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TO: Kent Dorr, K-H Project Management, Building T130F, X6034
FROM:  Doug Steffen, RMRS E/C/D Project Management, Bldg. T130F, X2164
DATE: July 18, 1997
SUBJECT: **Building 123 Proposed Action Memorandum (PAM):
Response to DOE and CDPHE Comments**

Below are the proposed responses to comments received from DOE and CDPHE on the Building 123 PAM. The PAM was modified in accordance with the responses provided below. Please review these responses and provide comments such that any modifications can be added to the PAM.

Originator: Bill Fitch, DOE

1. Section 2.2.1

Last Para. states that "radiological surveys, sampling and analysis will be done for the presence of beryllium, asbestos, lead, PCBs, and other potential contaminants." The next sentence states "Results ... are summarized in Section 2.3". First sentence was in the draft and the second sentence was added for the final. Note the inconsistency. No action is required.

RESPONSE

Section 2.4 was changed to state the following: "Pursuant to RFCA criteria, a Reconnaissance-Level Characterization Survey (RCLS) was conducted to identify any hazardous and radioactive contaminants in the Building 123 Cluster. The survey identified no significant hazards associated with Buildings 113, 114 nor 123S, and indicated that the majority of Building 123 is considered to be "unaffected" (low potential for hazardous or radiological contamination) based on operational and process history. However, the following rooms in Building 123 were previously, or currently, posted as Radiation Control Areas (RCAs) or Radioactive Material Management Areas (RMMAs) and are therefore considered to be "affected" (potential for low-level contamination) and will require a more detailed survey prior to decommissioning: Rooms 103A, 105, 112, 123, 124, 125, 126, 127, 135, 149, 155A, 156, 157, 158, and 163."

2. *Page 13, Figure 2-5 is really a table.*

RESPONSE

Figure 2-5 was changed to Table 2-1.

3. *Pleased to see how the contaminant information is summarized and presented. Is there some way to summarize the magnitude or concentration? Would like a copy of the "Asbestos Characterization Report" and the "Addendum to Building Inspection (April 1997).*

RESPONSE

Copy of document was provided to reviewer.

4. *Page 15, Section 2.3.4, RCRA Units*

(I) assume that there are no RCRA Units within the building. (I know Unit 40 is everywhere).

RESPONSE

The following comprises Section 2.3: "The Building 123 area encompasses a portion of RCRA Unit 40, the plant-wide process waste system, a network of tanks and underground and overhead pipelines constructed to transport and temporarily store process wastes from point of origin to on-site treatment and discharge points. RCRA Unit 40 includes all overhead and underground and process waste lines in and around Building 123. Closure of RCRA Unit 40 will be conducted in accordance with Colorado Hazardous Waste Regulations (265, Subpart G) which requires a 30-day public comment period. No other RCRA unit exists in the Building 123 area."

5. *Page 17, Section 3.2.1, 2nd Para.*

Isn't the Project Executive Plan a specific planning document? Shouldn't it be listed here?

RESPONSE

The PEP was added to the list in Section 3.1.1, but only as a generic citation, since the document has yet to be approved.

6. *Page 21, Section 3*

Stated that a Building 123 Decommissioning Project Health and Safety Plan (Rev 0) has been developed. Do we have something to send out to a member of the public who requests one? Would like a copy.

RESPONSE

Specific citation of the document was changed to general citation in the text, as this document has yet to be approved and has not been released for public comment. A copy of the document was provided to the reviewer.

7. *In same paragraph*

Stated that an Activity Hazard Analyses will prepared. Requests a copy of document.

RESPONSE

A copy of the document will be provided to the reviewer once it has been prepared.

8. *Page 23, Section 3.5*

Waste management activities for the project are described in Building 123 Decommissioning Project Waste Management Plan Rev 0 (May 1997). Requests a copy of plan.

RESPONSE

Specific citation of the document was changed to general citation in the text, as this document has yet to be approved. A copy of the document was provided to the reviewer.

9. *Section 4.0, Environmental Impacts*

Section is weak. I hope the stakeholders who are concerned about canceling the Sitewide EIS don't attack this section. Will ask the RFFO NEPA Officer to look at this and make suggestions.

RESPONSE

NEPA section (4.0 "Environmental Impacts) has been revised to include the Proposed Action and Alternatives, including an impact analysis of the Proposed Action.

10. *Page 24, Section 4*

Reconnaissance Level Characterization Report is finished. Requests a copy of report.

RESPONSE

Specific citation of the document was changed to general citation in the text, as this document has yet to be approved. A copy of the document was provided to the reviewer.

