United States Government | Department of Energy
Rocky Flats Office

memorandum

DATE: AUG 18 1993

REPLY TO ATTN OF: OSB:GDN:09144

SUBJECT: Health & Safety Plan (Accident Prevention Safety Program Plan) Rocky Flats Plant Integrated Operable Units Rocky Flats Instruction/Remedial Investigations June 1993

TO: Richard J. Schassburger, Acting Director, Environmental Restoration Division, RFO

Reference: Memorandum, Schassburger to Olinger, ERD:BKT:08454, dtd 7/19/93, subject: Health and Safety Plan for Rocky Flats Plant Industrial Area Remedial nvestigation/Resource Conservation and Recovery Act Facility Investigation (Remedial Investigation/Rocky Flats Instruction) Field Activities.

Attached is a copy of the Occupational Safety Branch comments to the referenced document.

If there are any questions concerning these comments, please contact Gary Noss, of my staff, at extension 4371.

Shirley J. Olinger, Director
Safety and Health Division

Attachment

cc w/Att:
V. Witherill, AMTS, RFO
Schassburger ~~F. Lockhart~~, ERD, RFO
G. Noss, SHD, RFO
J. Torma-Krajewski, SHD, RFO

July 27, 1993

To: Bruce Thatcher, ERD, RFO

Fr: Angela S. Watmore, SMS, DP-6.1 for S&H Division, RFO

Re: Comments on the Health and Safety Plan (Accident Prevention Safety Program Plan) for Rocky Flats Plant Integrated Operable Units RFI/RI Investigations June 1993

Background

As per the July 19, 1993, Richard J. Schassburger memorandum to Shirley J. Olinger, I have reviewed the above document for compliance with DOE Orders and OSHA (29 CFR 1910.120). I have not been provided a copy of the site Health and Safety Plan for IAG activities, consequently those comments are not included in this document. Below is a summary of my comments.

Comments

DOE Orders

As provided in DOE Order 5480.1B, the DOE desires quality assurance. Need a QA program to monitor the effectiveness of this HSP. As provided in DOE Order 5483.1A, Jacob's OSH professionals should conduct unannounced compliance inspections. The HSP specifically mentions compliance with 5480.11; these requirements should be reflected in the training provided to on-site workers.

OSHA, 29 CFR 1910.120

Due to the title of this safety plan, which is a site-specific plan, I focused my review on 29 CFR 1910.120(b)(4) compliance. According to 29 CFR 1910.120(b)(4), a site-specific safety and health plan must address the safety and health hazards of each phase of site operation and set out the requirements and procedures to insure employee protection. This safety plan addresses Phase 1 of the RI/RFI operation for OU 8, 9, 10, 12, 13, and 14. Below is a list of the minimum 1910.120(b)(4) requirements, applicable section(s) in this safety plan that provide for compliance procedures, and my comments.

(a) Safety and health risk or hazard analysis for each site task and operation found in the workplan.

Section(s): 3.0, 5.0

Comments: The Radiological Protection Branch will focus on rad hazards, consequently I did not review such. Each site task is set out on page 3-15 and Table 3-1 provides for each Individual Hazardous Substance Site (IHSS). The hazards (safety and health risks) for each IHSS have been set out in Table 5.2. In Table 5.2, IHSS 144 should be clarified to encompass both north and south as in Table 3-1. In Table 3-1, please clarify that OU 9 involves IHSS 121, 122, 123.2, 124.1, 124.3, 125, 126.1, 126.2, 127, 132, 146.1, 146.6, 147.1, 149.1, 149.2, 159, and 215 as in Table 5.2. In Table 5.2, I see no reason for a repeat of OU 12/IHSS 147.2 on page 5-9. Section 5.5. provides for a task analysis that should be harmonized with the list of tasks set out on page 3-15. i.e., traveling between IHSS' hazards and those for site walk-overs and surface water sediment sampling. Page 3-15 should mention PCB sampling as in Table 5.5.

In general this analysis should be in-depth enough to select proper PPE. By conducting this in-depth analysis, the intent of 1910.120(c) is also met.

(b) Employee training for 1919.120(e) compliance.

