

RESPONSE TO USEPA COMMENTS 01 JULY 2002
&
RESPONSE TO FUSRAP COMMENTS 15 JULY 2002

TN & Associates, Inc. Response to EPA and FUSRAP Comments
Draft Line 1 and Firing Site Supplemental RI Report (May 2002)

EPA Comments Received on 07-01-02

GENERAL COMMENTS

1. Historical operations at Line 1 were varied and complex. This has resulted in a large number of areas and potential migration pathways that could have been impacted by environmental pollutants originating from Line 1 activities. Although less complicated, the nature of operations at the Firing Site are also somewhat unclear, partly due to the classified activities that took place in this area. Considering these factors, the report would benefit from a more detailed presentation of the sampling rationale for each of the main areas. This would include more detailed figures (see General Comment 2) showing the pertinent features of each building or area, the areas targeted for sampling, why sampling was deemed necessary for each of the targeted areas, and what the collected samples indicate with regard to defining the nature and extent of contamination and potential migration pathways.

Response: The historical site assessment and sampling rationale was addressed in the Line 1 and Firing Site Work Plan (Sept. 2001) and has been performed to the project scope and approved by the EPA. The historical information and waste streams identified have been tied to the sampling results in this report along with the identification of areas of concern.

Please refer to the work plan for summaries of building drawings, aerial photographs, interview transcripts etc. In addition, aerial photographs, historical engineering drawings, and interview transcripts were collected and have been made available electronically for future reference.

2. Currently, the report includes only aerial photos and a few large plates showing all features and sampling locations. Considering the complexity of historical operations at these sites, more detailed figures should be provided. The figures included in the report should be expanded to include the following: (1) detailed maps delineating the primary features of each building or area with an emphasis on locations that merit environmental investigation and any areas that have been part of a previous removal action; (2) conceptual flow diagrams showing suspected surface water and groundwater flow directions based on topography and known drainage paths and (3) isoconcentration maps or spider diagrams (directly tied to a sampling location) showing the numerical value of all detections for each contaminants of concern, highlighting detects that exceed a preliminary remediation goal (PRG).

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Response: See response to comment number 1 pertaining to background information at the site.

TN&A agrees that groundwater flow direction is important to the evaluation of these sites, however evaluation of groundwater operational unit is not part of TN&A's scope. For the a complete evaluation of groundwater at Line 1 and Firing Site see the URS Draft Final Fall 2000 and Spring 2001 Groundwater Monitoring Report. Known drainage pathways and topography are identified on Figures 4, 5, 8 and 9 in the TN&A report.

Numerical values above PRGs for TN&A sample locations as well as in the previous RI are presented on Figures 4 and 8. Figures 4 and 8 are supported by the delineation of areas of concern on Figures 5 and 9. USACE has determined further delineation of these areas of concern will be performed during subsequent activities on Line 1 and Firing Site. A statement will be added clarifying the level of delineation performed by TN&A.

Based on the manner in which the information is presented in the report, we are unable to determine whether the nature and extent of contamination is adequately defined in each area (in order to draw excavation maps/complete the remedial design), whether all areas of concern have been adequately identified, whether adequate (spatial) sampling has been conducted in possible areas of concern, and whether a sufficient suite of contaminants of concern has been analyzed in each potential area of concern.

Response: TN&A agrees that further delineation of extent of contamination is needed. As per USACE guidance, the areas of concern identified in this report will be further delineated during subsequent activities. A statement will be added clarifying the level of delineation performed by TN&A.

3. The report does not provide any discussion of the data usability issues associated with the JAYCOR data. The report needs to include a detailed discussion of the potential uncertainties associated with the JAYCOR data and how the quality of the JAYCOR data compares with the quality of the data collected by TN & Associates.

Response: Comment noted. A discussion of how the JAYCOR RI was used and problems encountered can be found in Section 5.0. The JAYCOR RI data was used as part of the sampling rationale and is presented in this report for those reasons. A comprehensive reevaluation/reporting of the JAYCOR RI data is beyond TN&A's scope. Since JAYCOR locations were not surveyed during the JAYCOR RI, TN&A locations will be used to perform further delineation.

