

Advanced RESRAD-ONSITE & RESRAD-OFFSITE, RESRAD-BIOTA, and RESRAD-RDD Training Workshop

Argonne National Laboratory
Argonne, IL
June 15-19, 2020

<i>Advanced RESRAD-ONSITE and RESRAD-OFFSITE Training</i>	
Day 1	
8:45 – 9:00	Opening Remarks/Introduction
9:00 – 9:40	RESRAD-ONSITE Overview
9:40 – 10:30	The Beginning of DCGL Journey – Determining Radionuclides of Concern (ROCs) with Hands-on Exercise
10:30 – 10:40	Break
10:40 – 11:20	DCGL Challenge – Kd and Existing Groundwater Contamination (Kd Estimate Options in RESRAD-ONSITE)
11:20 – 12:00	Hands-on Exercise
12:00 – 1:00	Lunch
1:00 – 1:40	Mass Balance and Non-dispersive Models in RESRAD-ONSITE
1:40 – 2:20	Hands-on Exercise Deriving DCGLs for Groundwater
2:20 – 2:45	Non-traditional Proposal – Onsite Burial of Concrete
2:45 – 3:00	Break
3:00 – 4:00	DCGL for Hot Spot – Inhomogeneous Contamination (Layered contamination and hotspot) with Hands-on Exercise
4:00 – 4:45	RESRAD-OFFSITE Overview

<i>Advanced RESRAD-ONSITE and RESRAD-OFFSITE Training</i>	
Day 2	
8:30 – 9:00	Hands-on Exercise Using RESRAD-OFFSITE to Simulate Onsite Scenarios
9:00 – 9:45	Hands-on Exercise Comparison of Onsite and Offsite Exposures and Sensitive Parameters
9:45 – 10:15	Source Term Model with Hands-on Exercise
10:15 – 10:30	Break
10:30 – 11:45	Source Term Model with Hands-on Exercise (Continued)
11:45 – 12:00	Submerged Source
12:00 – 1:00	Lunch
1:00 – 1:45	Overview of Probabilistic Analysis
1:45 – 2:15	Hands-on Exercise Integrated Offsite Scenario (Probabilistic Analysis)
2:15 – 3:00	DCGLs Derivation Options 75%/25% Approach vs. Peak of Mean and Mean of Peak Approach
3:00 – 3:15	Break
3:15 – 3:45	Demonstration of the New Source Term Model Features (Version 4.0.2 β)
3:45 – 4:30	Applications of RESRAD-OFFSITE for Waste Disposal Performance Assessment
4:30 – 4:45	Discussion

RESRAD-BIOTA	
Day 3	
8:30 – 9:15	Introduction and Overview of RESRAD-BIOTA
9:15 – 10:15	Demonstration of RESRAD-BIOTA
10:15 – 10:30	Break
10:30 – 11:15	Hands-on Problem 1 and Review (Screening Analysis)
11:15 – 12:00	Technical Basis – Derivation of the DOE Graded Approach Methodology
12:00 – 1:00	Lunch
1:00 – 2:00	Hands-on Problem 2 and Review (Site-specific Screening Analysis)
2:00 – 3:00	Principles of Ecological Risk Assessment
3:00 – 3:15	Break
3:15 – 4:00	Hands-on Problem 3 and Review (Site-specific Analysis)
4:00 – 4:15	Sensitivity Analysis
4:15 – 4:45	Hands-on Problem 4 and Review (Sensitivity Analysis)
4:45	Adjourn for Day 1
Day 4	
8:30 – 9:00	Technical Basis – Derivation of Dose Conversion Factor for Specific Organism Geometries
9:00 – 9:15	Organism Editor and Wizard Feature
9:15 – 10:15	Case Study I and Hands-on Problem 5
10:15 – 10:30	Break
10:30 – 11:30	Case Study II and Food Chain/Web Model
11:30 – 12:00	Wildlife Transfer Factors Database and ICRP RAPs and Dose Coefficients
12:00 – 1:00	Lunch

<i>RESRAD–RDD</i>	
Day 4	
1:00 – 1:15	Introduction
1:15 – 2:00	Protective Action Decisions
2:00 – 2:30	Methodology
2:30 – 2:45	Break
2:45 – 3:15	RESRAD–RDD Demo
3:15 – 4:00	Hands–on
4:00 – 4:45	Group A, Access During Emergency Response
Day 5	
8:30 – 9:30	Group B, Early-Phase Protective Actions
9:30 – 10:30	Group C, Relocation
10:30 – 10:45	Break
10:45 – 11:45	Group D, Temporary Access
11:45 – 1:00	Lunch
1:00 – 2:00	Group E, Transportation
2:00 – 3:00	Group F, Release of Property
3:00 – 3:15	Break
3:15 – 4:15	Group G, Food Consumption
4:15 – 4:45	Review and Discussion