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1	General		Please add a caveat acknowledging that remediation activities at some properties have not yet been completed and the status in this work plan may change upon completion; and these changes may be documented in future addendums.	Concur. The following sentence was added to the end of Section 2.4, page 15, 2 nd paragraph. "Data collected from on-going investigations in support of the remediation of accessible soils will also be used to supplement, modify or amend ISOU RI sampling."
2	General		The Missouri Department of Health and Senior Services and our staff are still reviewing the assumptions made in the development of your screening levels for structures. The goal is to better understand the assumptions made here so as to be prepared for the USACE's eventual development of derived concentration guidelines within subsequent documents. Meanwhile, this review may prompt further questions or comments to which we will request your assistance. We appreciate the assistance your staff has provided to us in the past regarding similar discussions and look forward to working with them regarding this matter as well.	Concur.
3	Page 5, 10 and 70, sections 1.3, 2.2, and 4.1.4.1, respectively		Please explain in the text the reason for Plant 7W being excluded from this document. There is plenty of evidence for historic sources of contamination. If this refers to the determination of Mallinckrodt commercial waste versus MED/AEC waste, then please state this. Additionally, how will potential inaccessible soil from MED/AEC operations be addressed when the property is eventually remediated?	Clarification. A determination of the source of contamination at Plant 7W is under discussion with Mallinckrodt/Covidien. If a determination is made that Plant 7W is within the scope of MED/AEC, then inaccessible soils determined to be associated with MED/AEC operations at Plant 7W will be addressed as part of this operable unit. The following sentence was added to the end of the last bullet of Section 1.3 and reads as follows: "If contamination in Plant 7W is determined to be MED/AEC related Plant 7W will be included in scope of the ISOU."
4	Page 9		For clarity, we recommend the document mention that Covidien currently owns the Mallinckrodt facility.	Concur. On page 1, the following text was added: "The facility was previously owned and operated by Mallinckrodt Chemical Works, Inc., and Mallinckrodt, Inc. is now owned and operated by Covidien. For the purpose of this work plan, the property will be referred by its historic designation as the "Mallinckrodt" facility or property." As

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				appropriate, references to the ownership will be changed although the historic actions taken by Mallinckrodt, Inc will be documented as actions taken by Mallinckrodt.
5	Page 22, section 3.1.1, first paragraph Page A- 2, section A-1.1.2, third paragraph	A comprehensive ecological risk assessment is not being performed as part of the ISOU BRA because an ecological risk assessment was previously conducted in support of the 1998 ROD for the 1993 BRA. In addition to a quantitative human health risk assessment, the 1993 BRA included an ecological risk assessment that qualitatively evaluated potential effects from contamination at the SLDS.	There have been numerous changes to the ecological risk assessment process since the 1993 BRA. The Department suggests following the most recent EPA ecological risk assessment guidance for superfund sites. This is currently found in the EPA guidance document, "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments" (EPA 540-R97-006).	USACE agrees that there have been numerous changes to the ecological risk process since the 1993 BRA. However, given the environmental setting of SLDS and the nature of the ISOU media, USACE concurs with the findings of the 1993 ecological evaluation that resources would be best applied toward protection of human health. The reasons for this determination are:1) the SLDS is a heavily urbanized area not suitable for habitation of sensitive and T&E species; 2) it is highly unlikely that potential ecological impacts from the ISOU are greater than those from accessible media; 3) the potential for direct exposures to ISOU media is greater for humans than for terrestrial or aquatic species; and 4) the potential for subsurface migration beneath structures to sensitive terrestrial or aquatic habitats (although none are likely to exist) is unlikely. Also, given that some remediation at the SLDS has since been conducted, potential impacts to ecological resources from the ISOU contaminated media are likely to be even less significant than those determined during the 1993 BRA. Therefore, no further ecological studies are planned for ISOU media.
6	Page 23, section 3.1.1, paragraphs 4-7 Figure 3-1 Pages A-18 to A-19	The potentially complete and significant ISOU exposure pathways for the current/future SLDS construction worker and the current/future SLDS Maintenance worker are described.	It appears that inhalation of particulate and gaseous (i.e., radon) emissions from contaminated drain/sewer sediment weren't considered as an exposure pathway; this pathway does not appear in the evaluations for construction workers or maintenance workers. Because Ra-226 and U-238 are present in the drain/sewer sediment, please describe the rationale or methodology reference for why this pathway is not considered in the conceptual site model.	The cited CSM text and figures have been revised to present this analysis. The inhalation pathways for particulates and radon in drain/sewer sediments are considered to be incomplete and insignificant, respectively, for construction and maintenance workers. Particulate emissions from sediment are unlikely to occur, even during assumed construction/maintenance activities, due to the high moisture content of the sediments. Additionally, significant radon exposures to