4. The report does not include a summary of any deviations to originally scoped field activities. Please include a summary of any field implemented changes to proposed sampling locations or activities provided in the Supplemental RI Work Plan.

Response: Comment noted. A section will be added summarizing field implemented changes.

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5. The report does not discuss any of the groundwater data collected by JAYCOR. While it is recognized that investigating groundwater was not part of the scope of this investigation, a map showing previously installed groundwater monitoring wells, approximate groundwater flow directions, and any groundwater contaminant plumes previously identified would be helpful.

Response: TN&A agrees that groundwater information is valuable in evaluating site conditions, however, as the reviewer noted, groundwater investigation is beyond TN&A's scope. For an evaluation of groundwater at Line 1 and Firing Site see the URS Draft Final Fall 2000 and Spring 2001 Groundwater Monitoring Report. This report contains groundwater flow directions, groundwater contaminant plumes as well as monitoring well locations. The text will include reference to the URS Draft Final Fall 2000 and Spring 2001 Groundwater monitoring Report.

6. The report does not include a final summary and conclusions section. Including a comprehensive summary and conclusions section that notes the main areas of concern would help the reader focus on the most important details of the RI effort.

Response: Final conclusions and recommendations are identified in an area by area comprehensive summary in Section 5.0. This section keeps all elements of this investigation together by showing the reader the progression from identification of historical waste streams to area conclusions (at the end of each section) in an area by area format. Firing Site conclusions are presented likewise in Section 6.0.

Figure 5 also focuses the reader quickly on the results of this investigation by showing the areas of concern to be further evaluated in future remedial action work. Firing Site areas of concern are shown on Figure 9. Details of those areas shown on these figures are located in Sections 5.0 and 6.0.

The word "conclusions" will be added to Section 5.0 and Section 6.0 to further identify where the conclusions are located. In addition a conclusions heading will be added in each area by area section within Section 5.0 and Section 6.0.

7. The report does not include a formal recommendations section. The text acknowledges in multiple sections of the report that the nature and extent of contamination is not defined in many areas, however few recommendations for future data collection efforts are provided. At a minimum, the report should include the following recommendations: (1) proposed soil sampling locations in any areas where the nature and extent (vertical and horizontal) of soil contamination is not defined; (2) proposed groundwater sampling locations in any areas where soil samples are above PRGs or groundwater migration pathways are suspected; (3) proposed surface water sampling locations in buildings where surface water was observed but not sampled; (4) any suspected surface water migration pathways that were not sampled; (5) proposed soil sampling locations in the suspected sediment ponds between the melt buildings and (6) any other recommended data collection efforts to support further definition of the nature and extent of contamination.

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Response: TN&A agrees that additional sampling will be needed to further delineate the extent of contamination. Final conclusions and recommendations are identified in an area by area comprehensive summary in Section 5.0. This section keeps all elements of this investigation together by showing the reader the progression from identification of historical waste streams to area conclusions (at the end of each section) in an area by area format. Firing Site conclusions are presented likewise in Section 6.0.

The design of a sampling analysis plan and additional graphical interpretations to be used in future work is beyond TN&A scope of work. As per USACE guidance, the areas of concern identified in this report will be further sampled during subsequent activities.

Similarly the evaluation of groundwater operable units and a sampling analysis plan for groundwater is beyond TN&A's scope. For the an evaluation of groundwater at Line 1 and Firing Site see the URS Draft Final Fall 2000 and Spring 2001 Groundwater Monitoring Report. This report contains groundwater flow directions, groundwater contaminant plumes as well as monitoring well locations. A reference to this report will be included in the text.

8. Please describe "Project Linen / Project Cottontail", including the types of materials produced and the nature of waste management activities.

This comment addresses information found in the work plan (Sept. 2001). All available information regarding Project Linen/Project Cottontail was presented in the work plan. Due to the secretive nature of AEC operations, no further information on Project Linen/Project Cottontail is available.

