Current Topics in Colorado

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NRC/NMA Uranium Recovery Workshop

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Colorado Program

- Reorganized last year from a unit into the Radiation Management Program,
 - Radioactive Materials Unit:
 - Licensing
 - Inspection
 - Incident Response
 - X-Ray and Machines Unit:
 - Certification
 - Uses Qualified Inspectors for most machines
 - MQSA
- * Program Manager is Joe Vranka,
- X Just finished successful IMPEP review.

Current Topics in Colorado

- ***** License Terminations
- * Remediations
- *** UMETCO/Uravan**
- Cotter/Canon City
- Clean Harbors Deer Trail
- ***** TENORM

License Terminations

- * Hecla-Durita:
 - •CRR turned in for review 2005,
 - ◆DOE submitted LTS Plan to NRC 2005,
 - •NRC raised questions about gw monitoring (or lack thereof),
 - Ongoing discussions and field visits.

License Terminations (Cont.)

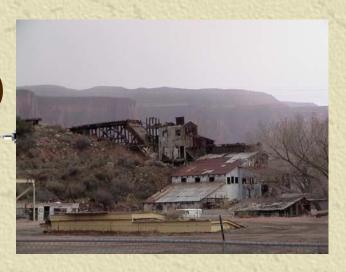
- **Maybell**
 - CRR turned in Spring 2006,
 - Under review at NRC,
 - Should be no issues.

Remediations

- * HWY 141 at Uravan:
 - CDOT owned property,
 - •Removed ~ 50,000 cy,
 - Disposed at UMETCO.

Remediations (cont.)

- Gateway Vanadium Mill:
 - Orphan site,
 - AEA license never terminated,
 - Residents exceeding public dose limit,
 - NRC funding obtained,
 - Materials also into Umetco,
 - •~ 14,000 cy of material moved.



Remediations (cont.)

- **CSMRI Creekside:**
 - Legacy site,
 - Indigent licensee (but really CSM),
 - Numerous contractors,
 - CSM wants cost recovery, so is following OSWER,
 - License and D&D plan in place,
 - Classification and disposition of material at issue,
 - Lack of trust,
 - Legal actions,
 - Governor's Office mediating some issues.

Remediations (cont.)

- **EXECUTE** CSMRI Table Mountain:
 - Outdoor areas complete,
 - One building at issue,
 - Under renewal.

* AMAX R&D

- Remediation complete 2005,
- License termination request pending.

UMETCO/Uravan

- * Remediation complete this month,
- Final Surveys this summer,
- Cap placement next year,
- Closeout in 2008,
- Participatory process with DOE, NRC, Licensee and CDPHE,
 - VERY productive.

Cotter/Canon City

- * License in timely renewal since 2000,
- Revised application 09/2003,
- * License issued 12/2004,
- Over 50 conditions challenged,
- Negotiated most away,
- Went to hearing on 5 issues,
- Judge agreed with Department on major issues,
- * One condition still challenged (Direct Disposal).

Cotter/Canon City (cont.)

- Incidents and violations led to Compliance Order,
- Cotter in standby as of March 2006,
- Order on Consent in place,
- No receipt or processing of materials while in standby,
- Bench scale testing allowed,
- * Engineering evaluation in process,
- Make Improved gw monitoring for leak detection.

Cotter/Canon City (cont).

- * Zirconium pilot plant may ramp up first,
- Sequoyah MAR:
 - Issues surrounding characterization of material,
 - Can't receive until readiness review complete,
 - Not approved,
- * Improved relationship.

Clean Harbors Deer Trail Facility

- * Permit modification for NORM/TENORM,
 - Appealed by County
 - Portions of permit stayed during appeal
- License application for NORM/TENORM,
 - Appealed by County
 - Appeal dismissed in Denver District Court.
- Rocky Mountain Low-Level Waste Disposal Compact
 - Compact designation received for radium processing wastes
 - Compact claims jurisdiction over all NORM/TENORM materials

Clean Harbors Deer Trail Facility

- * http://www.cdphe.state.co.us/hm/hwy36.htm
- Graded approach to application
 - Full LLW process not done
- **★** Ra-226 < 400 pCi/g
- **U** and Th up to 0.05%,
- 2 nCi/g total activity
- * No LLW or byproduct material by definition.

TENORM

- Main issue, Drinking water residuals main issue,
- Some tailings sites,
- ★ Historic practice case by case basis
- ★ New DW standards expands the universe of TENORM generators
- *Year-Long Stakeholder process to develop guidance and to institutionalize approach,
- * NRC rulemaking now underway for uranium.

http://www.cdphe.state.co.us/wq/TENORM/TENORM.html