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				workers are not likely given 1) the existing concentrations of radium detected in the sediments, and 2) the infrequent and short duration of exposures assumed for workers (i.e., not expected to exceed 90 days in a lifetime for a construction scenario).
7	Page 24, section 3.1.2 PCOCs	N/A	The Department believes the potential for VOCs beneath buildings exists and should be investigated. We recommend the USACE use field screening instruments on samples collected beneath buildings. If hits are observed, we recommend the USACE conduct laboratory sampling. Inclusion of VOCs as a PCOC is also requested.	Clarification. As stated on page 24 of the Work Plan, "many of the organic and non-radioactive inorganic chemicals detected during the previous characterization activities cannot be attributed to one source, industry, or event due to the history and diverse nature of the industries located at and surrounding the SLDS. The determination of the nature of contamination at SLDS was refined to only those types of contaminants that can be clearly identified to MED/AEC operations." For this reason, VOCs have not been identified as attributable to the MED/AEC operations and therefore it is not appropriate to consider them as PCOCs.
8	Page 28, Section 3.4.1.1, second paragraph, first two sentences	The initial vertical boundary for sampling an inaccessible soil area will be 1.8 m (6 ft) at all areas, except Plant 2, 6, 7; the Mississippi River levee. The vertical boundary was selected based on accessible soil data that showed the depth of contamination extending to 0.6 m bgs (2 ft) at most plant and VP locations (DOE 1995, and the 1998 ROD, which defined the removal of accessible soil to a 4- to 6-ft depth to be protective of human health [USACE 1998a]). The vertical boundaries at Plants 2, 6, and 7 will be greater because the vertical extent of contamination	Rather than merely using the 1998 ROD and 1995 DOE documents to confirm the selection of sampling depths, please also use information obtained during the remedies. The concern we have is that extent of contamination typically was greater than initially planned and did occasionally exceed 6' in depth (even in areas not confined to the Mississippi River levee, Plant 2, 6, or 7). Our recommended change in verbiage for this section would be "All sampling locations will be conducted to a depth no less than 1.8 m (6 ft). Locations to which a greater depth is already planned have been identified from previous investigations and nearby remedies. These areas and the corresponding depths are shown within table 5-1. Furthermore, if either the lab results or field screening tools indicate contamination exists at the bottom of the borehole, then further drilling will be required. The goal is to bound the extent	Concur. Text was revised to state that "all sampling locations will be conducted to a depth no less than 1.8 m (6 ft)." All available data to date was used to define the ISOU sampling requirements so the text was also revised to state that "a review of existing characterization and accessible soil verification data was conducted for all SLDS locations to determine the vertical depth for sampling." Additionally, the text does state that the "vertical boundary at each specific sample location will be increased if elevated radiation readings are detected during sampling."

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		was 6.9 m (23 ft), 5.4 m (18ft), and 3 m (10 ft), respectively (DOE 1995; USACE 1998a).	of contamination."	
9	Page 28, Section 3.4.1.1, second paragraph, first two sentences	N/A	Since many of these boreholes will be made through the floor or footings of structures, please specify the interface at which the ground surface is declared for purposes of measuring sample depths (i.e., soil).	Concur. The second sentence of the paragraph now reads as follows: "Soil sampling will be initiated in the uppermost soil layer below any cover material (i.e., asphalt and associated gravel)." Soil sampling methods are also discussed in Section 3.7.5.
10	Page 28, Section 3.4.1.1, second paragraph, last three sentences	Therefore the sections of RRs (DT-9 and DT-12) and roadways (Mallinckrodt, Hall, and Destrehan Streets) adjacent to these properties will also be initially sampled to 1.8m (6 ft). The vertical boundary for the inaccessible soil beneath the Mississippi River levee will extend to a depth of 50 ft (from the top of the levee) because the original soil that may be impacted is located at depths of 25 ft bgs. The vertical boundary at each specific sample location will be increased if elevated gamma radiation readings are detected during sampling.	Since this section pertains to soil boundaries for structures, these sentences should be included within subsequent sections related to roadways, RRs, and sewers.	Concur. The following text was added to the roadways and RR section. It is not applicable to the sewers section since the soil boundaries are identified to the sewer depth. "The vertical boundary for inaccessible soil associated with roadways will be the same as the vertical boundary for inaccessible soil associated with buildings and structures which is a minimum of 1.8 m (6 ft) at all areas. Although the vertical boundaries for inaccessible soil sampling at Plants 2, 6, and 7 will be greater because the vertical extent of contamination was 6.9 m (23 ft), 5.4 m (18 ft), and 3 m (10 ft), a review of existing data for Plants 2, 6, and 7 indicate that the depth of vertical contamination at the boundary of each of the plant areas do not exceed 1.8 m (6 ft). Therefore the sections the roadways (Mallinckrodt, Hall, and Destrehan Streets) adjacent to these properties will also be initially sampled to 1.8 m (6 ft). The vertical boundary at a specific sample location may be increased if elevated radiation readings (twice background) are detected during sampling."
11	Page 28, section 3.4.1.1, last paragraph, line 11	N/A	Replace comma with period.	Concur. Text was revised.
12	Page 29, Section 3.4.2 Buildings and Structures,	Initially, each exterior, interior, or rooftop area of a building or structure will be surveyed based	Please include within this section a brief explanation of the rationale used to decide whether a structure is potentially contaminated	Concur. The paragraph was revised to read as follows: "A preliminary assessment was performed for each building as part of this Work