SPECIFIC COMMENTS

1. **Page 1-1, Section 1.0, Introduction.** This section should reference the 2 Records of Decision (RODs) for the IAAP and briefly discuss how they apply to Line 1 and the Firing Site. Line 1 is included as part of the previous IAAP RODs, while the Firing Site has yet to be addressed. For Line 1, this investigation was originally intended to define the extent of contamination so that the remedial action could be implemented. However, radiological contamination was not defined in this effort. The manner in which radiological contamination will be defined should be described in the text.

Response: A discussion on the use of the RODs in the development of this report will be added to Line 1 and Firing Site introductions. The scope was limited to address only chemical, metal and organic sampling. Radioactive sampling was not performed outside of screening level to ensure personnel safety as well as the proper handling and disposal of samples. Radioactive sampling of Line 1 and the Firing Site will be scheduled and accomplished by the St. Louis District Corps of Engineers under the FUSRAP program.

In the second paragraph, the text indicates that asbestos was not considered a contaminant of concern in this investigation. Please discuss the nature of possible asbestos contamination at

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Line 1 and the Firing Site and whether conditions warrant sampling to evaluate possible releases of asbestos to the environment.

Response: TN&A was not scoped to evaluate asbestos as mentioned in the last sentence of the second paragraph. The word "potential" will be added in front of contaminant of concern for clarity.

2. **Page 1-1, Section 1.1, Historical Site Summary.** These sections would benefit greatly by including supporting figures that illustrate where the most important historical operations, from an environmental perspective, took place.

Response: Please see response to general comment number 1.

3. **Page 1-5, Section 1.1.3, Firing Site Historical Summary.** The text states that FS-6 and/or FS-12 are temporarily shut down. Please clarify whether both FS-6 and FS-12 are shut down, the reasons why they have been shut down, and the actions or criteria that would need to be met for these areas to be put back into service.

Response: FS 12 is shut down indefinitely (because of DU fragments and further investigation). FS-6 is active. Criteria to put FS-12 back into service is deferred to the Army and can not be answered at this time.

4. **Page 1-6 and 1-7, Section 1.2.2, IAAAP Topography and Surface Drainage.** Please include figures in this section showing the anticipated surface water flow pathways for Line 1 and the Firing Site.

Known drainage pathways and topography are identified on Figures 4, 5, 8 and 9 in this report. Anticipated surface water flow pathways are shown on Figure 6.1-3 in Section 6.1 and Appendix D of the JAYCOR RI report. References will be made in section 1.2.2.

5. **Page 1-7, Section 1.2.3, Geology.** Please include a cross section showing the regional geology/hydrogeology to support the text in this section. Also, provide a discussion of any monitoring wells installed by JAYCOR at Line 1 or the Firing Site in this section.

Response: A reference will be made to the Section 5.1.2.1 of the JAYCOR RI report which discusses site geology identified during JAYCOR well installation and to Table 5-1 which identifies hydrogeologic units. Re-evaluation of JAYCOR well installations is beyond TN&A's scope and project funding.

6. **Page 1-9, Section 1.3, IAAAP Previous Environmental Investigations.** Since the data collected during the JAYCOR RI is used heavily in this report, the discussion of the JAYCOR RI/FS in this section needs to be expanded. Please include a summary of the results of the JAYCOR RI for Line 1 and the Firing Site, including a discussion of data usability.

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Response: A discussion of how the JAYCOR RI was used and problems encountered can be found in Section 5.0. The JAYCOR RI data was used as part of the sampling rationale and is presented in this report for those reasons. A comprehensive reevaluation/reporting of the JAYCOR RI data is beyond TN&A's scope and project funding.

7. Page 1-10, Section 1.4, Contaminants of Concern. We do not concur with the *preliminary* remediation goals proposed in Table 2. While RGs for some constituents come directly from the ROD, we are unclear of your rationale for developing PRGs for other constituents. The rationale included in paragraphs 2 and 3 of this section is confusing and does not appear to be consistent with that included in the IAAP OU-1 Interim or Final ROD. We suggest that you consider PRGs from EPA Region 9 Screening Tables. For VOCs, groundwater protection PRGs should be evaluated in determining the extent of impacted soils.

