

CORRES. CONTROL
INCOMING LTR NO.

00294RF03

DUE DATE
ACTION

Bill Owens, Governor
Douglas H. Benevento, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Laboratory and Radiation Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

<http://www.cdph.e.state.co.us>



Colorado Department
of Public Health
and Environment

August 20, 2003

Mr. Joseph Legare
Assistant Manager for Environment and Stewardship
U.S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, Colorado 80403-8200

RE: Approval, Industrial Area, Sampling and Analysis Plan, FY03 Addendum, IA#-03-12, August 2003

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) has reviewed, and hereby approves, the subject sampling and analysis plan addendum. Drafts of the addendum, dated June and July 2003, were reviewed and comments were discussed with facility representatives on two occasions. A copy of the Division's initial, written comments is attached for reference.

One concern remains; however, the Division agrees that a field change will be sufficient. Samples need to be collected at the two OPWL leak locations (P-16 & P-17) as described in the SAP Addendum #IA-03-11 for IHSS Group 000-2. However, the sample location for P-17 (CD44-000) does not appear to be properly located to investigate a possible leak associated with the OPWL "at pipe join". As such, it appears (based on the location shown on Fig 4 in the IHSS Group 000-2 SAP) a biased location needs to be located on the east side of B559 at the elbow where the line emerges from the building. A boring must be placed in close proximity to the 90-degree horizontal turn, as shown in the northwest corner of IHSS 500-159, and extend to sufficient depth to characterize the subsurface soils. Please ensure that the pertinent language of the 000-2 OPWL SAP Addendum is addressed through this addition to the sampling plan.

If you have any questions regarding this correspondence, please contact me at (303) 692-3367, Harlen Ainscough at 303-692-3337 or David Kruchek at (303) 692-3328.

Sincerely,

Steven H. Gunderson
RFCA Project Coordinator

| | | |
|--------------|---|---|
| COR. CONTROL | X | X |
| ADMN. RECORD | X | X |
| PATS/130 | | |

Reviewed for Addressee
Corres. Control RFP

8/23/03 log
Date By

Ref. Ltr. #

Attachment

DOE ORDER #

NONE

cc: Rick DiSalvo, DOE
Norma Castaneda, DOE
Tim Rehder, EPA
~~Atkins Building~~ Building T130G

Lane Butler, KH
Dave Shelton, KH
Mark Sattelberg, U.S.F&W

Colorado Department of Public Health and Environment

Hazardous Materials & Waste Management Division

Comments

Draft Industrial Area

Sampling and Analysis Plan

FY 03 Addendum #IA-03-12

IHSS Group 500-3

June 2003

General Comments:

1. Considering that there is a large recirculation tunnel under the lab sections of B559, specific sampling needs to be performed under and associated with joints between this and the slab, where contamination could have migrated to the soil underneath. The recognition and location of this tunnel needs to be added to the text and on the figures. Considering that this tunnel runs east-west the length of the building, it needs to be understood if the process waste lines shown are in or under the slab or overhead. Overhead lines would be less likely to have undetected leaks, whereas in slab or in ground would require additional sampling associated with these lines. This may also possibly affect some of the proposed locations. Other possible areas of concern should also be identified in the figures, such as sumps or pit.
2. The UBC sampling should also consider characterization of the slab utilizing the cores that will be pulled, for future D&D/ER demolition/disposal purposes.
3. Recognizing that the assumed process for determining if exceedences of action levels will require an action, is to perform a statistical evaluation of the AOC, There needs to be recognized the limit to AOCs in this group. As such, the sampling results for the UBC for 559 should not be lumped with the tanks (T33, T34, T35) or B528 (Tank 7) that have different sources and potential for contamination, and should therefore be identified as separate AOCs.

