pCi/L				
Iodine-129	0.196	200	200	330
Strontium-90	1.127	500	500	1,100
Technetium-99	22.23	60,000	60,000	44,000
Hydrogen-3	12,354	1,000,000	1,000,000	1,900,000
Uranium-233	19.12	300	300	660
Uranium-234	19.4	300	300	680
Uranium-235	1.757	300	300	720
Uranium-236	1.757	300	300	720
Uranium-238	1.484	300	300	750

- (a) Provided by EPA from Trey Glenn (Regional Administrator) to Jay Mullis, based on the most stringent of either the Water Quality Standard (i.e., ambient water quality criteria based effluent limit) or the estimated technology based effluent limit.
- (b) TDEC 0400-20-05-.161 STANDARDS FOR PROTECTION AGAINST RADIATION, Schedules.
- (c) 10 CFR Part 20 - STANDARDS FOR PROTECTION AGAINST RADIATION, Appendix B: Annual Limits on Intake and Derived Air Concentrations of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage.
- (d) DOE Standard-1196-2011, April 2011. DOE STANDARD DERIVED CONCENTRATION TECHNICAL STANDARD.