11. *Section 4, Last paragraph*

Paragraph is weak. The Programmatic Agreement among the Rocky Flats Field Office, the Colorado State Historic Preservation Officer and the Advisory Council on Historic Preservation concerning Historic and Cultural Property at the Rocky Flats Environmental Technology Site has been submitted for signing. Checking to see if it is in place. Building 123 was identified as a Potentially Historic Structure and may be subject to requirements for recordation or preservation. Documentation was prepared and submitted for Building 123 on April 30, 1997. Expect this documentation to be adequate and anticipate that the SHPO will concur in our decision to demolish B123.

RESPONSE

The section (4.2.7) was revised to indicate that the agreement has been approved. Landscape photographs will be taken of the building before it is to be demolished.

12. *Guard Post 113*

Post was identified among those guard posts which may be subject to requirements for recordation or preservation, and documentation was prepared and submitted for the guard house complex on April 30. Suggest we strengthen this language in succeeding

documents to strongly state we are complying and are meeting the requirements for documentation.

RESPONSE

No response is required.

13. Page 25, Section 5.0, First Paragraph, Line 3

States that "ARARs are identified in the draft DPP". They used to be but aren't anymore.

RESPONSE

Reference to the DPP document was removed from the entire document, since it has yet to be approved.

14. Section 6.0

States that Figure 6-1 is attached but it isn't. Requests copy of figure.

RESPONSE

Figure 6-1 was apparently not attached to reviewers copy. The figure was changed to Attachment B in the second revision.

15. Section 2.1.1 , RCRA Unit 40

"Closure of RCRA Unit 40 will be conducted in accordance with the Site's Part B RCRA permit ..." Unit 40 is not a permitted unit. Partial closure of this interim status unit requires submittal and approval of a closure plan in accordance with Part 265, Subpart G of the Colorado Hazardous Waste Regulations (CHWR) which includes a 30-day public comment period.

RESPONSE

This reference was removed from the text. A closure plan is currently under preparation as indicated in text in Sections 2.3.1 and 3.1.3.3.

Originator: Office of Chief Counsel, DOE

1. Cover letter

A Proposed Action Memorandum should not go to the reading rooms before DOE approval.

RESPONSE

The PAM was submitted for public comment before DOE approval.

2. Section 2.1, Line 3

The reference should be to the Site's Life Cycle Baseline rather than the Ten Year Plan.

RESPONSE

Text was changed in Section 1.0 to indicate the following: "The effort will be managed as a non-time critical interim remedial action under the Comprehensive Environmental

Response, Compensation, and Liability Act (CERCLA), with respect to the RFETS Life Cycle Baseline.”

3. *Section 3.0, Line 1*

It is not correct to reference the draft DPP. The flow chart from the DPP could be included in the PAM as the process to be used in this project.

RESPONSE

All references to the DPP were removed from the document. The flow chart was not included in the document.

4. *Section 3.0, Line 5*

It is not correct to say that “plans will be prepared and approved by RFETS”. In RFETS prepares and submits and the LRA approves.

RESPONSE

The text was changed in Section 3.0 to indicate the following: “All compliance documentation and project plans will be prepared and approved by RFETS Decommissioning and Demolition Management under a Project Execution Plan to ensure that decommissioning efforts are conducted in a safe and compliant manner”.

5. *Section 3, Line 9*

Suggest moving this sentence, which begins “Once the building is ready for decommissioning...” Up before the sentence which begins “As part of...”

RESPONSE

The entire section (3.0) was revised. The two sentences were combined to state: “All building utilities and associated facility safety systems will be disconnected prior to commencement of building demolition.”

6. *Section 3.0, Line 13*

Suggest using another word instead of “following”. Such as “Remediation of contaminated soil will be completed as indicated by the results of the analyses.”

RESPONSE

The sentence in Section 3.0 was expanded to state the following: “Underground pipelines will be managed with respect to soil sample analyses results. Soil remediation, if necessary, will be conducted with respect to RFCA Action Levels in a manner that is protective of human health and the environment.”

7. *Section 3.1, Line 1, 1st Word*

Suggest changing “The” to “A”

RESPONSE

The sentence was revised to state: “The primary decommissioning objectives will be accomplished according to an integrated scope, schedule and cost control system.”

8. *Section 3.2.1, Line 6*

The other regulatory activities should list the requirements of historical preservation act and reference the site programmatic consultation w/SHPO and US National Park Service.

RESPONSE

Section 4.2.7 addresses this concern and states the following: "The programmatic agreement between the DOE Rocky Flats Field Office, the Colorado SHPO, and the Advisory Council on Historic Preservation has been approved. Arrangements are being made to take landscape photographs of Building 123 which has been designated as a Potentially Historic Structure. The buildings will be demolished after the photographs have been taken."