Section(s): 2.0, 4.1

Comments: Training should include specific location of this HSP for access when needed (i.e., on-site is too general, specify who and where has responsibility).

(c) Personal protective equipment for each site task and operation as required by 1910.120(g)(5).

Section(s): 8.0

Comments: From Section 5 and 8, it appears that level C will be worn at all tasks, except for the layout of sample plots. However, Appendix A lays out level D for sampling. i.e, page 8-7 provides that level D will only be worn in areas where the potential for exposure to toxic substances does not occur. Then if you look at Appendix A, surface radiation surveying will be conducted in level D. Unless you are guaranteeing that there is no potential for exposure to toxic substances during these surveys, the language on page 8-7 should be changed.

I did not find any specifications for the PPE used for site walk-overs and surface water-sediment sampling. Clarify. On page 8-3, provide for half-mask option or justify why full face is necessary. Add 1910.120 Appendix B requirement for hooded protective clothing for level C PPE. Add steel toe requirement on page 8-6.

(d) Medical Surveillance for 1910.120(f) compliance.

Section(s): 4.2

Comments: An exam should be conducted also if the employee complains of symptoms that indicate possible exposure.

(e) Specify frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment.

Section(s): 6.0

Comments: Methods of maintenance should be added.

(f) Site control measures required by 1910.120(d).

Section(s): 3.0, 7.0, 10.0

Comments: ----------

(g) Decontamination procedures for 1910.120(k) compliance.

Section(s): 8.5, 9.0

Comments: I did not see a requirement to comply with EG&G's HSP for RFO decontamination. Add this requirement.

(h) 1910.120(l) Emergency Response Plan.

Section(s): 10.0

Comments: Add specific location of this HSP so that the emergency numbers are readily available.

(i) Confined space entry procedures.

Section(s): 4.1.1 (training mentioned), 5.6.12

Comments: 29 CFR 1910.146 should be cited, along with the Jacobs SOP for confined spaces. RFO known confined spaces need to be specified.

(j) 1910.120(j) Spill Containment Program.

Section(s): 5.6.7

Comments: I did not see a spill containment program in this HSP. Add for any possible major spills. Add language that focuses on prevention of spills and splashes by employees. This language can be included as part of the worker training.

(k) 1910.120(b)(4)(iii) Pre-entry briefing.

Section(s): 4.1.1, 4.1.5, 4.1.6.2

Comments: See comment to (b).

DOE F 1325.8

United States Government

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REPLY TO
ATTN OF: RPB:TPD:07379

SUBJECT: Health & Safety Plan (Accident Prevention Safety Program Plan) Rocky Flats Plant Integrated Operable Units RFI/RI Investigations June 1993

TO: Richard J. Schassburger, Acting Director, Environmental Restoration Division, RFO

Reference: Memorandum, Schassburger to Olinger, ERD:BKT:08454
Subject: Health and Safety Plan for RFP Industrial Area Remedial Investigation/RCRA Facility Investigation (RI/RFI) Field Activities, dated 19 July 1993

Attached is a copy of Radiological Protection Branch comments to "Health & Safety Plan (Accident Prevention Safety Program Plan) Rocky Flats Plant Integrated Operable Units RFI/RI Investigations June 1993".

Shirley Olinger, Director
Safety and Health Division

Attachment

cc File

DOE/RFO/SHD/RPB Comments to "Health & Safety Plan (Accident Prevention Safety Program Plan) Rocky Flats Plant Integrated Operable Units RFI/RI Investigations June 1993"