Response: As prescribed in the ROD, the procedure for establishing remediation goals (RGs) reflects the need to establish protective standards for contact with contaminated soil in an industrial setting, and for standards that will guard against the possibility of contaminants leaching from soil to groundwater in quantities that pose a threat to human health and the environment. Implicit in the establishment of these two sets of standards is that the most stringent of each pair of contaminant-specific values will be selected as the suggested cleanup option.

TN&A agrees with the reviewers that the text and tables in the current draft do an inadequate job of laying out the RG development process in a sufficiently transparent manner. Furthermore, some of the values listed in Table 2 are incorrect. The next draft of the report will address this problem by:

- providing an intelligible overview of the process
- correcting all mistakes, and
- tabulating each step of the procedure in a way that makes the process transparent to all.

Briefly, the process will:

(1) combine the designated RGs set forth in Table 13 of the ROD with contaminant-specific soil contact RGs developed to address exposure in an industrial setting (such as the U.S. EPA Region 9 industrial soil PRGs).

(2) combine the designated groundwater protection RGs for RDX and TNT (as set forth in Table 14 of the ROD) with a set of soil leaching RGs for all other COPCs. These will be developed according to the hierarchy of criteria described in Section 2.9.2 of the ROD, and

(3) compare the suggested contaminant-specific cleanup target pairs, in each case choosing the more stringent (lower) of the two soil concentrations as the suggested cleanup option.

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In addition, perchlorates should be considered as a potential contaminant of concern. To partly address this issue, please clarify the nature of the propellants used at Line 1 ("T-28 propellant powder").

Response: This comment addresses information found in document reviews in the work plan (9-20-01). See response to Comment 1. Perchlorates will be mentioned as a PCOC.

8. **Page 1-11, Section 1.4.2, Line 1 Contaminants of Concern.** The process for selecting the contaminants of concern should be discussed. Please clarify if the COCs come from the ROD or are based on the assessment of historical operations at the site.

Response: A clarifying statement will be added "COCs identified in this section are those found with results above preliminary action levels."

9. **Page 2-1, Section 2.1, Data Quality Objectives.** Based on our review of this report, it does not appear that the investigation met the stated DQOs. That is, it does not appear that extent of chemical contamination has been sufficiently defined to support the remedial design/remedial action. The Supplemental RI should discuss in detail the extent to which specific DQOs were met. This section is merely a restatement of the information provided in the Field Sampling Plan.

Response: As per USACE instructions, the areas of concern identified in this report will be further delineated during subsequent activities.

10. **Page 2-3, Section 2.5, Radiological Screening.** This section discusses the screening procedures that were used to determine if radiological contamination was present in the sampling areas, but does not indicate if radiological contamination was actually detected at any of the sampling locations. Please include a discussion of any sampling locations that had to be moved or abandoned due to possible radiological contamination. Results of all radiological screening samples should be provided.

Response: Agreed. Language will be added for sample locations moved due to the presence of radiological contaminants above background in order to protect worker health and prevent the collection of radiologically contaminated samples. Section 2.5 will be changed from "Radiological Screening" to "Radiological Control Measures". The word "Screening" is suggestive of a radiological investigation.

11. **Page 2-4, Section 2.6, Management of IDW.** This section should discuss how IDW was managed. Details of where waste was disposed, and sampling data to support such disposal should be provided.

Response: Sampling of acetate sleeves, PPE, and decontamination water was not required. IDW was properly handled and contained at the TN&A trailer in plastic bags and portable polyethylene water containers until onsite disposal at Trench 6 in the Inert Disposal Area. The text will include these statements on the disposal of IDW.

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12. **Page 3-1, Section 3.1, Analytical Methods.** It is unclear whether the method used for analyzing for MOCA was sufficient to define a possible release of MOCA to the environment at levels of concern. Please clarify.

Response: Comment noted. Reporting of any MOCA detections was requested during Method SW8270C analysis on environmental soil samples collected around buildings known to have processed or used MOCA. Details of MOCA analysis can be found in Section 3.1. MOCA was not detected in any samples analyzed. This suggests that soils of suspected Line 1 Buildings are free of MOCA contamination. However, because MDLs nor PRGs have not been established, TN&A recommends that MOCA be investigated during subsequent activities at Line 1.