9. *Section 3.2.1, 2nd Para., Line 1*

The Programmatic Consultation with the SHPO is a planning document which should be referenced.

RESPONSE

See above response.

10. *Same Reference*

The Reconnaissance Level Characterization Report should be an appendix to this PAM as should the other plans cited (unless they are available in the reading rooms already).

RESPONSE

None of the supporting documents will be included as Appendices. However, Section 3.3.1 was revised to state that the documents "will also be available to the general public upon request."

11. *Section 3.2.2, Line 1*

Suggest changing "governed" to "conducted"

RESPONSE

The entire sentence was revised to state: "Characterization activities associated with the decommissioning effort includes survey of interior building surfaces."

12. *Section 3.2.2, Line 6*

The Sampling and Analysis Plan should be an appendix to this PAM.

RESPONSE

None of the supporting documents will be included as Appendices. However, Section 3.3.1 was revised to state that the documents "will also be available to the general public upon request."

13. *Section 3.2.2, 2nd Para., Line 3*

The draft MARSSIM should be an appendix to this PAM available in the reading rooms. Same thing for draft NRC Manual.

RESPONSE

None of the supporting documents will be included as Appendices. However, Section 3.3.1 was revised to state that the documents "will also be available to the general public upon request."

14. *Page 20, Unconditional Radiological Release Criteria, Line 1*

The clause "In accordance with the ..RFCA.." Should have a specific cite.

RESPONSE

The sentence in Section 3.1.2.1 was revised to state: "In accordance with Attachment 9.0 of RFCA, all building surfaces, equipment and demolition materials will be decontaminated."

15. *Same Reference, Line 5*

"The RFETS Building Rad Cleanup Std ..." Suggest putting this sentence first, then the current lead sentence.

RESPONSE

The referenced sentence is included in the following revised paragraph:
"In accordance with the Attachment 9.0 of RFCA, all building surfaces, equipment and demolition materials will be decontaminated. Radioactivity levels will be reduced to meet effective dose equivalent (EDE) criteria. Following decontamination activities, the RFETS Building Radiation Cleanup Standard (BRCS) will be utilized to determine if residual radioactive constituents contained in remaining equipment and demolition debris is compliant with RFCA guidelines and appropriate as-low-as-reasonably-achievable (ALARA) considerations. The BRCS is currently under development in coordination with the EPA, CDPHE, and DOE."

16. *Same Reference, 3rd Para., Line 3*

The reference to "When 10 CFR Part 834 is approved..." needs a lot more explanation or in alternative state that when other requirements are promulgated (established) they will be met also.

RESPONSE

The reference was deleted from the text because it has yet to be approved.

17. *Section 3.2.3, Line 1*

Replace "Prior to decommissioning" with "As part of the decommissioning process"

RESPONSE

The sentence (in Section 3.1.3.1) was revised to state: "As part of the decommissioning process, all utilities and electrified systems will be disconnected and capped".

18. *Section 3.2.3, Line 2*

"The scope of building decommissioning also includes..."

RESPONSE

The sentence (in Section 3.1.3.1) was revised to state: "The scope of the building decommissioning effort also includes removal of all interior piping, ventilation and

above-slab waste systems.”

19. Section 3.2.3, Line 8

Suggest rewrite to say “The debris will be disposed offsite at properly licensed facilities depending of the type of waste stream created during decommissioning. Low level rad wastes is planned to be disposed of at _____. Sanitary (solid) waste is planned to be disposed of at _____.”

RESPONSE

Section 3.1.3.1 has been revised to indicate references to specific disposal sites, as stated below:

“The building will be surveyed for radiological contamination prior to decommissioning and building rubble will be segregated and disposed at properly licensed facilities, depending on the type of waste stream created during decommissioning activities. Friable asbestos will be disposed at Kettelman, California; non-friable asbestos and sanitary waste will be disposed at USA Waste, Erie, Colorado; low-level radioactive waste (LLW) will be disposed at Nevada Test Site (NTS); Radioactive ACM will be disposed at Hanford Site, Washington; and low-level mixed waste (LLM) will be stored temporarily on site until an appropriate off-site facility has been identified.”

20. General question

Has DOE agreed that disposal will be offsite?

RESPONSE

A final radiation survey will be performed on building surfaces prior to demolition. The data will be made available to DOE before demolition. In addition, DOE will have the opportunity to conduct an independent survey of the building. The building rubble will not be released offsite without DOE’s concurrence.

21. Page 21, Section 3.2.4, Line 2

Need to cite Attachment No. 6 after the reference “defined in the RFCA.”