#	¶ or Sec.	Comment
1.	Acronyms	The definitions of ERHSO, MMH, RWP, RFI, & RI need to be included.
2.	1.0 & 2.1.1	DOE & EG&G should also be in the loop for modification to the plan.
3.	2.1.2	The training should also be consistent with requirements specific to Rocky Flats.
4.	2.1.2	Add "Radiation Safety" to "provide industrial hygiene/chemical safety guidance".
5.	Fig. 2.1	Shouldn't "HSST" be "HSS"?
6.	2.1.4	The intent of the first sentence is not clear, nor the philosophy of the next two sentences. Also, it is not clear which organization (JE, EG&G, both) the "Project Manager" belongs to. With the HSS/HSO being two people, how are we assured that all the items are done, and not just handed off between the two?
7.	2.1.5	Cannot find the "Site Manager" in the organization chart of Fig. 2.1.
8.	2.1.6	It is unclear whether the HSST is supposed to be a HSS Under Instruction (HSSUI) or the HSS for Training; if it is the former these should not be the HSST's responsibilities, but rather he should be assisting the HSS in these areas, if it is the latter, why is the trainer doing all these other things? Also, the paragraph about monitoring workers, equipment, etc. is an RPT function.
9.	3.3.1.1	Change "Stanley" to "Standley".
10.	3.6	Regarding "nonintrusive" - what is definition of nonintrusive? If digging, sampling, and tank/pipeline inspections are nonintrusive, what is intrusive? Change "may be conducted a follow-up." to "may be conducted as a follow-up.".
11.	3.6	It is not clear why the NaI survey would be performed after the HPGe survey.
12.	4.1.1, 4.1.3, 4.1.4, 4.1.6	Need to include training on Radiological Work Permits (RWPs).
13.	General	Should not specify people by name (in case they leave). Should specify by position/title.
14.	4.1.6.1	Should specify Radiation Worker (RW) I or RW II training.
15.	4.1.6.2	Should specify GET or GERT.
16.	4.2	Should address radiation exposure history, initial and final whole body counts, having radiation exposure records available to employee, etc.
17.	5.2	What about NIOSH? Also, change "American Conference of Governmental Hygienists" to "American Conference of Governmental Industrial Hygienists".
18.	5.4.1	How can the concentrations be completely unknown? There should be a "less than" or "approximately" statement. For Americium, change "transplutonium" to "transuranic" & delete "extremely". For Plutonium, change "uptake of radioactive alpha particulates" to "uptake of radioactive alpha emitting particulates", in last sentence for Plutonium, what is source of data? For Uranium, change "combustible" "pyrophoric". For Tritium, change "alpha" to "beta" and "compound" to "gas", and delete "readily".
19.	5.5	Since the first paragraph is in the past tense, are the analysis documented somewhere? In third paragraph, isn't the maximum depth of soil disturbance 6", not 12"? In fifth paragraph, change "would proceed in unimpeded" to "would proceed unimpeded".
20.	5.6.4	Most of this section is extraneous to this document since trenching operations would require either a revision to this document, or a new H&S Plan.
21.	Tbl. 5.3 & 5.4	How do you pre-screen for Pu if you are to dig 6"?
22.	6.4.1	Who are the H&S Liaison Officer, and the ERHSO?
23.	6.4.2	Who performs the performance checks? Does this mean Jacobs has check sources?
24.	6.4.3	What is the source for the definition of Low Level Waste (LLW)? The upper limit for LLW should be specified. It is not clear who the CTR is and who he works for.
25.	6.4.4	Does the hazard present really warrant going to the trouble of lapel sampling? It has not been the practice of EG&G to do lapel air monitoring even in known contamination areas in Plutonium production buildings.
27.	6.4.5	Dosimeters are not required unless the RWP calls for it.
28.	6.4.6	Second paragraph needs to be in section 6.4.5. Surface monitoring doesn't say much about conditions at a depth of 6". "in excess of background" is too restrictive.
29.	7.2.1	In second paragraph, fourth sentence, should specify that the contamination mentioned is chemical.
30.	Fig. 7.1	Where is radiological surveying to be done?
31.	8.2.1	How does the 6" digging fit into this?

32.	9.0	Should specify whether this is talking about chemical contamination. Another section may be required to deal with radiological decontamination.
33.	9.4	What about fixed contamination and other requirements for free release of material?
34.	10.2.4	Change "radionuclide" to "radioactive materials".
35.	App. A	What is a "MIE Miniram"? Radioactive materials are not specified in mg/m3, rather in uCi/ml. Type H cartridges are of no use against Tritium.
36.	Att. A	Needs to include words about radiation exposure history, bioassay programs, and medical diagnosis or therapy using x-rays, gamma rays, or radionuclides.
37.	Att. C	On Form 9-1; For the block marked "Radiological" it is not clear what kind of information and level of detail is being asked for.

Comments provided by T. Denny, J. Dummer, & D. Rodgers.