Pecullan, Michael

From: Pecullan, Michael
Sent: Wednesday, February 06, 2002 7:01 AM
To: Delhoste, Charles
Cc: Reilly, Kevin; Bixler, Allen
Subject: FW: New Haven
Follow Up Flag: Follow up
Due By: Wednesday, February 13, 2002 4:15 PM
Flag Status: Flagged

Cam-

Re- the fluorspar piles: How many are there? What is their size? Can we get representative samples (not grab samples)?

Mike
-----Original Message-----
From: James Reese [mailto:james.reese@worldnet.att.net]
Sent: Thursday, January 17, 2002 12:55 PM
To: michael pecullan
Subject: New Haven

Mike

Our results at New Haven were mixed. Survey unit 2, the roadway, cleaned easily. We found several large stones of ore along the road and some buried within the soil on the side of the road.

Survey units 3 and 4 (scale and shrink wrap) results were different. We were able to reduce the overall contamination levels significantly however, what we have found is that there are small flakes/shards of ore that have filtered down under the ballast rock in the rail lines that is very difficult to remove. The areas of concern are not large (perhaps 10 ft. by 30 ft) but the effort is much more than I anticipated. All total we exhumed 16 five gallon pales of material, labeled the pales, and stored them in the old storage pile area (which is still correctly labeled as a radioactive material area).

What effect will this have on the clean up? I don't believe it is necessary to remove every spec of ore spilled during the transfer. As it stands now, regardless of how much work is done prior to the final survey, I would expect to find anomalies (elevated areas). The key question will be, "Are these anomalies significant enough to require removal?" I will work to develop a level that can remain and still meet the NRC/EPA criteria. I included the EPA so the depot is ready for the final closure when it occurs.

I do recommend that survey units 3 and 4 undergo further housekeeping. The remaining levels at these small areas are significant enough to require removal (ranging between 2 – 10 times background). The most efficient method to perform this removal would be to use a bobcat or other loader type piece of equipment. I would estimate this to take no more than 1 day of actual equipment use. Once the material has been removed and a survey has been performed to verify removal, new ballast rock will be needed to refill between the tracks.

As an aside, during the survey I noticed that the Florospar piles (metallurgical) emitted significant levels of gamma radiation. The levels increased as the percentage numbers increased (as listed on the name plates at the piles). The readings ranged from 14,000 cpm to 100,000 cpm (I estimate that this would equate to 0.02 - .02 mrem/hr). Do you know anything about the possible source? If not, I would recommend that samples be taken to determine the source. I would be happy to work with the depot to take the samples and have them analyzed is necessary.

I will issue a trip report detailing the above. If you have any questions please give me a call or send and email.

Sincerely,

James Reese
Sr. Health Physicist
ERS Solutions, Inc.
(916) 689-2680 office
(916) 689-6270 fax