RESPONSE

The sentence was revised to state: “Remedial actions will be contingent upon compliance of sample analyses results with Tier II ; ‘action level’ criteria defined in Appendix 6 of the RFCA.”

22. Section 3.5, 3rd Paragraph

Eliminate 1st sentence entirely.

RESPONSE

The entire section has been revised and all references to subcontractor involvement have been removed.

23. Section 3.5, 4th Paragraph

Rewrite entirely to take out all reference to subcontractor and RMRS... Suggest “The solid waste will be packaged according to the criteria appropriate to its waste type and transported to offsite licensed disposal facilities for disposal. All packaging and shipping regulations will be met”.

RESPONSE

All references to subcontractor involvement and RMRS have been removed. Section 3.4.2 has been revised to state the following:

“Process knowledge and relative operating history will be used to manage contaminated areas apart from unaffected areas. Contaminated material will be segregated, categorized, and packaged according to the specifications for disposal in permitted hazardous waste, LLW, or LLM facilities. Waste characterization data and packaging requirements for LLW will meet the procedures and policies for managing LLW as outlined in the RFETS Low-Level Waste Management Plan. (Low Level Waste Management Plan 44-RWP/EWQA - 0014, Rev. 1, 1996). Waste Operations will designate temporary storage locations for LLW, LLM, or hazardous waste, as conditions warrant.”

24. Page 24, Section 3.5, Last Paragraph

Need to use PU&D as words before using acronym.

RESPONSE

The words “Property Utilization and Disposal” were added to Section 3.4.1 “Non-Regulated Waste”.

25. Section 4.0

A whole lot of problems with the NEPA Section--- too numerous to list.

RESPONSE

NEPA section (4.0 “Environmental Impacts) has been revised to include the Proposed Action and Alternatives, including an impact analysis of the Proposed Action.

26. General Comment

The PAM generally fails to be legally sufficient for two main reasons:

a. First, because the PAM's specific reliance on the draft Decommissioning Program Plan (DPP), a document which does not yet even exist in a draft form. Until the DPP is approved, it is inappropriate to incorporate it by reference into other Rocky Flats Cleanup Agreement (RFCA) decision documents.

b. Second, the PAM fails to adequately incorporate National Environmental Policy Act values. This is partly because the PAM defers to the DPP On this matter as well as deferring to the Site's Cumulative Impacts Document which is yet another document that has not been officially released to the public. As a RFCA decision document, this PAM must include, at a minimum, thoughtful consideration of alternatives to the proposed action. This includes the “no Action” alternative a discussion of the potential for irretrievable/irreversible commitment of natural resources.

RESPONSES

a. All references to the DPP have been removed from the document.

b. NEPA section (4.0 “Environmental Impacts) has been revised to include the Proposed Action and Alternatives, including an impact analysis of the Proposed Action.

27. General

Kaiser-Hill's cover memo transmitting this draft PAM to your office indicates that this draft PAM has previously been submitted to the RFCA regulators for comment and was to be released to the reading rooms for public comment starting May 23, 1997. Unfortunately, this office was provided its first opportunity to review this document when it was unofficially provided a copy June 4, 1997. In the future, this office should be given the opportunity to participate in the review process of PAMs, including those concerning decommissioning of buildings, much earlier in the consultative process.

RESPONSE

Attempts will be made to ensure that all documents in review will be submitted to the appropriate agencies on a more timely basis.

28. General

At this time, this PAM is not legally sufficient for release to the public reading rooms for public comment. This PAM should be resubmitted for legal review once the comments provided on the enclosed copy of the draft PAM have been addressed.

RESPONSE

The PAM has already been submitted for public comment. The public response period ended July 3, at which time no public comments had been received.

Originator: Chris Gilbreath, CDPHE-HAZMAT

1. Section 2.1.2, IHSS 148

The sampling and analysis plan (SAP) for IHSS 148 must be submitted and approved by the Division prior to implementation. Public comment is not required, therefore, the final PAM should describe the approval mechanism for the sampling, analysis and remediation of both IHSS 148 and UBC 123 (e.g., the SAP shall be submitted to the Division at least 30 days prior to implementation). In the event that the SAP has not been completed, a compliance schedule which identifies the date for submittal of the SAP to the Division should be added to the final PAM.

RESPONSE

The following sentence was added to Section 3.0 indicating the approval mechanism for the SAP: "The SAP will be submitted to CDPHE at least 30 days prior to implementation."

2. Section 2.2.4, Building 123S

"The facility has been closed for approximately one year." Has the building been certified RCRA clean closed, non-operational or shutdown? Clarify the term "closed".

RESPONSE

The following statement was added to Section 2.2.4: The facility was formally as part of the RCRA process in 1996. Closure followed 40 CFR 262.34(a) and 40 CFR 265.111 and 40 CFR 265.114 requirements.

