
**RESPONSE TO USEPA COMMENTS REVISION 2
PLANT 2/3**

09/17/90

**WMCO/DOE-FMPC
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REPORT
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RESPONSE TO USEPA COMMENTS
REVISION 2

PLANT 2/3

1. Comment:

Section V, Page 6, Paragraph 8: The response to Comment #17 states that quarterly sampling will continue for a period of two years after termination of pumping. However, the Plant 2/3 Work Plan states that "samples shall also be collected quarterly for one year after termination of pumping activities to verify that the contaminates have been removed." Please correct this discrepancy.

Referenced Comment 17:

Section III: If pumping is ever terminated, what sampling will be performed to monitor water quality from that point on. Provision for notification of work stoppage to U.S. EPA must be in accordance with notification requirements of the 1990 Consent Agreement.

Referenced Response 17:

Will modify. Sampling to monitor water quality after pumping has been terminated will include quarterly sampling for the identified contaminants and total radionuclides. This sampling will continue for two years after termination of pumping, as long as the contaminant levels in the sample results are below the established criteria for the FMPC. If this is the reason for termination of pumping, reporting to the USEPA will be in accordance with the Consent Agreement Under CERCLA 120 and 106(a) Section XXIV.

Response:

Will modify. The sampling plan in the Plant 2/3 Work Plan will be modified to read, " Samples shall also be collected quarterly for two years after termination of pumping activities to verify that the contaminants have been removed."

2. Comment:

Section 3.3, Page 3: The response to comment #23 states that preliminary sampling will take place prior to the commencement of the removal action. Preliminary sampling should be identified as a separate activity under this work plan or clearly described as part of the source detection activity. It is unclear in the health and safety plan whether sampling of the perched water and/or soils will precede the removal action activities. Sampling of surface water is checked off in the description of "Tasks to be performed." However, it is appropriate to provide safety guidelines addressing the unknown identity and concentration of suspected contaminants for this phase of the work plan.

Referenced Comment 23:

Section 3.3, page 3: The list of potential contaminants should include the VOCs, if they could be present under this plant as with plant 6.

Referenced Response 23:

No modification required. Preliminary sampling is scheduled prior to the implementation of the removal action to determine contaminants of concern and to determine type and level of treatment required. However, There are not expected to be any VOCs beneath Plant 2/3 for two reasons: 1) Plant 2/3 is located 1100 feet away from Plant 6 where VOCs were found and it is unlikely that VOCs would travel that far, and 2) soil borings analysis results from in and around Plant 2/3 collected in April 1990 did not show any VOCs greater than 3 ppb in Boring #1193. Therefore, these chemicals will not be considered as potential hazards in Plant 2/3 Health and Safety Plan at this time.

Response:

Will modify. The sampling of the Plant 2/3 wells (installed under the FMPC Facility Testing Program) for HSL/VOC contaminants is part of the source detection activity. This shall be clarified in the Tasks to be Performed Section of the Plant 2/3 Health and Safety Plan (Section 1.0). Surface water will not be sampled in Plant 2/3 (only groundwater will be sampled). The Tasks to be Performed Section description shall be corrected accordingly. The only groundwater data that is available at this time concerning potential identity and concentrations of "suspected contaminants" is the analytical result from boring 1149 in Plant 6. The results of this analysis which includes VOCs will be added to the Plant 2/3 Work Plan as Attachment V. This attachment will be referenced in Section 3.3, of the Plant 2/3 Health and Safety Plan.

3. Comment:

Section 3.3, Page 3, Table: Comment #24 refers to suspected levels of contamination in all media. Work activities will involve more direct contact with soils, found water and plant derived liquids (as indicated in Section 5.0) than air. Consequently, suspected contaminant levels in specific media (soil and water are more of a concern than air) should be presented. This information should be available from information gathered during the preliminary sampling.

Referenced Comment 24:

Section 3.3, page 3: Local background levels for suspected contaminants should be specified along with the regulatory exposure limits. If contaminants are expected to be concentrated in water, soils, or both, this should be annotate in the list of suspected contaminants.