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	3rd sentence.	on the potential for contamination.	and thus necessitating an investigation.	Plan and based on information including survey data, construction date, use of the structure by MED/AEC, and proximity to accessible soil remediation areas, if it was determined that the building may be impacted, then a scoping survey was proposed. The spatial (horizontal and vertical) boundaries will be defined by the dimensions of each individual building or structure. Building and structure surfaces that may be surveyed include, but are not limited to, the following: roofs, exposed exterior and interior surfaces, air vents, and ceilings. The scoping surveys are further discussed in Section 3.7.6."
13	Page 29, Section 3.4.2 Buildings and Structures, 3rd sentence.	N/A	Very little information is provided within this document regarding surveys to be conducted of the individual buildings. We realize the already large scope of this document is one of the limiting factors. We therefore recommend this section be amended to include a statement saying that "Surveys of individual structures, and occasionally subparts of a structure, will be described in their own work plans or descriptions and will be submitted to regulators, landowners, and tenants for review." We do anticipate some structures needing a survey of their air handling and ventilation systems in addition to their structures.	Additional details on the methods of how the scoping surveys will be conducted can be added to this ISOU RI Work Plan but individual building work plans are not proposed because the results of the scoping surveys will be used to perform structure surveys in accordance with the Final Status Survey Plan for Structures and Other Consolidated Materials Left in Place at the St. Louis Sites (Structures FSSP). The scoping surveys currently described will be a cursory survey to determine the level of contamination, if any, on a structure. The survey will be biased towards the surfaces most likely to be contaminated based on information from the preliminary assessment (i.e., existing data, construction date, use, proximity to previous soil excavation, etc as identified in the ISOU WP). In addition, the scoping survey will include surfaces that are prone to accumulating contamination like horizontal surfaces and intake vents and will utilize professional judgment while in the field. The results of the scoping survey will be used to determine a MARSSIM based classification (i.e., Class 1, 2, or 3) for the structure and a subsequent, MARSSIM-based survey will be performed for each impacted structure in accordance to the

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				Structures FSSP. The survey procedures and results will be documented in a survey evaluation report per the Structures FSSP and in the ISOU RI Report. This process is similar to the verification surveys for land areas/soil currently being conducted for the FUSRAP. The penultimate sentence in Section 3.4.2 was revised to read as follows: "The scoping surveys will be conducted in accordance with the Final Status Survey Plan for Structures and Other Consolidated Material Left in Place at the St. Louis Site (hereafter referred to as the FSSP for Structures) (USACE 2003) and are further discussed in Section 3.7.3."
14	Page 29, Section 3.4.2, third sentence.	N/A	This section needs to explain that though surficial contamination is mentioned in this document, it is only the soils under the structure that are considered inaccessible. Contamination found upon the structure or related equipment will be remediated.	Concur. Contamination on structure and equipment surfaces may be remediated in the future based on the selected remedy documented in the ISOU Record of Decision. The author believes that a more appropriate place to address this comment is in Section 1.3. The comment was addressed by adding a sentence to the end of the first paragraph of Section 1.3 and reads as follows: "The remedial decision may include remediation of structure and equipment surfaces."
15	Page 30, Table 3-2 Screening Level Criteria for PCOCs for the ISOU	N/A	Using screen values based on industrial use scenarios assumes the properties may not be releasable for UU/UE. It is our understanding the USACE intends the Vicinity Properties and some portion of Mallinckrodt to be releasable for UU/UE. Please verify our understanding. To ensure all COCs above UU/UE concentrations are properly characterized, we recommend selecting more appropriate screening values.	Clarification. The USACE is using screening values based on industrial use scenarios, since it is highly unlikely that any of the SLDS will be redeveloped for residential use. It is also unlikely that the ROD for the ISOU will require more stringent cleanup criteria than those in the accessible soils ROD.
16	Page 45, section 3.7.6, Pages 55- 112, section 4.0, existing data evaluations for buildings within individual	The preliminary evaluation for what contaminated surfaces will be investigated during the building scoping surveys as discussed in section 3.4.6 has been made for all properties. The information is presented in	We ask that you provide a statement explaining that the scoping surveys for specific surfaces will be provided in future work plan submittals for individual buildings or groups of buildings.	Please see response to comment 13.