TN&A would like to forward any needed additional responses to USACE-Omaha or Army.

13. **Page 3-2, Section 3.3, Data Validation.** Please summarize in this section the overall quality and usability of the data collected and provide explanations for any data that was rejected.

Response: Over all quality and usability of this data is good. Due to calibration deficiencies, some of the sample results for Acetone were rejected. Acetone is a common lab contaminant. The initial and continuing calibrations response factors are to be >0.05. Should this requirement not be met, all non-detected results to samples associated with the deficiency are to be "R" qualified.

In the first paragraph, the text indicates that QA/QC procedures are discussed in Section 13. We were unable to locate a Section 13 in the Report. Please clarify.

Section 13 is in reference to the QAPP Addendum of the Line 1 and Firing Site Work Plan. Clarification will be made as to where Section 13 is located.

14. **Page 4-1, Section 4.0, Statistical Analysis of RI Background Data.** The background sampling locations for the JAYCOR data should be provided on a figure to demonstrate that they are representative of the types of soil that would be found at Line 1 and the Firing Site and are located in areas that are unimpacted by any past or present plant activities. Also, please indicate in the text if the background data collected by JAYCOR is of sufficient quality to be used for the determination of background conditions.

Response: Reference will be made to Figure 4-9 and Table 4.4.1 of the JAYCOR RI for information on background sample locations. Since a statistical analysis had not been performed by JAYCOR on their background data TN&A reevaluated the data to establish upper tolerance or Poisson limits. The sampling locations employed by JAYCOR were inside plant boundaries, in areas to the north and west of Line 1 and Firing Site where soils have not been impacted by plant activities. Reference also will be made in the revised report to the sampling and analytical methodologies employed by JAYCOR and their

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analytical laboratory. To the extent possible, all available information will be cited to address suitability-for-a-purpose issues concerning this data set.

The JAYCOR data set from which the "reduced" background evaluation was prepared should be presented to allow for verification.

Response: A list of all sampling stations is presented on Figure 4-9 and Table 4.4.1 of the JAYCOR RI report. In general, all available soil background data were employed in this evaluation. The only data-points excluded were those of sediment samples.

The use of this background determination in assessing data from this investigation should be outlined.

Response: The screen is especially important where the exceedance of low risk-based RGs otherwise establishes unrealistic cleanup targets in the absence of information about area-wide levels of naturally-occurring substances.

15. Page 5-1, Section 5.0, Line 1 Area-by-Area Results. This section needs to include a much more detailed summary of the JAYCOR data collected at Line 1 and the Firing Range. Data quality, sampling techniques and the range of analyses performed for the JAYCOR sampling effort need to be discussed in detail in this section. Also, all of the subsections in Section 5 need to clearly illustrate any areas where the nature and extent of soil contamination requires further delineation, describe any other data gaps and include definitive recommendations for future sampling efforts. As described in General Comment 2, these sections also need to: (1) include detailed figures showing building/area features and specific contaminant levels above PRGs using isoconcentration maps or spider diagrams; (2) delineate any areas that have been the subject of a removal action and (3) provide more detailed rationale to support sampling locations and investigation approaches.

Response: TN&A agrees that further delineation of extent of contamination is needed. As per USACE guidance, the areas of concern identified in this report will be further delineated during subsequent activities. Delineation of the extent of contamination beyond identifying areas of concern is beyond TN&A's scope. Please see response to general comment number 3. A discussion of how the JAYCOR RI was used and problems encountered is in Section 5.0. Since JAYCOR locations were not surveyed during the JAYCOR RI, TN&A locations will be used to perform further delineation.

(1) (2) See response to Comment 1.

Numerical values above PRGs and graphical representation of locations above PRGs for each analysis for TN&A sample locations as well as in the JAYCOR RI are presented on Figures 4 and 8. Figures 4 and 8 are supported by the delineation of areas of concern on Figures 5 and 9. Further delineation of these areas of concern will be performed during the remedial action phase. Figure 4 also identifies areas of sump excavations.