3. *Section 2.3.1, Asbestos*

Identify the State of Colorado regulation which requires the submittal of either a Demolition Notification form or an Asbestos Abatement Notification form.

RESPONSE

The following statement was added to Section 2.4.1: "A permit is required for asbestos abatement operations in accordance with Regulation 8, Control of Hazardous Air Pollutants, Part B, Section 3, (1)(a)(i); Notification will be made to the State of Colorado in accordance with Regulation 8, Part B, Section 3, (1)(a)(iii). A separate form for demolition is required for demolition in accordance with Regulation 8, Part B, Section 3, (3)(b)(i, ii, iii)."

4. *Section 2.3.2, Beryllium*

This section reads, "No samples identified the presence of beryllium." The Reconnaissance Level Characterization Report, however, states "No samples identified the presence of beryllium above the RFETS site housekeeping level of 25 ug/ft². Define the term "Site housekeeping level" .

RESPONSE

The section was revised to state the following: "All results were below the RFETS site housekeeping level of 25 µg/ft², a standard developed by the Atomic Energy Commission in approximately 1949 and adopted and used by RFETS since the 1960's."

5. *Section 2.3.4, RCRA*

Hazardous Waste in SAAs - For previously generated hazardous waste, characterization should have already been completed using either process knowledge or sampling and analysis results. Hasn't the waste already been containerized and labeled? Revise the paragraph accordingly.

RESPONSE

The paragraph was reworded to state the following:

Satellite Accumulation Areas (SAAs) were established in Rooms 103A, 124, 125, 127, and 156 to ensure proper storage of RCRA hazardous wastes near the point of generation. The building custodian characterizes and segregates all SAA wastes according to sampling and analysis results and process knowledge. These waste streams are further tracked by the RFETS SAA tracking system, which is audited internally. The wastes must be properly prepared for storage or disposal prior to closing of all Building 123 SAAs.

6. *Section 2.3.5, Perchloric Acid*

As identified in the PAM, crystallized perchloric acid may be shock sensitive and represent a hazard. As a result, ensuring safe and proper decontamination of the five hoods is critical. Identify the procedure(s), training and personnel to be used to flush and rinse potentially shock sensitive crystals in the hoods.

RESPONSE

The following was added to Section 2.4.5: "Site Health and Safety have reviewed requirements for decontamination of perchloric acid hoods. The steps that outlined in the requirements include interviews with laboratory personnel; walkdowns, necessary repairs, and washdowns of all hoods and associated ductwork; and dismantlement of ductwork into easily managed sections. The requirements also define proper segregation and disposal of all solid duct material."

7. Section 2.3.9, Metals

"All paints indicated detectable levels of one or more of the metals (lead, chromium, cadmium, and arsenic)." Are the levels of metals found in the paint greater than Toxicity Characteristic Leaching Procedure levels? How will the paint be managed? Language was added to the text to indicate that internal methodology will be developed as guidance for hood decontamination.

RESPONSE

Results will be reviewed according to TCLP criteria. Painted surfaces will be managed as construction debris. The following was added to Section 2.4.9: "All paints indicated detectable levels of one or more of the metals. All results will be reviewed in accordance with Toxicity Characteristic Leaching Procedure (TCLP) criteria prior to disposal. Painted surfaces of construction materials will be managed as standard construction debris and are not expected to exceed TCLP debris levels."

8. Section 3.22, Characterization

"Non-Impacted Areas are areas that have no potential for residual radiological contamination." As previously described in Section 2.2.1 "Building 123 was one of the first ten buildings constructed at Rocky Flats. The building has always been used as an analytical laboratory and a dosimetry facility." Based on the history and age of the building, it is not technically defensible to say that there are areas in Building 123 that have no potential for residual radiological contamination.

RESPONSE

Though the primary function of B123 was and is an analytical lab and dosimetry facility. However, the function of several of the rooms in the building was exclusively office space. Therefore, office areas should not be considered as impacted areas.

9. Section 3.22, Characterization

NUREG 5849 proposes a somewhat different approach which appears to be appropriate for Building 123. It states, "Scans of unaffected areas should cover a minimum of 10% of the floor and lower wall surface area. At least 30 randomly selected measurement locations or an average measurement of 1 per 50 m² of building surface area, whichever is greater, for total and removable activity, should be performed for each survey unit. These locations should be performed for each survey unit. These locations should include all building surfaces. Identification of activity levels in excess of 25% of the guideline, either by scans or measurements, will require reclassification of the area to the "affected" category...". Will the areas considered non-radioactively contaminated be classified as "non-impacted areas" or as Class 3 impacted areas?

