Ross Adams EE/ CA & Risk Assessment - Update

Hydaburg Meeting
September 22, 2009
Presentation Overview

- The Plan
- Schedule and tasks for completion of the EE/CA and Risk Assessment
- What have we accomplished since May 2009
- Discussion of “Background”
The Plan

- Newmont has entered into an Administrative Order on Consent with the USDA Forest Service for Ross Adams
  - To complete:
    - Planning documents
    - Site Investigation
    - Site Characterization Report
    - Engineering Evaluation / Cost Analysis (EE/CA)
    - Human Health and Ecological Risk Assessment
  - Objectives are:
    - Work with the agencies to develop an appropriate remedy with stakeholder input
    - Complete the EE/CA and Risk Assessment process in a timely manner
The Schedule and Tasks

- Planning documents (SAP, QAPP & SSHP) completed and approved June 5
- Field Investigation – 3 Phases
  - #1 June 8 - 12 (complete)
  - #2 July 18 - August 2 (complete)
  - #3 September 20 - 26 (this week)
- Site Characterization Report
  - Additional biological data may be collected in 2010 to support risk assessment
  - Draft 90 days after analytical work complete
The Schedule and Tasks

- Risk Assessment
  - Screening level risk assessment Fall 2009
  - Fall – Winter 2009 assessment of additional data requirements
  - Collect additional data 2010, if needed
  - Complete Risk Assessment after analysis of data

- EE/CA
  - EE/CA draft to be developed 90 days after USFS approval of Site Characterization Report
  - Will include public participation
  - Finalized after completion of Risk Assessment
Field Investigation
What we have accomplished

#1 Sampling Event - June 2009
- Soil / mine waste samples at 17 locations
- Evaluation of gamma survey tools for preliminary correlation with soil samples
- Evaluation of XRF for preliminary correlation with soil samples
- Water quality samples and water flow at 13 stations
- One spring water quality sample
- Placement of 34 radon cups
What we have accomplished

#2 Sampling Event - July 2009
- Detailed gamma survey
- Biota Inventory
- Water quality samples and water flow at 14 stations
- Sediment samples at 14 stream and 28 marine locations
- One water quality spring sample
- Engineering evaluations
- Soil / mine waste samples at 69 locations
- Placement and collection of 3 radon cups
What we are doing this week

#3 Sampling Event - September 2009

- Water quality samples and water flow at 14 stations
- Additional gamma survey
- Characterize mine opening air flow
- One water quality spring sample
- Collection of the remaining radon cups
Why the focus on gamma?

- Gamma radiation is high energy and can penetrate clothing and through the body.
- Gamma radiation is one of the significant human health risks at Ross Adams.
- Gamma provide a reliable measure of uranium and thorium mineralization.
- Gamma is easily measured in the field and with GPS provides spatially oriented real time information.
- Our consultant has extensive experience in characterizing and remediating uranium mine sites using gamma as the key parameter.
Ross Adams Site and the Background Issue
Ore Stockpile Area
900 ft Level Area
900 ft Level Mine Rock Pile
Discussion

- What is “Background” and why is it important?
- Clean up normally established to background or risk-based criteria
  - Ore stockpile area (OSA) is located in an unmineralized area – typically clean up is done to a risk-based criteria because background is well below any risk-based criteria
  - 900-700 ft level workings in area of high natural mineralization – clean up target controlled by “local” background concentrations; in this case background may exceed risk-based criteria
Closing

- Committed to providing timely completion of the studies and engineering
- Work cooperatively with the agencies
- Support stakeholder engagement