Referenced Response 24:

Will modify. The table on page 3 will be amended to include local

background levels of suspected contaminants in ambient air along with the regulatory exposure limits.

Response:

The preliminary sampling results for Plant 2/3 will not be available for several months (expected November 1990). However, the work plan will be modified to include the results of perched groundwater sampling from boring #1149 in Plant 6 (See Attachment V of the revised work plan). The exposure limits (independent of specific media) for the suspected contaminants are listed in Table 3.3 of the Health and Safety Plan. Also, the Action Levels Table in Section 4.3 lists the appropriate actions which will be taken if contamination is detected on open surfaces along with breathing zone contamination. Local background concentrations for uranium at the FMPC are approximately 1.5 to 6.5 ppm in the soils and 0.1 to 2.7 ppb in the groundwater, but the work for this removal action is to be performed in identified areas of above background concentrations of uranium. The remainder of the constituents listed in Table 3.3 are substances which were known to be used or could possibly occur from the historical usage of Plant 2/3. It is important to note that the substances (with the exception of uranium) in Table 3.3 were listed due to the historical usage of the building only rather than any analytical data suggesting the presence of these constituents in the soil or groundwater. All of the remaining constituents have non detectable levels in the ambient air in Plant 2/3. The local background concentrations of these constituents in the soil and water at the FMPC is not monitored since the primary exposure pathway of these substances to FMPC workers is through the ambient air. Protective clothing including gloves and splash resistant over-garments will be worn by the removal action workers who could possibly come into direct contact with contaminated soils or water.

4. Comment:

Section 3.3., Page 3, Table: Those chemical constituents appearing in the suspected contaminant list that could reasonably be encountered in the &lperched water and soils should appear in the list of analytes in Section V of the work plan. Uranium is the only constituent that appears in the target compound list.

Response:

Will Modify. Tributylphosphate (TBP) is not listed on the USEPA hazardous substance list but it is included in Table 1 due to the large quantities of TBP which were used in Plant 2/3. The wells in Plant 2/3 will be sampled separately for TBP.

Will not modify for the remaining substances listed in Table 1. The primary hazard for nitrogen dioxide is inhalation and will be monitored with field screening equipment and or monitoring devices as described in the modified section 4.2 of the Health and Safety Plan. The acidic and basic substances listed in Table 3.3 (Nitric Acid, Sodium Hydroxide, and Calcium Hydroxide) would have reacted in all probability and would not be able to be detected through sampling for the pure chemical. However, it

is believed that the inorganic analysis of the proposed sampling will be able to detect the some of these reacted substances. Kerosene is not specifically listed on the proposed sampling parameters but the aromatic hydrocarbon constituents of kerosene are included on the full hazardous substance list. Asbestos areas in Plant 2/3 are identified and controlled. If any asbestos is encountered during this removal action, then an asbestos work permit issued by the site's industrial hygiene department will be required. The sodium constituent of Sodium Carbonate will be detected by the inorganic analysis of the proposed sampling. Separate analysis to identify sodium carbonate may be performed if the sodium concentration is high. Sampling for ammonia will not be done at this time since it is unlikely that much of the ammonia remains in the soil/groundwater in its pure chemical form. Ammonia analysis as nitrates can be performed separately if warranted, but due to the lower comparative quantities of ammonia used in Plant 2/3 it is not considered necessary at this time. It is important to note that the substances (with the exception of Uranium) in Table 3.3 were listed due to the historical usage of the building only rather than any analytical data from Plant 2/3 suggesting the presence of these constituents in the soil or water.

5. Comment:

Section 4.2, Pages 5 and 6; and Section 4.3 Table: In response to the reply to comment #25, the type of monitoring equipment to be utilized for each specific contaminant should be addressed in each health and safety plan. Action levels have no relevance unless they are related to a specific piece of equipment capable of providing that information. 29CFR 1910.120 (b) (4) (2) specifically states that the instrumentation and the a document not accompanying the work plan should not be presumed to be acceptable guidance for monitoring activities.