RESPONSE

The following statement was added to Section 3.1.2: "Areas considered to be non-radioactive will be classified as Class 3 impacted areas."

10. *Section 3.2.2*

Soil sampling of the surrounding process waste lines and the IHSS 148 areas should include sampling for nitrates.

RESPONSE

Nitrates were added to the analyte list in Section 3.1.2.2.

11. *Section 3.5, Waste Management*

"Working under the direction of RMRS, the qualified and trained subcontractor will also load all hazardous, LLW, and LLM waste into approved containers...and make certain that all regulatory requirements are met." Define the training requirements for the subcontractor(s) generating and managing hazardous and mixed wastes.

RESPONSE

The following statement was incorporated into Section 3.4: "Waste management training requirements are outlined in *Part IX Personnel Training of the Rocky Flats Environmental Technology Site RCRA Permit* (DOE 1997). The training matrix defined in Part IX details the training requirements for all personnel managing hazardous waste. Although the document is part of a permit, all RCRA training requirements of 40 CFR 265.16 are met.

12. *Section 5.1.1, Airborne*

"Fugitive dust emissions are appropriate for the demolition." The statement should read fugitive emission controls.

RESPONSE

The sentence was reworded as follows: "Fugitive dust emissions controls are appropriate and relevant for the demolition."

13. *Section 5.1.1, Airborne*

Demolition activities mentioned are subject to the AQCC's Regulation No. 1, Section III.D.2.h., which does not require a permit, however an abatement plan must be in place and meet the requirements listed in the regulation.

RESPONSE

An asbestos abatement plan will be prepared by the asbestos contractor and will be reviewed, if necessary, by RMRS.

14. *Section 5.2*

This section should clearly specify whether the identified regulatory requirements are applicable or whether they are merely relevant and appropriate. This is an important distinction because a requirement determined to be applicable must be met in its entirety, while a requirement that is relevant and appropriate needs to be met considering site conditions and protection of human health and the environment.

RESPONSE

An attachment (A) indicating all ARARs associated with the project was added to the document.

15. Section 5.2.1, RCRA

This section does not include all of the ARARs associated with RCRA. For example, if batteries will be managed as universal waste then the requirements of Part 279 of the CHWR are applicable requirements. In addition, the land disposal restriction (LDR) treatment standards of Part 268 are applicable to any hazardous waste removed from the area of contamination and to any hazardous waste that is excavated from the area of contamination, managed within another unit, and returned to the area of contamination. Finally, the closure requirements of Part 265 are applicable to areas associated with RCRA Unit 40 if hazardous waste was managed in that unit after November 8, 1980. If hazardous waste was not managed after that date, then those requirements may still be relevant and appropriate.

RESPONSE

An attachment (A) indicating all ARARs associated with the project was added to the document.

16. Section 5.2.1, RCRA

This section states that fluorescent lights will be managed as universal waste. However, the definition of universal waste does not include fluorescent lights, at this time.

RESPONSE

Correct. 40 CFR 273, *Universal Waste Management* applies to batteries (except lead-acid batteries managed under 40 CFR 266) pesticides, and mercury switches. Therefore, reference to the Universal Waste Rule was deleted.

17. General Comment

The Building 123 PAM does not clearly identify anticipated monitoring activities throughout the decommissioning process. The PAM and the Building 123 Reconnaissance Level Characterization Report identify actual and potential radiological and chemical contamination within the building and surrounding soils. The PAM, however, does not describe necessary air monitoring during decontamination and demolition of the building. In light of the recent problems the Site experienced with the remediation of the T3 and T4 trenches, air should be continuously monitored for radionuclides and beryllium, at a minimum. The PAM doesn't necessarily need to completely describe and define monitoring activities but at a minimum, the PAM must reference the appropriate monitoring procedure(s) for all decontamination and demolition activities to be conducted. This monitoring plan must be available upon request prior demolition activities to be conducted. This monitoring plan must be available upon request prior to implementation of proposed decommissioning activities. In addition, the SAP for IHSS 48 and UBC 123 should clearly describe any necessary air and water monitoring requirements.

RESPONSE

Section 3.2.2 *Ambient Air Monitoring* was added to the document (3.2.2, Ambient Air Monitoring) to address air monitoring for the project. In addition, the project intends to take the following actions:

In response to a possible need for remediation of soil beneath the building slab with respect to soil sample analysis results, the project will operate a minimum of two low volume particulate samplers in the vicinity of the project site: One sampler will be located in the predominant upwind direction, and at least one sampler will be placed in the prevailing downwind direction. Specific sampler locations will be selected based on vehicular and pedestrian traffic patterns and the availability of electric power. Air Quality Management will be consulted to select sampler locations. The samplers will be operated continuously during active decommissioning activities and will be changed weekly.

