



RIC 2024 Hybrid

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ADAPTING TO A **CHANGING LANDSCAPE**

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Bethesda North Marriott Hotel
and Conference Center
Rockville, Maryland

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Draft Interim Staff Guidance (ISG) DUWP-ISG-02, “Radiological Surveys and Dose Modeling of the Subsurface to Support License Termination”

*Extends NUREG-1575, “Multi-Agency
Radiation Survey and Site Investigation,”
(MARSSIM) to the subsurface, addressing
surveys of open excavations, reactor
basement substructures, and materials
planned for reuse, among other topics*



DIVISION OF DECOMMISSIONING, URANIUM RECOVERY, AND WASTE PROGRAMS INTERIM STAFF GUIDANCE DUWP-ISG-02

RADIOLOGICAL SURVEY AND DOSE MODELING OF THE
SUBSURFACE TO SUPPORT LICENSE TERMINATION

DRAFT FOR COMMENT

Manuscript Completed: June 2023
Date Published: October 2023



Image Credit: E. Darois (ML22136A164)



Image Credit: DUWP-ISG-02, Figure 2.9



DUWP-ISG-02—Alternative Sampling and Survey Methods

*Includes guidance on use of in situ
gamma spectroscopy for radiological
surveys, including final status surveys*

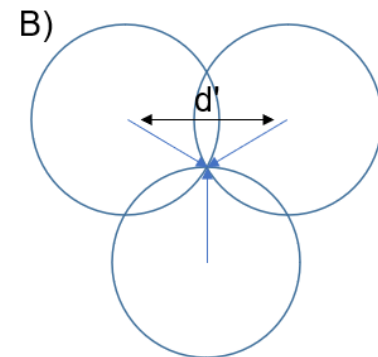
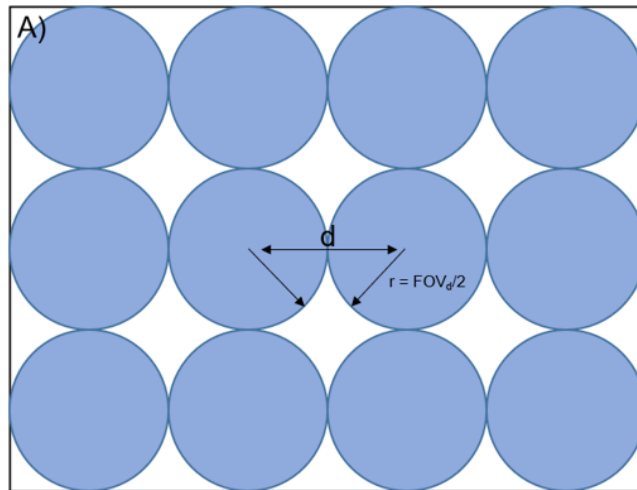
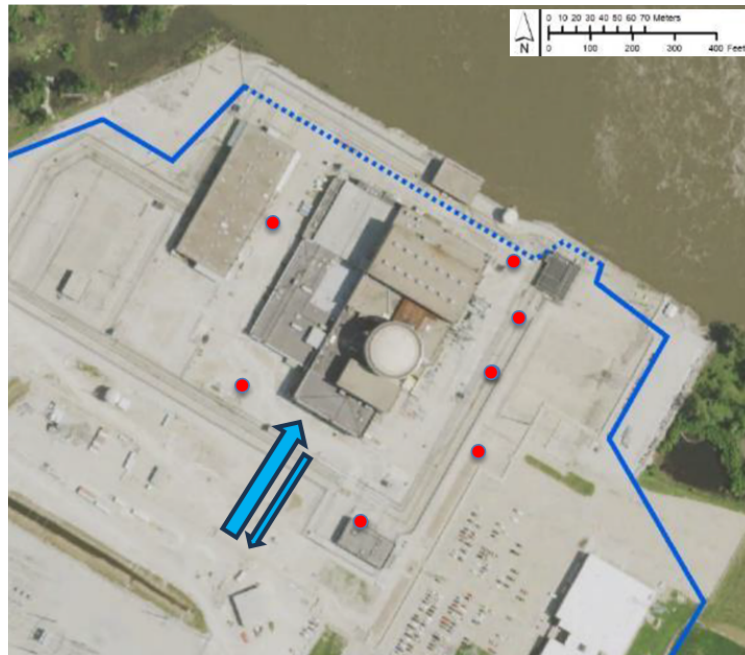


Image Credit: DUWP-ISG-02, Figure 2.7.