Referenced Comment 25:

Section 4.2.1 - 4.2.4, page 4: The specific type of atmospheric monitoring instrumentation for volatile inorganic and organic detection with the projected probe assemblies should be specified. The sensitivities of the selected probes and/or detection assemblies should be specified, with relative response restrictions or non-detect limitations of each assemblies.

Referenced Response 25:

No modification required. There are specific FMPC Health and Safety Procedures which include this information. These procedures are applicable to all task specific health and safety plans. This information does not have to be included in every task specific health and safety plan. The type of equipment that will be used for this purpose include Draeger tubes, MIE RAM-1 photometer, and an HNu-101 photoionization instrument. According to 29 CFR 1910.120 (b)(4)(E) this type of information does not need to be included.

Response:

Will modify. Section 4.2.4 will be modified in the Plant 2/3 Health and

Safety Plan to provide monitoring equipment information including instrument name, hazard measured, application, detection method.

6. Comment:

Section 5.0, Pages 6-12: The response to comment #29 states that skin contact with chemicals listed in section 3.0 is extremely unlikely. However, the possibility of contact with liquids in sumps and drains is evident in the applicability column in the tables in section 5. The final sentence in the response seems to be in agreement with the original comment for the possible need for a splash-resistant type of over-garment. Therefore, it appears from the response that the concept of splash gear when in contact with wet or liquid materials is supported. Please clarify and make appropriate changes.

Referenced Comment 29:

Sections 5.1-5.4, pages 6-9: Process coveralls are not chemical or liquid resistant. Saranex, or equivalent, is the minimum acceptable protective clothing. If concentrated process material could be encountered, a butyl rubber or heavy PVC splash suit would be an appropriate outer garment.

Referenced Response 29:

No modification required. Use of Saranex or equivalent chemical resistant clothing is level B or C protection. Since skin contact with chemicals specified in Section 3.0 will be extremely unlikely and, even if it occurred, would not create a serious skin hazard, there is no justification for level B or C skin protection. The current background levels of air contaminants are well under Permissible Exposure Limits (PELs) and action levels. Periodic monitoring for these contaminants will be conducted during the tasks listed in accordance with the FMPC Health and Safety procedures. This periodic monitoring will determine if switching to Saranex or equivalent chemical resistant clothing is warranted. For operations where splashing or skin contact with wet materials is probable face shields, PVC splash suits, and rubber gloves will be required.

Response:

Will modify. Splash-resistant clothing will be required for the perched water source detection and the installation of the collector system activities. The Personnel Protective Equipment (Section 5.0) of the Health and Safety Plan will be modified accordingly. Splash-resistant clothing will not be required for the installation or operation of the pumping/treatment system activity since contact with contaminated liquids is not anticipated during these activities. Section 5.0 will be modified accordingly.

7. Comment:

Section 5.0, Pages 6-12: The response to comment #31 indicates that the work environment has been sufficiently characterized to eliminate the necessity for escape packs of SCBA'S. The guidance provided by 1910.120

(h) (3) (i-iv) indicates that any time a new work activity (i.e., distributing contaminated soil or water, moving drums, blowing out process lines) is initiated, air monitoring should be undertaken to assure that ambient conditions have not changed. Characterization of ambient contaminant levels from past activities is not adequate. Also, due to the inability of an air purifying respirator to protect the wearer beyond specific environmental limits, real-time air monitoring equipment escape packs should be available whenever respirators are worn as the primary mechanism for respiratory protection.

Referenced Comment 31:

Sections 5.1-5.4, pages 6-9: Escape packs should be included on the list of the equipment list. Additionally, self-contained breathing apparatus (SCBAs) should be used during the initial phases of the investigation for better protection against radionuclides, asbestos, and chemical hazards until the working environment is fully characterized and is deemed to be stable.

Referenced Response 31:

No modification required. The working environment is already well enough characterized to be able to dispense with the SCBA/ELSA requirement for unknown atmospheres. The revised table on page 3 includes suspect contaminants and their local background levels.

