



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

September 20, 2018

Mr. Joseph J. Weismann  
Vice President of Government  
and Radiological Affairs  
US Ecology, Inc.  
101 S. Capitol Blvd., Suite 1000  
Boise, ID 83702

**SUBJECT: US ECOLOGY, INC. – TECHNICAL EVALUATION REPORT OF REVISION  
THREE OF US ECOLOGY'S SITE-SPECIFIC DOSE ASSESSMENT  
METHODOLOGY**

Dear Mr. Weismann:

By letter dated August 4, 2017, US Ecology, Inc. (USEI) submitted to the U.S. Nuclear Regulatory Commission (NRC) a request to review Version 3 of USEI's Site-Specific Dose Assessment Methodology (SSDA) (Agencywide Documents Access and Management System Accession No. ML17230A221 (ADAMS)).

The attached Technical Evaluation Report (TER) documents the NRC staff's technical review of Version 3. Similar to a review of a 10 CFR 20.2002 request, the NRC staff performed a technical review of the methodology and associated supplement documents (ADAMS Accession No. ML18085A238 and ML18124A017) and evaluated the technical basis and assumptions incorporated into the calculations used by USEI. The NRC staff also used the methodology to evaluate previously evaluated USEI requests and compared the conclusions. Based on this review, the NRC staff considers the use of Version 3 of the SSDA to be an appropriate method for evaluating future proposed disposals at USEI. The Version 3 SSDA methodology can be used to satisfy the criteria in 10 CFR 20.2002(d); however, individual 10 CFR 20.2002 requests by NRC licensees wishing to ship licensed material to USEI must address the criteria in 10 CFR 20.2002(a)-(c) on a case-by-case basis. Unless USEI becomes a NRC licensee, USEI must request, for each proposed domestic shipment exceeding an exempt quantities regulatory limit, an exemption from the applicable NRC licensing requirements pursuant to 10 CFR 30.11, 10 CFR 40.14, or 10 CFR 70.17<sup>1</sup> in addition to the licensee's 10 CFR 20.2002 request.

In response to your initial request, the SSDA, the technical basis document, and the NRC's detailed TER are considered proprietary in accordance with 10 CFR 2.390(a)(4) and as such

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<sup>1</sup> Shipments originating from outside the United States will require an exemption from NRC's import licensing requirements pursuant to 10 CFR 110.10(a), as was the case with the 2009 shipment from Canada. Depending on the type and quantity of the radioactive waste being shipped from abroad, the 10 CFR 110.10(a) exemption request may need to be in addition to a 10 CFR 30.11, 10 CFR 40.14, or 10 CFR 70.17 exemption request.

will not be available for public review. However, a second, publicly-available TER was developed to demonstrate how this process will satisfy the NRC's mission of protecting public health and safety. The NRC staff also notes that site-specific parameter values unique to specific disposal requests should be included and documented in future submittals in order for the SSDA methodology to be evaluated on a case-by-case basis.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Copies of both TERs are enclosed. Please contact Mr. Maurice Heath if you have any questions concerning the above. He can be reached at (301) 415-3137 or via email at [Maurice.Heath@nrc.gov](mailto:Maurice.Heath@nrc.gov).

Sincerely,

**/RA/**

John Tappert, Director  
Division of Decommissioning, Uranium Recovery,  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:  
TER (Proprietary)  
TER (Public)

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METHODOLOGY **DATE: September 20, 2018**

**ADAMS Accession No.: ML18164A070**

**\* via email**

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