DUWP-ISG-02—Dose Modeling for Existing Groundwater Contamination

Addresses guidance gaps regarding adequacy of groundwater monitoring networks and assessment of risk from existing groundwater contamination

Image Credit: Fort Calhoun License Termination Plan, Figure 1-7



DUWP-ISG-02—Dose Modeling for Unsubmerged and Submerged Sources

Addresses guidance gaps for application of commonly used decommissioning dose modeling codes to develop cleanup levels for unsubmerged and submerged sources, including basement substructures

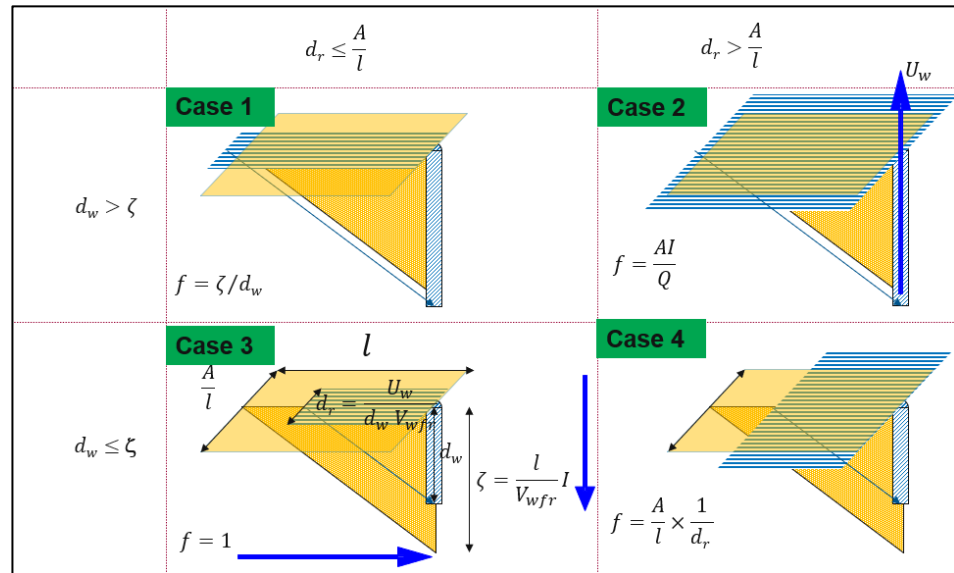


Image Credit: DUWP-ISG-02, Figure 3.5 (modified from RESRAD training slide)

DUWP-ISG-02—Public Comments

Issued October 19, 2023, with a 60-day public comment period (88 FR 72112)

Comments were due December 18, 2023

12 comments were received, including the following:

- 1. Level of survey needed for reuse of offsite materials*
- 2. Survey of low-risk or small excavations*
- 3. Need for and nature of site-specific support for risk-significant parameters*
- 4. Adding realism to assessment of risk from existing groundwater contamination*

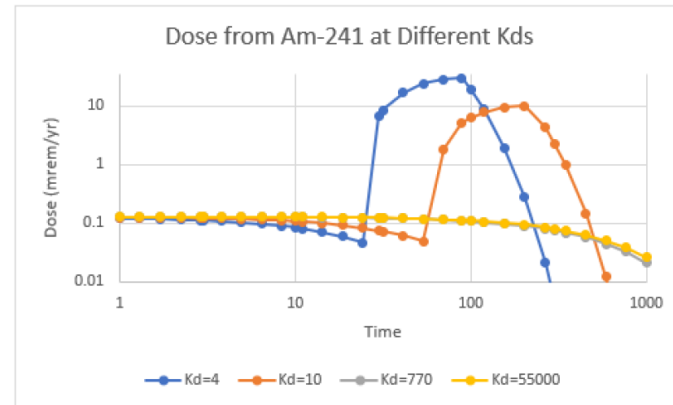


Image Credit: DUWP-ISG-02, Figure 3.10



DUWP-ISG-02—Next Steps

Publication of the final DUWP-ISG-02 is anticipated in late summer 2024; comment responses will accompany the final document

The final DUWP-ISG-02 will be incorporated into the next revision of NUREG-1757, Volume 2

The NRC is separately updating NUREG/CR-7021 and Visual Sample Plan under contracts with ORNL and PNNL, respectively (see the draft ISG for more information on planned updates)

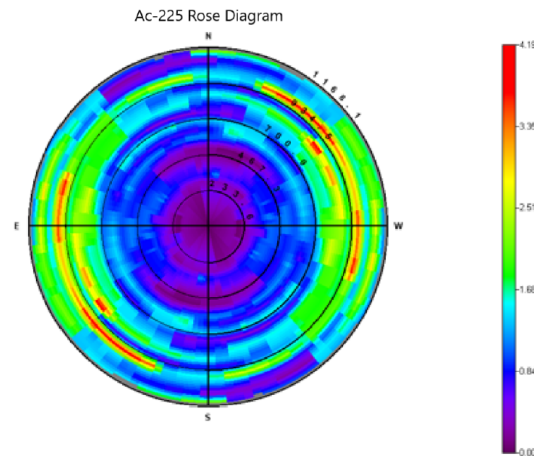


Image Credit: DUWP-ISG-02, Figure B.1

You can find the draft ISG and other related reports on the NRC's [What's New in Decommissioning](#) website

Contact Information

Cynthia Barr, NRC/NMSS

Cynthia.Barr@nrc.gov



Randall Fedors, NRC/NMSS

Randall.Fedors@nrc.gov



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