Response:

Will not modify. As noted in Table 4.3 in the Health and Safety Plan, supplied air respirators will be used if HNu field screening of the work environment indicates organic vapor concentration over 10 parts per million. Section 4.2.4 will be modified to require supplied air respirators for personnel performing the field screening of the work environment. If the results of the field screening indicate that the ambient conditions are below action levels, then escape packs or SCBA's will not be required. The field screenings will be conducted before work begins and after new work activities which may effect the ambient contaminant level.

8. Comment:

Section 9.0, Page 19: The response to comment #35 is inadequate. Specific decontamination procedures should be a part of the health and safety plan. Improper decontamination practices can contribute significantly to the spread of contamination and endangerment of non-participatory personnel. Citation of a related but unattached document for decontamination protocol is not adequate.

Referenced Comment 35:

Section 9.0, page 13: Decontamination procedures and stations should be specified, as well as decontamination line monitoring procedures. This information should also be represented in a diagram. The use of chemical decontamination solutions, other than soap and water, is appropriate.

Referenced Response 35:

Decontamination will be performed consistent with FMPC Standard Operating Procedures for similar operations. In addition, specific RI/FS decontamination procedures for the Facilities Testing Program will be followed when appropriate.

Response:

Will Modify. A more detailed Decontamination Plan (see Section 9.0) will be included in the Plant 2/3 Health and Safety Plan.

9. Comment:

Section 9.0, Page 19: The attached map delineates the preliminary exclusion zones very well. From the text, it appears that decontamination procedures will take place on the "step-off pads." A diagram and/or a clear written definition of activities to take place on the pad should be included in the decontamination section.

Response:

Will Modify. A written description of the activities to take place on the "step off pads" will be included in the Decontamination Plan (see section 9.0). A diagram of the step-off pad will also be included on the preliminary exclusion zone map.

PLANT 9

10. Comment:

Section II..40., Page 2, Paragraph 6: The response to Comment #40 describes the ground water in Boring #1324 as an expression of a ground water mound. However, the text consistently discusses this water as "perched water." This inconsistency needs to be explained.

Referenced Comment 40:

Section I: Is the water at 1324 perched water or does it represent a groundwater mound?

Referenced Response 40:

No modification required. Based on the fact that no perched water was found on the west side (Boring #1323) or the south side (Boring #1325) of the secondary containment enclosure west of Boring #1324, it is assumed that the water in Boring #1324 represents a groundwater mound.

Response:

Upon further review of existing FMPC groundwater data, it has been determined that the groundwater found in boring #1324 is "perched water". It is believed that the contaminated groundwater was created by leaking

underground piping/sumps (the perched water investigation of this removal action will investigate the source of this water further). It is also believed that below the point of discharge of the leaking piping/sumps a "pocket" of this released water was created above a confining clay layer. Soil boring data indicates that the contaminated groundwater from boring #1324 is not hydrologically connected to the lower Great Miami Aquifer (GMA).

11. Comment:

Section V, Page 6, Paragraph 8: The response to Comment #50 and #54 stating that quarterly sampling will continue for ". . . two years after termination of pumping. . ." was not incorporated into the text. The text states that only one year of quarterly sampling will be performed. The appropriate changes must be made.

Referenced Comment 50:

Section III: If pumping is ever terminated, what sampling will be performed to monitor water quality from that point on?

Referenced Response 50:

Will modify. Sampling to monitor water quality after pumping has been terminated will include quarterly sampling for the identified contaminants and total radionuclides. This sampling will continue for two years after termination of pumping, as long as the contaminant levels in the sample results are below the established criteria for the FMPC. If this is the reason for termination of pumping, reporting to the USEPA will be in accordance with the Consent Agreement Under CERCLA 120 and 106(a) Section XXIV.

Referenced Comment 54:

Section V, page 4: Sampling frequency must be specified. References to facility Standard Operating Procedures (SOPs) is not adequate. Procedures must be outlined in work plan.

Referenced Response 54:

Will modify. Sampling frequency will be included in the work plan for the RI/FS validated sampling and the FMPC process control sampling as follows:

Sampling Frequency

System start up and verification	Weekly
First 6 months of system operation	Monthly
After first 6 months of system operation	Quarterly

The samples shall be collected quarterly after the first 6 months of system operation until such time as the sampling results indicate that the contaminant levels are below the established criteria for the FMPC. Samples shall also be collected quarterly for two years after termination of pumping activities to verify that the contaminants have been removed.