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	properties, areas or property groups Appendix F figures	the existing data evaluation narrative for buildings within individual properties, areas, or property groups in Section 4. The buildings for any type of scoping survey are designated on Appendix F Figures.		
17	Section 4.0	N/A	Please note that although this document includes the entire SLDS and SLDS VPs, not all final documents (i.e., PRARs, FSSEs) have been completed for regulator review. Therefore, the Department may comment on the need for investigation of additional inaccessible soils once these documents are completed.	Concur. See response to comment 1.
18	Page 56, section 4.1.1.1, 3 and 7	N/A	Paragraph 3, sentence 2 states that, "Two main areas inside building 25 were used to develop and conduct uranium processing activities for MED/AEC paragraph." Paragraph 7 goes on to say, "Plant 1 was not considered a uranium ore processing area. Therefore, data evaluations for the ISOU for Plant 1 will address radiological PCOCs." Since portions of Plant 1 were used for uranium ore processing operations, this statement needs to be amended. Subsequently, nonradiological PCOCs should be included or other reasons provided for their exclusions.	Clarification. Portions of Building 25 at Plant 1 were used to develop uranium processing methods on a small scale. Therefore, uranium ore would have been present during some periods in limited quantities. The plant was not use for uranium ore processing operations and therefore this text will be modified. Only radiological PCOCs will be investigated at Plant 1.
19	Page 56, section 4.1.1.1, paragraph 5, sentence 2	N/A	This sentence is redundant since the exact information is repeated in sentence three and four of paragraph five. Suggest removing sentence two.	Concur. Text was deleted.
20	Page 59, section 4.1.1.3, paragraph 3, line10	N/A	Should be building X not building L.	Concur. Text was revised.
21	Page 62, section 4.1.2.2, last paragraph, line 2	N/A	Remove IOUs	Concur. Text was deleted.
22	Page 64, section 4.1.2.3, second paragraph, line	N/A	Replace "likely potentially impacted" with either "likely impacted" or "potentially impacted"	Concur. The text was revised to state that the soils are "potentially impacted".

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	three and four			
23	Page 71, section 4.1.4.1, fourth paragraph	The only buildings that remain are the Hazardous Material Handling Building in Plant 7N and the Water Treatment Plant in Plant 7S.	The narrative does not correspond with Figures E-5, E-10 and G-4.	Concur. The figures have been revised to show the only buildings remaining are the Hazardous Materials Handling Building in Plant 7N and the FUSRAP Water Treatment Plant in Plant 7S.
24	Page 73, section 4.1.4.3, first paragraph, last sentence	The structure is scheduled for demolition, which makes the underlying soil accessible and, therefore, the soil south of and beneath the Hazardous Materials Handling Building will be remediated as accessible soil under the 1998 ROD and does not require soil sampling as part of the ISOU.	Run-on sentence. Additionally, please state that the structure is scheduled to be turned over to the USACE by Covidien for demolition and remediation of soils.	Concur. Text was revised to "The structure is scheduled to be turned over to USACE by Covidien for demolition. Therefore, the soil south of and beneath the Hazardous Materials Handling Building will be remediated as accessible soil under the 1998 ROD and does not require soil sampling as part of the ISOU."
25	Page 74, section 4.1.5.1, paragraph 2, line 9 and 11	N/A	"Westerheide Tobacco" used in line 9 and in line 11 referred to as "Westerheide Store." Suggest keeping the name consistent either "Westerheide Tobacco" or "Westerheide Tobacco Store."	Concur. Text was revised.
26	Page 75, section 4.1.5.2, paragraph 4, line 6	N/A	"Remaine" should be written "remain"	Concur. Text was revised.
27	Page 76, section 4.1.5.3, paragraph 5, line 2	N/A	Replace "exceeded" with "exceed"	Concur. Text was revised.
28	Page 76, section 4.1.5.3, paragraph 5, line 18	N/A	Remove space in DT-3	Concur. Text was revised.
29	Page 77, section 4.1.5.4, last paragraph and Figure F-5	N/A	Paragraph states that buildings 62, 63 and 66 are potentially impacted and will be investigated via a scoping survey. This does not match figure F-5, which shows buildings 62 and 63 proposed for a scoping survey.	Clarification. Figure F-5 was revised to indicate that Building 66 is proposed for a scoping survey.
30	Page 78, section 4.1.5.4, first paragraph, line 1	N/A	Font size for "and" is smaller	Concur. Text was revised.
31	Page 78, section 4.1.5.4, paragraph	N/A	Suggest changing "non-numbered" to "unnumbered"	Concur. Text was revised.

