THE REVISION OF REGULATORY
GUIDE 4.14 (REVISION 1)

RADIOLOGICAL EFFLUENT AND
ENVIRONMENTAL MONITORING AT
URANIUM MILLS

By
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at
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• Revision 1 was designed primarily for the conventional uranium mill
• Introduction of new technologies to recovery uranium
  In Situ
  Heap Leach
• In Situ Facilities not fitting the typical single point source concept
  Central Processing Facility
  Satellite Facilities (possibly more than one)
  Multiple Well Fields and Header Houses
  (Large production facilities are spread out over very large areas)
• During the review of new applications, NRC staff and industry recognized that Revision 1 was creating additional and un-necessary Request for Additional Information (RAIs)

• NRC recognized the need to revise Revision 1
NRC contracted Oak Ridge Associated Universities under two separate task orders to develop the following:

• Technical Basis Document to support revising Regulatory Guide 4.14 Revision 1
• Draft Regulatory Guide 4.14 Revision 2

NRC and ORAU conducted frequent conference calls to discuss various sections of the technical basis document and provide feedback.
In the initial review, ORAU identified over 100 recommendations for the technical basis document.

NRC and ORAU reviewed each recommendation and in some cases, revisited recommendations.
GENERAL OVERVIEW OF THE CHANGES IN THE DRAFT REGULATORY GUIDE

- Inclusion of other uranium recovery facilities, including conventional mills
- Inclusion of non-radiological contaminant monitoring for surface and groundwater
- Removal of radon flux monitoring as a recommendation for environmental monitoring (Licensees must still comply with 10 CFR 40)
- Inclusion of Land Use Census for the identification and of new or modified exposure pathways during the operational life cycle
- Consideration of the risk-informed decision-making process
- The incorporate of current regulatory practices and regulations
PATH FORWARD WITH DRAFT REGULATORY GUIDE 4.14 (REVISION 2)

CURRENT PATH FORWARD (ON GOING)

- INTERNAL NRC STAFF REVIEW AT THE DIRECTORATE LEVEL (DURLD)
- AGREEMENT AND NON-AGREEMENT STATE REVIEW

FUTURE PATH FORWARD

- PUBLIC COMMENT PERIOD (SUMMER 2014)

NOTE: An updated version of MILDOS will be released soon
- The new version will include Rn-220
- There will be a training class for the new version at the Technical Training Center (TTC) in Chattanooga, TN
QUESTIONS?