Response:

Will modify. The sampling plan in the Plant 9 Work Plan will be modified to read, " Samples shall also be collected quarterly for two years after termination of pumping activities to verify that the contaminants have been removed".

12. Comment:

Section 3.3, Page 3, Table: Comment #59 refers to suspected levels of contamination in all media. Work activities will involve more direct contact with soils,, groundwater and plant-derived liquids (as indicated in Section 5.0) than air. Consequently, suspected contaminant levels in specific media (soil and water are more of a concern than air) should be presented. This information may only be available from information gathered during the preliminary sampling.

Referenced Comment 59:

Section 3.3, page 3: Local background levels for suspected contaminants should be specified along with the regulatory exposure limits. If contaminants are expected to be concentrated in water, soils, or both, this should be annotate in the list of suspected contaminants.

Referenced Response 59:

Will modify. The table on page 3 will be amended to include local background levels of suspected contaminants in ambient air along with the regulatory exposure limits.

Response:

The preliminary sampling results for Plant 9 will not be available for several months (expected November 1990). However, the work plan will be modified to include the results of perched groundwater sampling from boring #1149 in Plant 6 (See Attachment V of the revised work plan). The exposure limits (independent of specific media) for the suspected contaminants are listed in Table 3.3 of the Health and Safety Plan. Also, the Action Levels Table in Section 4.3 lists the appropriate actions which will be taken if contamination is detected on open surfaces along with breathing zone contamination. Local background concentrations for uranium at the FMPC are approximately 1.5 to 6.5 ppm in the soils and 0.1 to 2.7 ppb in the groundwater, but the work for this removal action is to be performed in identified areas of above background concentrations of uranium. The remainder of the constituents listed in Table 3.3 are substances which were known to be used or could possibly occur from the historical usage of Plant 9. It is important to note that the substances (with the exception of uranium) in Table 3.3 were listed due to the historical usage of the building only rather than any analytical data suggesting the presence of these constituents in the soil or water. All of the remaining constituents have non detectable levels in the ambient air in Plant 9. The local background concentrations of these constituents in the soil and water at the FMPC is not monitored since the primary exposure pathway of these

542

substances to the FMPC workers is through the ambient air. Protective clothing including gloves and splash resistant over-garments will be worn by removal action workers who could possibly come into direct contact with contaminated soils or water.

13. Comment:

Section 3.3, Page 3, Table: Those chemical constituents appearing in the suspected contaminant list that could reasonably be encountered in the perched water and soils should appear in the list of analytes in Section V of the work plan. Uranium is the only constituent which appears in the target compound list.

Response:

Will modify. Acetone will be deleted from Table 1 and Section 7.0 since it was reported as below detection levels in the laboratory results of groundwater from boring 1149 in Plant 6. Freon-11 will also be deleted from Table 1 and Section 7.0. Freon-11 should not have been included on the original target compound list and was not listed in the laboratory results for hazardous substances in groundwater from boring 1149 in Plant 6. Also organic vapors will be monitored as described in Section 4.2.

Will not Modify. Acetone, 2-Butanone, 1,1,1 Trichloroethane, and uranium appear in the target compound lists. The primary hazard for nitrogen dioxide, 1,1-Dichloroethylene, and Trichloroethylene is inhalation. These substances will be monitored with field screening equipment and or monitoring devices as described in the modified section 4.2 of the Health and Safety Plan. Asbestos is not considered a hazard in Plant 9 but is listed since asbestos/transite insulation may be disturbed. An asbestos work permit issued by the site's industrial hygiene department will be required if asbestos is encountered. The acidic and basic substances listed in Table 3.3 (Nitric Acid, Hydrofluoric Acid, Sodium Hydroxide) would have reacted in all probability and would not be able to be detected through sampling for the pure chemical. However, it is believed that the inorganic analysis of the proposed sampling will be able to detect the reacted substances. It is important to note that the substances (with the exception of Uranium and Trichlorethylene) in Table 3.3 were listed due to the historical usage of the building only rather than any analytical data from Plant 9 suggesting the presence of these constituents in the soil or water.