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(3) A detailed historical site assessment and sampling rationale was addressed in the Line 1 and Firing Site Work Plan (Sept. 2001) and has been approved by the EPA.

The extent of contamination will need to be re-evaluated after appropriate PRGs are determined (see Specific Comment #7).

Response: Agreed. Areas of concern will be re-evaluated after appropriate PRGs are determined (see response to specific comment number 7).

16. Page 7-1, Section 7.0, Fate and Transport. This section provides a good summary of literature derived information for the contaminants of concern but provides no site specific discussion about how the contaminants of concern could be expected to behave in the environment at Line 1 and the Firing Site. For each of the contaminants of concern, please include a discussion of the anticipated mobility and primary migration pathways given the environment at Line 1 and the Firing Site. Also, it is not clear if any geotechnical samples were collected for laboratory analysis (e.g., grain size analysis, percent of organic carbon, permeability, porosity) to help evaluate fate and transport of contaminants of concern in soil. If any geotechnical samples were collected as part of the field effort, please include the sample results in this section.

Response: The draft final version of the report will seek to more effectively combine generic fate and transport assumptions that arise from known physical-chemical data on the COPCs with available information on the geological features of the site. For example, since it is known that clay-rich soils exist around Line 1, it may be assumed that vertical migration of some contaminants will be limited and that anaerobic microbial metabolism will be favored. Data such as these will be used to provide a site-specific component to existing accounts of fate and transport characteristics of the COPCs.

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Comment No.	Page	Section / Paragraph	Comment
1	i	Purpose	Purpose as stated is to "identify and delineate areas of contamination". Based upon the discussion in the text this was not accomplished at a number of the areas the phrases "Further delineation" and/or "additional sampling is needed" occurs. That suggests the purpose was not accomplished. Recommend adding a phrase such as "contamination, to the extent possible with available funds" or a sentence such as "All areas were not fully delineated due to the lack of available funds." This would clarify the text.
Response:			Comment noted. As per USACE guidance, the areas of concern identified in this report will be further delineated during the future activities. TN&A was not scoped to delineate the current areas of concern any further than what has been identified in the report, i.e. cubic yards to be excavated. A statement will be added clarifying the level of TN&A delineation performed.
2	i	Purpose	I'd also add a statement such as "The scope was limited to address only chemical, metal and organic sampling. Radioactive sampling was not performed outside of screening level to ensure personnel safety as well as the proper handling and disposal of samples. Radioactive sampling of Line 1 and the Firing Site will be scheduled and accomplished by the St. Louis District Corps of Engineers under the FUSRAP program."
Response:			Agreed. The language in the above comment will be added.
3	ii	2 nd last	I'd remove the "atomic bombs" phrase throughout the document and replace it with "nuclear weapons components". There is no evidence that suggests atomic bombs were completed at the IAAAP.
Response:			The version you have reviewed is the internal draft. This comment has been addressed in the current Draft.
4	1-1	Intro / 2	Recommend adding to better determine the nature and extent of "chemical, metal and organic" contamination. (Since we have omitted rad contamination delineation from the scope.)
Response:			Agreed. "Determine the nature and extent of soil contamination" will be changed to "Determine the nature and extent of chemical and metal soil contamination"
5	1-1	1.1.1/1	Line 1 is listed as covering 190 acres here and 173 acres on page ii. Which is correct?
Response:			The version you have reviewed is the internal draft. This comment has been addressed in the current Draft.
6	1-4	anywhere	Recommend adding a statement that the plant contractor currently holds an IDPH license and its purpose.

