Public Meeting for DG-1186 & DG-4013

Richard Conatser
Nuclear Regulatory Commission
Washington, DC
15-January-2009

Introduction

- Good Morning! Thanks for attending.
- Subject of meeting
- Purpose of meeting
- Attendance List
- Comments (Industry and Public)
- Personal introductions

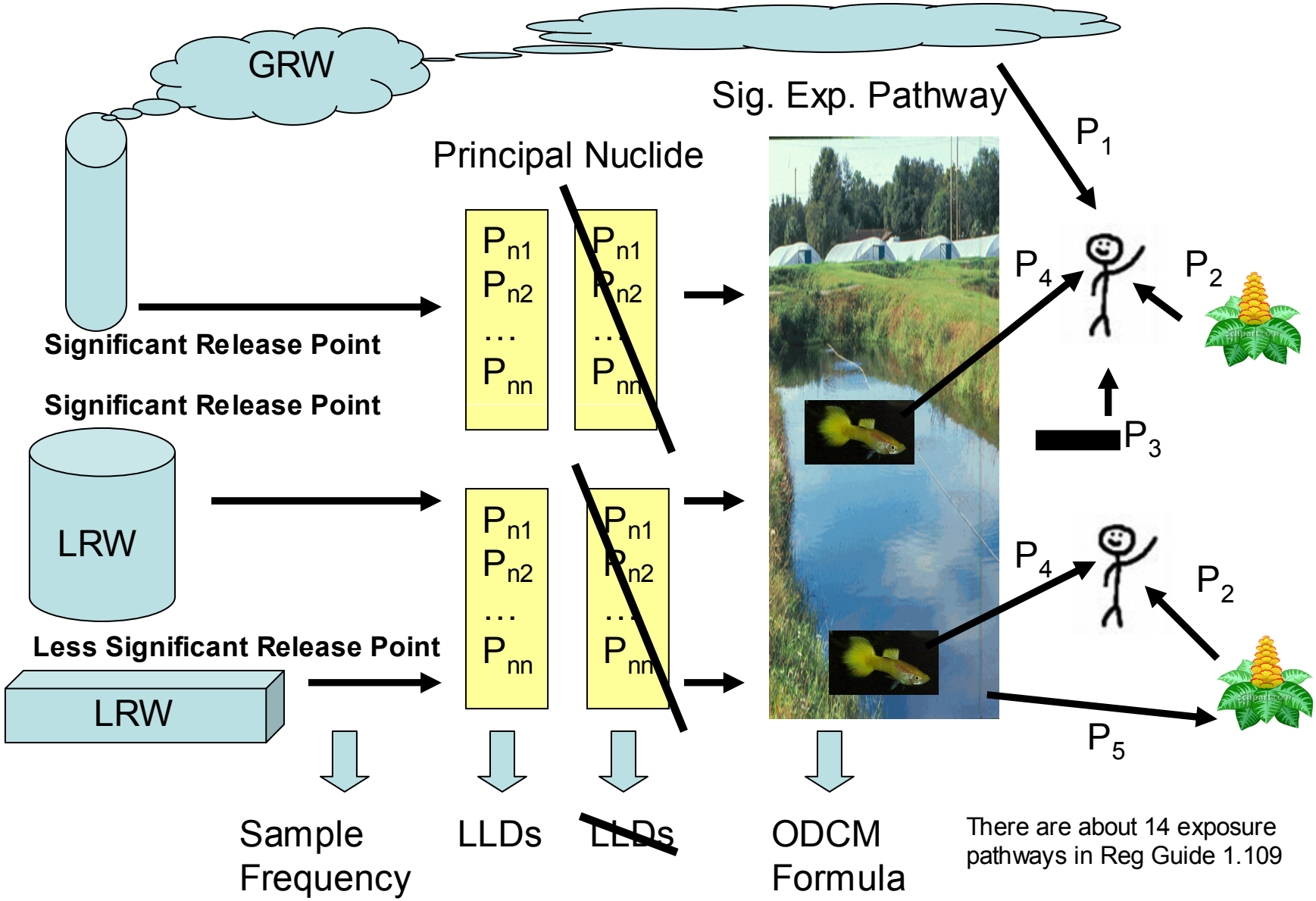
Outline

- Introduction
- DG-1186 (RG 1.21 Rev 2)
  - Release Points
  - Principal Radionuclides
  - Leaks and Spills
  - Dose Assessments
  - ARERR
- DG-4013 (RG 4.1 Rev 2)
  - REMP
  - Exposure Pathways
  - Enhanced Detection Capability
  - AREOR
- Conclusion