14. Comment:

Section 4.2., Pages 5-6;and Section 4.3, Table: In response to the reply to comment #60, the type of monitoring equipment to be utilized for each specific contaminant should be addressed in each health and safety plan. Action levels have no relevance unless they are related to a specific piece of equipment capable of providing that information. 29 CFR 1910.120 (b) (4) (2) specifically states that the instrumentation and the sampling (monitoring) technique be specified. Reference to a document not accompanying the work plan should not be presumed to be acceptable guidance for conducting monitoring activities.

10

Referenced Comment 60:

Section 4.2, pages 3-4: The specific type of atmospheric instrumentation for volatile inorganic and organic detection projected probe assemblies should be specified. The sensitivity selected probes and/or detection assemblies should be specified relative response restrictions or non-detect limitations assemblies.

Referenced Response 60:

No modification required. There are specific FMPC Health and Safety Procedures which include this information. These procedures are to be included in every task specific health and safety plan. This information have to be included in every task specific health and safety plan. Type of equipment that will be used for this purpose include Drae MIE RAM-1 photometer, and an HNu-101 photoionization instrument.

Response:

Will modify. Section 4.2.4 will be modified in the Plant 9 Safety Plan to provide monitoring equipment information instrument name, hazard measured, application, detection method.

15. Comment:

Section 5.0, Pages 6-10: The response to comment #65 states contact with chemicals listed in section 3.0 is extremely unlikely. However, the possibility of contact with liquids in sumps and is evident in the applicability column in the tables in Section 5. sentence in the response seems to be in agreement with the origin for the possible need for a splash-resistant type of overalls. Therefore, it appears from the response that the concept of splash-resistant clothing when in contact with wet or liquid materials is supported. Please clarify and make the appropriate changes.

Referenced Comment 65:

Sections 5.1-5.3, pages 5-7: Process coveralls are not chemical or liquid resistant. Saranex, or equivalent, is the minimum acceptable clothing. If concentrated process material could be encountered rubber or heavy PVC splash suit would be an appropriate outer garment.

Referenced Response 65:

No modification required. Use of Saranex or equivalent chemical resistant clothing is level B or C protection. Since skin contact with chemicals specified in Section 3.0 will be extremely unlikely and, if it occurred, would not create a serious skin hazard, there is no justification for level B or C skin protection. The current background levels of contaminants are well under Permissible Exposure Limits (PELs) levels. Periodic monitoring for these contaminants will be conducted during the tasks listed in accordance with the FMPC Health and Safety Procedures.

procedures. This periodic monitoring will determine if switching to Saranex or equivalent chemical resistant clothing is warranted. For operations where splashing or skin contact with wet materials is probable face shields, PVC splash suits, and rubber gloves will be required.

Response:

Will modify. Splash-resistant clothing will be required for the perched water source detection and the installation of the collector system activities. The Personnel Protective Equipment (Section 5.0) of the Health and Safety Plan will be modified accordingly. Splash-resistant clothing will not be required for the installation or operation of the pumping/treatment system activity since contact with contaminated liquids is not anticipated during these activities. Section 5.0 will be modified accordingly.

16. Comment:

Section 5.0, Page 6-10: The response to comment #67 indicates that the work environment has been sufficiently characterized to eliminate the necessity for escape packs of SCBA's. The guidance provided by 1910.120 (h) (3) (i-iv) indicates that any time a new work activity is initiated, air monitoring should be undertaken to assure that ambient conditions have not changed. Also, due to the inability of an air purifying respirator to protect the wearer beyond specific environmental limits, real-time air monitoring equipment and escape packs should be available whenever respirators are worn as the primary mechanism for respiratory protection.

Referenced Comment 67:

Sections 5.1-5.3, pages 5-7: Escape packs should be included on the list of the equipment list. Additionally, self-contained breathing apparatus (SCBAs) should be used during the initial phases of the investigation for better protection against radionuclides, asbestos, and chemical hazards until the working environment is fully characterized and is deemed to be stable.