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Comment No.	Page	Section / Paragraph	Comment
Response:			The IDPH license is not relevant to this remedial investigation report as per the Army.
7	1-5	1.1.3/1	Recommend changing the phrase to read "indefinitely shut down by the IAAAP commander in February 2001."
Response:			Agreed. Phrase will be added.
8	1-10	1.3/4	Do you want to mention the pending ESD for the ROD?
Response:			The ESD is not relevant to this remedial investigation report as per the Army.
9	1-10	1.4.1/2	End of first line should read "stated" rather than states.
Response:			Agreed. Change will be made.
10	General	General	For all the samples taken did you establish the horizontal extent of the contamination? If so I would mention this somewhere. Additionally, did you ensure the sampling went below the historical depth of the features (ditches, pathways, impoundments) or is additional sampling necessary?
Response:			The areas of concern identified in this report will be further delineated during future activities. Text will be added explaining that depths were sufficient for the vertical evaluation of historical features, exceptions will be noted.
11	2-1	2.1	You may want to add a chart which states the DQO's, if they were met or not and rationale if they were not met. Also, the numbering of pages in this section needs to be corrected.
Response:			Comment noted. The areas of concern identified in this report will be further delineated during the remedial action phase. TN&A was not scoped to delineate the current areas of concern any further than what has been identified in the report, i.e. cubic yards to be excavated. A statement will be added clarifying the level of TN&A delineation. Agreed, pages have been corrected.
12	2-1	2.5	Add a statement similar to above "Radioactive sampling of Line 1 and the Firing Site will be scheduled and accomplished by the St. Louis District Corps of Engineers under the FUSRAP program." Also, list any sample numbers here (or in a separate Table) which were moved due to the presence of rad. (Or, if none were relocated – state so.)
Response:			Agreed. The statement will be added and sample locations moved due to the presence of radiological contaminants above background will be noted.
13	2-1	2.5.1	Add a statement as to the instrument used to establish the count rates – I suspect that it was a 2x2 sodium iodide detector.
Response:			The version you have reviewed is the internal draft. This comment has been addressed in the current Draft.

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14	5-1	5.0/3	Was the purpose of the samples in this area to confirm that the areas identified by JAYCOR were removed to the criteria in the ROD? If so why not mention it and define the area as confirmed on Figure 5?
Response:			Agreed. Text will be added to Section 5.0 indicating that former sump areas (identified by JAYCOR) believed to have been sampled by TN&A (no survey data available) appear to have been excavated to criteria in the ROD.
15	5-2	5.1/8	May want to add text to say that samples were not taken because the areas in question could not be located by historical or topographical markers.
Response:			Agreed. Language presented above will be added.
16	5-5	5.2/1	Add text to say who removed the sumps at 1-10 and what year (if known.)
Response:			Text will be added explaining current information could not be found indicating who and when sumps were removed at 1-10.
17	5-6	5.3/3	May want to add text relative to the last round of DOE released documents which described MOCA waste management practices and listed some sampling results.
Response:			Comment noted. A reference will be made to the MOCA investigation document summaries in the historical document review section of the work plan.
18	5-7	5.3.2	Were the SVOC's listed above or below PRG's? Add text to clarify.
Response:			Agreed. Text will clarify that SVOCs were not detected above PRGs.
19	5-11	5.4.4 / General	Should a Results and Conclusions be added to sections which currently do not have something similar to paragraph 5.4.3.1? Something in the range of "No further sampling is necessary, additional sampling is necessary or the data is not sufficient to make this determination"
Response:			Agreed. Conclusions will be added in manner of no further sampling is necessary, additional sampling is necessary where it is not stated.
20	5-17	5.9/2	Did you mean to say "explosives" contamination rather than environmental in the last sentence?
Response:			Agreed. "explosives" will be added instead of "environmental"
21	6-3	6.4/2	May want to clarify that FS-10, referred to as the "old FS-12" was not used for hydroshot testing.
Response:			Agreed. Clarification will be made.
22	6-4	6.5/6	Last sentence. "This area is included in the radiological survey.." Which survey is this referring to? If it is the one FUSRAP will do in the future suggest adding "This area will be included in the radiological survey performed in the future under the FUSRAP Program."

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Comment No.	Page	Section / Paragraph	Comment
Response:			This statement will be removed. It was a left over from the removed TN&A radiological survey plan.
23	Figures	General	May want to add the red dashed lines to the legend. I assume that they are conveyors / walkways.
Response:			Agreed. Ramps will be added to the figure legends.