18. *General Comment*

It seems premature to submit a PAM for the under-building contamination before necessary characterization has been/can be done. This lack of characterization leads to a lack of the detail that is required in a decision document like a PAM. Section 3.2.4 would typically be expanded to include detailed remediation methods. Once the SAP has been completed, a Remediation Plan which identifies the remediation activities to be utilized shall be submitted to the Division prior to implementation. Statements that the remediation "will be done according to established procedure" and that "several locations have undergone similar remediation" seem to be used to excuse the lack of detail. This section should not use vague terms like "could", but should describe or reference specific procedures.

RESPONSE

Remediation options for soil and pipelines were added to the document as Sections 3.1.3.2 and 3.1.3.3 and will also be addressed in a separate RCRA closure plan.

19. *General Comment*

Other specifics that should be included, if applicable, are:

- *air monitoring/air pollution control permits;*
- *other specific requirements or applicable regulations (cited);*
- *specific cleanup target levels/performance standards; and*
- *Radiological Work Permit should be mentioned in Section 5.1.2.*

RESPONSE

Section 5.1.1 (Airborne) was expanded to include CAQCC regulations that serve as applicable requirements. Cleanup target levels will be dictated by Tier II action level criteria defined in the RFCA. Section 5.1.2 was deleted from the document because radiological standards are designed for worker protection and as such are not ARARs.

20. *General Comment*

The SAP and Remediation Plan for IHSS 148 and UBC 123 should be included in the Section 3.2.1 list of documents to be prepared. These documents do not go out for public comment, but do require Division approval.

RESPONSE

The SAP was added to the list in Section 3.1.1. Remediation of the soil and pipelines will be added to the RCRA Unit 40 Closure Plan and the SAP during the 2nd revision, but not in a separate document.

21. *General Comment*

The anticipated evaluation of the Environmental Checklist needs to be included in this PAM.

RESPONSE

The Environmental Checklist will not be included in the document. However, it will be available for guidance in the Project Files.

22. *General Comment*

The schedule allows for completion of the project within 6 months from the start of building demolition, but shows a 1-1/2 month overlap of building demolition with IHSS remediation. How will both these activities happen simultaneously?

RESPONSE

Initial soil sampling will begin outside of the building before demolition. Remaining samples will be collected following demolition.

23. *General Comment*

The PAM does not identify tank systems and/or valve vaults related to the Original Process Waste Lines. What tank systems and/or valve vaults are connected to the Building 123 process waste system and are they to be decommissioned as part of this PAM? Tank 428 for instance, is designed to collect waste generated from Building 123 and should be decommissioned as part of this PAM.

RESPONSE

Section 2.3.2 (IHSS 121) was revised to include the following statement: "Currently, all process waste throughout Building 123 is collected in floor sumps. Each sump collects and temporarily stores liquid waste which is then pumped through overhead lines into a main floor sump in Room 158. The waste is then gravity-fed through P-1 to Valve Vault 18, then to Tank 428 at Building 441, and finally to Building 374 for treatment."

24. *General Comment*

The revised PAM should include a detailed project schedule in order to effectively track the progress of activities for this project. This schedule should identify submittals for the SAP, the remediation plan and all other significant documents to be generated.

RESPONSE

The schedule is included as Attachment B.

Originator: Ed Smith, CDPHE

1. *Section 5.0, ARARs*

This section should clearly specify whether the identified regulatory requirements are applicable or whether they are merely relevant and appropriate. This is an important distinction because a requirement determined to be applicable must be met in its entirety, while a requirement that is relevant and appropriate needs to be met considering site conditions and protection of human health and environment.

RESPONSE

A general listing of ARARs was included in Section 5.0, and a more specific list of ARARs that are associated with the project was included as Attachment A. Both lists distinguish between applicable and relevant and appropriate requirements.

2. Section 5.1.1

An analysis is needed to determine whether the NESHAP standards for asbestos are applicable or whether they are relevant and appropriate.

RESPONSE

An evaluation of requirements associated with asbestos abatement/disposal including whether the requirement is applicable, relevant and appropriate, or To Be Considered was included in the PAM as Attachment A.

3. General

An analysis is required to determine whether TSCA is applicable or relevant and appropriate for disposal of PCB contaminated light ballasts and/or asbestos that may be generated during D&D of Building 123.