Referenced Response 67:

No modification required. The working environment is already well enough characterized to be able to dispense with the SCBA/ELSA requirement for unknown atmospheres. The revised table on page 3 includes suspect contaminants and their local background levels.

Response:

Will not modify. As noted in Table 4.3 in the Health and Safety Plan, supplied air respirators will be used if HNu field screening of the work environment indicate organic vapor concentration over 10 parts per million. Section 4.2.4 will be modified to require supplied air respirators for personnel performing the field screening of the work environment. If the results of the field screening indicate that the ambient conditions are below action levels, then escape packs or SCBA's will not be required. The field screenings will be conducted before work begins and after new

work activities which may effect the ambient contaminant level.

17. Comment:

Section 8.0, Pages 17-18: The map (figure 2) delineating the potential exclusion zones 9.0 is an improvement over the first presentation. However, insufficient detail is provided to clearly illustrate traffic patterns into and out of the work zones, decontamination functions, and where support functions will be staged. A larger scale version of this same illustration would be more helpful.

Response:

Will Modify. A larger scale version of the potential exclusion zones will be provided as Figure 2. Also additional information pertaining to traffic patterns, decontamination functions, and support functions will be included on the map and in the Decontamination Plan.

18. Comment:

Section 9.0, 18: The response to comment #72 is inadequate. Specific decontamination procedures should be a part of the health and safety plan. Improper decontamination practices can contribute significantly to the spread of contamination and endangerment of non-participatory personnel. Citation of a related but unattached document is not adequate. 20 CFR 1910.120 (b) (1) F refers to the development of the employer's overall health and safety procedures rather than task-specific plans as indicated in the response to Comment #76. The requirements for the inclusion of decontamination procedures in task-specific health and safety plans are covered in 29CFR 1910.120 (b) (4) (G) and clarified in 29 CFR 1910.120 (k).

Referenced Comment 72:

Section 9.0, page 11: Decontamination procedures and stations should be specified, as well as decontamination line monitoring procedures. This information should also be represented in a diagram. The use of chemical decontamination solutions, other than soap and water, is appropriate.

Referenced Comment 72:

Decontamination will be performed consistent with FMPC Standard Operating Procedures for similar operations. In addition, specific RI/FS decontamination Procedures for the Facilities Testing Program will be followed when appropriate.

Response:

Will Modify. A more detailed Decontamination Plan (see Section 9.0) will be included in the Plant 9 Health and Safety Plan.

19. Comment:

Section 3.0 & 7.0,, Pages 3 & 17: The response to comment #76 is inconsistent with the addition of HF to Table 1 and inclusion of HF in Section 7.0. The statement concerning the history of processes involving

the use of HF would be helpful if included in the historical description of plant activities.

Referenced Comment 76:

Attachments: Because of health risks posed by the potential presence of HF in the soils, groundwater, and plant process and building structures, the chemical specific hazards should be included in section 7. A reference to standard operating procedures (SOPs) for radiation and HF exposures are referenced in Section II, but should also be included in the plan for this removal action.

Referenced Response 76:

No modification required. Because the Plant 9 Zirnlo operation where HF was used has been rebuilt and new lines were put in and the old ones were purged, there is unlikely to be any HF acid present. Furthermore SOP's are not to be included in the task specific Health and Safety Plans per 29 CFR 1910.(b)(1)F.

Response:

Will Modify. Hydrofluoric acid was included in the chemical hazard table due to its historical usage in Plant 9 in the Zirnlo process operation. The Zirnlo process operation was rebuilt (as referenced in the response to comment 76) and new HF piping was installed to replace the existing HF piping. The old (existing) HF lines were purged at that time so it is unlikely that HF acid will be encountered. A brief description of the Zirnlo process operation will be included in the Site History Section 2.0 of the Plant 9 Health an Safety Plan. HF acid will remain in Table 1.0 and Section 7.0. HF acid will be monitored using equipment listed in Section 4.2.