RG 1.21 - Release Points

- Significant Release Point
  - Dose or Activity ≥ 1% of applicable category total
  - 5 categories for gases
  - 4 categories for liquids
- Less than Significant Release Points
  - Any release point that is not significant
- Long Sampling Interval
- Discretion for sampling frequency

Significant Releases, Nuclides, Pathways



There are about 14 exposure pathways in Reg Guide 1.109

When & How Hard to Look (LLDs)

When using this matrix, consider each nuclide separately

Release Point (Activity or dose may impact the sample frequency)	"Minor"	Principal
Significant	The contribution from this one nuclide is <1% of total activity or dose (for all nuclides by type), but this release contains other sig. nuclides. The release is sig. Sample frequency is per ODCM. Licensee discretion is allowed for LLD.	The contribution from this one nuclide, is >1% of total activity or dose, and this release contains other significant nuclides. Sample frequency is per ODCM, and LLD for this nuclide is per ODCM.
Less Significant	Even with all nuclides, the release is <1% of total activity and dose. Licensee discretion allowed for sample frequency of release point and LLD for the nuclide. Bounding Estimates may be used In lieu of sampling.	Even with all nuclides, the release is <1% of total activity and dose. Licensee discretion on selection of sample frequency. *When analyses are done*, the nuclide LLDs are per ODCM. Bounding Estimates may be used in lieu of sampling.

Nuclide

Classification of the nuclide may affect the LLD

RG 1.21 – Principal Radionuclides

- May use NUREG-1301/1302 list
- May use "risk informed" list
- Activity may impact LLDs
- ODCM lists principal nuclides
- ODCM list is historical or default
- Plant conditions may change list

RG 1.21 – Leaks and Spills

- Reminder of 50.75(g) requirements
- Survey and assess the hazard
- May Report in ARERR:
  - "All" groundwater monitoring results
  - New spills
  - Releases in current year (requirement)
- Report in AREOR if:
  - Old plumes (not from current year)
  - REMP monitoring well (requirement)
- May choose to report all in ARERR

RG 1.21 – Dose Assessments

- 10 CFR 50 Appendix I
- 10 CFR 20
- 40 CFR 190

RG 1.21 – Graphing Results

- We are reevaluating graphing
- It is an invaluable tool for licensees
- Graphing can be
  - complex,
  - time consuming
- We'll evaluate whether it is appropriate for the RG

RG 1.21 - ARERR

- Supplemental Information
- Abnormal Releases
- Qtr and yearly totals in the tables
- Report all nuclides detected per ODCM and RG 1.21
- Report totals per RG 1.21 (3 sig figs)

RG 4.1 - REMP

- RG 4.1 saw lots of changes
- Went from 4 pages to 24 pages
- Reevaluating “on-site” monitoring
- Expect “On site” section to change
- Expect elimination of duplicate HP TLDs
- On-Site monitoring focus on
  - Necessary surveys
  - Based on 20.1501 and 50.75(g)

RG 4.1 – Exposure Pathways

- Address if they exist at your site
- Examples in RG 4.1
- "Recognize" existing pathways
- List "other" pathways if significant
- Significant if ≥ 10% of total for type
- Clarify pathways vs release pts

RG 4.1 – 300 pCi/l

- Optional Enhanced Detection Capability
- This is not an LLD!
- Based on req'mt for annual reporting
- Some parallel to LRW Batch Release
  - Sample, Analyze, Calc/Permit, Report
- Could use the 2000 pCi/l LLD, sentinal wells, or 300 pCi/l EDC
- Example: 2100 pCi/l spill (review)

RG 4.1 - AREOR

- Meteorological data kept on file
- Long term tracking of plumes

Questions? Comments?