RESPONSE

An evaluation of TSCA regulations as ARARs was conducted and included as part of the general D&D ARARs. In addition, text was added under Section 2.4.7 stating the following: "Potential exists for the presence of PCBs in fluorescent light ballasts. Consequently, all light ballasts will be evaluated for PCB contamination and properly segregated after the building has been vacated and lights are no longer required. All light ballasts marked "PCB Free" or "No PCBs" will be managed as non-hazardous solid waste and disposed at a sanitary landfill. Ballasts marked "PCBs" or not marked and not leaking will be packaged for disposal at an TSCA-permitted facility. Leaking PCB light ballasts and unmarked light ballasts will be managed as fully-regulated PCB Articles."

4. Section 5.2.1

This section states that fluorescent lights will be managed as universal waste. However, the definition of universal waste does not include fluorescent lights, at this time.

RESPONSE

The reference to Universal Wastes has been deleted.

5. Section 5.2.1

This section does not include all of the ARARs associated with RCRA. For example, if batteries will be managed as universal waste then the requirements of 6 CCR 1007-3 Part 279 are applicable requirements. In addition, the land disposal restriction (LDR) from the area of contamination and to any hazardous waste that is excavated from the area of contamination, managed within another unit, and returned to the area of contamination. Finally, the closure requirements of 6 CCR 1007-3 Part 264 are applicable to areas associated with RCRA Unit 40 if hazardous waste was managed in that unit after November 8, 1980. If hazardous waste was not managed after that date, then those requirements may still be relevant and appropriate.

RESPONSE

A general listing of ARARs was included in Section 5.0, and a more specific list of ARARs that are associated with the project was included as Attachment A.

6. General Comment

As stated above, the PAM should specify whether the identified requirements are applicable or relevant and appropriate. A requirement cannot be both applicable and relevant and appropriate.

RESPONSE

A general listing of ARARs was included in Section 5.0, and a more specific list of ARARs that are associated with the project was included as Attachment A. The lists include an evaluation as to whether an ARAR is applicable, relevant and appropriate, or To Be Considered.

7. General Comment

Section 2.3.4 indicates that sampling has confirmed the presence of asbestos but the associated TSCA requirements for disposal of asbestos waste and the NESHAP standards for asbestos have not been identified as ARARs. Please determine if these requirements should be included as ARARs for this project.

RESPONSE

A general listing of ARARs was included in Section 5.0, and a more specific list of ARARs that are associated with the project was included as Attachment A. The lists include an evaluation of requirements associated with asbestos management/disposal including whether an ARAR is applicable, relevant and appropriate, or To Be Considered.

8. Section 5.0

This section states that no hazardous waste generation is anticipated from demolition. However, Section 2.3.3 states that lead based paint will be collected, characterized and managed in accordance with applicable hazardous waste regulations. This inconsistency should be corrected.

RESPONSE

Could not locate statement that "no hazardous waste generation is anticipated from demolition". Hazardous wastes will be managed according to Section 5.2.1, RCRA.

9. Section 5.0, 4th Paragraph

The last sentence indicates that a temporary unit, specifically a 90-day accumulation area, may be established under 6 CCR 1007-3, 264.553. The text is misleading in this respect. A temporary unit may be established pursuant to the referenced regulation and waste may be managed in such unit for up to a one year period. On the other hand, a 90-day accumulation area may be established pursuant to 6 CCR 1007-3, Section 264.553 or in a 90-day accumulation area established pursuant to 6 CCR 1007-3, Section 262.34, whichever is most appropriate.

RESPONSE

Attachment A (Specific ARAR list) lists 264 Subpart S (Corrective Action) which includes Temporary Units, and 262.34(a) which includes 90-day units. ARARs will

be used according to unit type. The accumulation time limit associated with these unit is administrative in nature and is not applicable.

10. *Table 5-1*

Asbestos requirements that are determined to be ARARs, if any, should be added to this table. Also, 6 CCR 1007-3, Part 262 and 268 should be added for waste generation and LDR treatment standards, as discussed above. Finally, DOE Order 5820.2A should be added as a TBC for radiation protection.

Originator: James Hindman, CDPHE

1. *Section 2.3.3, Last Paragraph*

Light ballasts and fluorescent lights are not regulated as universal waste streams in Colorado.

RESPONSE

All references to Universal Waste Streams have been removed from the document

2. *Section 7.0, Documentation*

Sampling and analysis data must be included in the completion report.

RESPONSE

Sample and analysis data will be included in a Sample and Analysis report to be prepared following receipt of sample analysis results.

3. *Figure 6-1, Schedule Layout*

The schedule shows that the Reconnaissance Level Characterization Report (RLCR) was to be submitted at the end of April, prior to submitting the PAM to CDPHE. Do we have a copy of the RLCR? If not, we should request it.

RESPONSE

A copy of the RCLR was submitted to CDPHE for review.