Specific Comments:

4. Section 1.0: In the fourth sentence "IHSS" should be followed by "Group" or, alternatively, reference to more than a single IHSS.
5. Section 1.1: Beryllium has not been identified, specifically, as a PCOC. The Division has specific knowledge that beryllium contamination exists near proposed boring CD44-005, and elsewhere, in Building 559. Based on Be being a possible contaminant of concern (PCOC), it should be specifically added to all investigations of UBC, process waste tanks and lines. Onsite Laboratory Method 6200 is ineffective for determining beryllium contamination thus Offsite Laboratory Method 6010 should be specified.
6. The IASAP also notes that "contaminated PCBs" were analyzed in the laboratory. Would these have been disposed through the waste lines that subsequently broke? The IASAP description of UBC 528 as waste collection tanks for B 559 suggests that possibility. Possible PCBs from B559 and into Tank T-7 are also reported in the IASAP. Please address as appropriate.
7. The IASAP discussion of Tank T7 also indicates that pesticides and herbicides from B559 were included in the waste streams. Please address.

8. **Section 2.2.1:** The Division's general decision to allow application of a 72-meter grid, versus an 11-meter grid, was predicated on contamination not being found, previously, beneath several other buildings. In this instance, releases have been documented beneath and beyond B559 (IASAP and HRR). Thus, a tighter grid is generally applicable. Please revise the sampling plan to employ an 11-meter grid in the southern (laboratory) portion of B559. The Division is agreeable to limiting statistical sampling to a depth of 0.5 feet beneath the pad unless subsurface sampling is indicated by field instrument, field laboratory results, or subsequently based on beryllium detections by Method 6010.
9. The Division is aware that the northern portion of B559 was office space. Although the proposed sample coverage in the northern portion is not deemed adequate, the Division is amenable to a spacing other than 11-meters in that area.
10. Soil removal occurred in 1968 and 1972 from "... over and around the process waste line from Building 559 to the process waste tank pit south of the building. The soil under the process waste line was not removed." Contamination beneath the building appears to have remained with contamination outside the building only partially removed. Despite these factors, biased sampling along the southern portion of the B559 OPWL is scant. Please add at least two more biased sampling points, to a sufficient depth, along the southernmost waste line. Also, please add a biased sampling point along the line between B559 and the sump pit to address residual contamination beneath the waste line, outside at a point along the east-west line leading to the OPWL within IHSS 500-159, and at the manhole next to the southwest corner of B 559. See Figure 3 and the IASAP.
11. In respect to the last paragraph of the section, the 72-meter grid may provide 90% confidence that accelerated action to remove soils is supported as a decision, but not necessarily the aerial (or vertical) extent of a successful remediation effort. The Division believes that the tighter grid is appropriate to support the extent of accelerated action if such is the decision.
12. **Section 2.2.3:** The narrative states that a biased sampling approach will be used but it fails to acknowledge that the tank is a known release site at its connection with Joint P-16, per the IASAP. Please address by ensuring that at least one of the biased samples is located at P-16. Please identify the location of P-16 on Figure 3.
13. It is unclear how three tanks, T33, T34 and T35, have become a single tank in the sump pit, Figure 3. Additionally, some explanation is required of the OPWL that is shown either originating or terminating at the original location of the three tanks. The line had to be connected to an apparatus.
14. **Table 2:** On page 7, please verify and as necessary modify the sampling intervals of CD43-011 and 012 in contrast to CD43-010. There is no apparent basis, or discussion, for varying the depths and Table 1 calls for subsurface sampling of all three tanks. Furthermore, the proposed locations surround only one tank, not three tanks. Are there not three tanks to be investigated, i.e. T33, T34 and T35?
15. A number of OPWL (and sump) borings for B559, pages 10-13, are planned for termination at 2.5 feet. Is there information to support these shallow depths? Please verify.
16. **Figure 3:** Please show the location of footing drains, sewer lines and NPWL. Each is of potential concern relative to UBC.
17. As previously noted for the IHSS Group 700-3 SAP Addendum the State Plane Coordinate grid is incorrect relative to boring locations. Please correct.
18. The IASAP notes that a south loading dock was used to ship and receive radioactive materials processed in the laboratory. Please identify the location of the dock. Although no releases were noted, one or more confirmatory surface samples should be considered.