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_	6 and 7			
32	Page 80, section 4.1.6.3, paragraph 1, line 6	N/A	Replace "as" with "was"	Concur. Text was revised.
33	Page 80, section 4.1.6.3, paragraph 1, line 7	N/A	Remove "e" from 49	Concur. Text was revised.
34	Page 80, section 4.1.6.3, paragraph 2, lines 3-8	N/A	States that the two historical samples (DE1380N1130 and DE1397N1050) contained SOR > 1.0 for accessible soil. The next sentence then states, "except for the two samples associated with inaccessible areas". Please explain whether these two samples are associated with accessible or inaccessible areas.	Concur. The references to inaccessible or accessible samples was deleted. The samples were collected in accessible soil areas but since they are located within the railroad property (DT-3), they are considered part of the ISOU. The text was revised as follows "Except for the remediated accessible soil area in the northern portion of the Security Gate 49 area, the evaluation of existing radiological data for the property demonstrates that the average and maximum radiological concentrations for the area are below the ISOU screening level criteria for surface soil. Inaccessible soil areas at Security Gate 49 area are located beneath the roadway and are adjacent to two soil sampling locations (DE1380N1130 and DE1397N1050) previously collected at DT-3 (Figure D-6). These two samples contained concentrations of radionuclides above the screening levels (SOR _N ≥ 1.0) including the maximum values reported for Ra-226 and Th-232. The area where soil samples DE1380N1130 and DE1397N1050 were collected overlies the historic track of the Norfolk Southern RR (DT-3)"
35	Page 92	N/A	DT-7 Midwest Waste VP (current location of USACE trailers) is not mentioned in the	track of the Norfolk Southern RR (DT-3)." Clarification. Per the DT-7 PRAR there are no inaccessible areas on DT-7. The area of known
			document, except that it's excluded. According to	contaminated soil in question is on DT-12 adjacent
			the PRAR, extensive remediation was conducted	to DT-7. The following paragraph was added to
			at DT-7 and there is an inaccessible soil area	section 4.3.2 "Accessible soil remediation was
			located on the eastern edge of the property next to	conducted between 2001 and 2003 at Midwest
			DT-12 (BNSF). If this inaccessible area is located	Waste (DT-7) just west of the DT-12. An
			on the BNSF property, then it needs to be	estimated 3,910 bank (yd³) of radiologically
	1	<u> </u>	mentioned in the BNSF narrative. If this	contaminated soils were excavated from DT-7

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			inaccessible area is located on the DT-7 property, then DT-7 needs to be included in the narrative, along with corresponding figures.	(USACE 2005d). GWS and soil sampling at DT-7 showed that radiologically contaminated soil was found on DT-12 along the property boundary with DT-7 as shown in Figure D-23." This information is further evaluated in Section 4.3.3.
36	Page 92, section 4.2.4	N/A	There is no mention of non-radiological PCOCs possibly being present in inaccessible areas, even though non-radiological PCOCs were present at this property as reported by the USACE on numerous occasions during conference calls. The final status of non-radiological PCOCs on DT-8 has never been reported.	DT-8 was not part of the MED/AEC uranium ore processing areas as defined in the 1998 SLDS ROD and therefore the ISOU PCOC list does not include DT-8 as requiring sampling for MED/AEC non-radiological COCs.
37	Page 95, section 4.2.4.3, first paragraph, last sentence	N/A	The word "sample" should be singular.	Concur. Text was revised.
38	Page 95, section 4.2.4.4, second paragraph	N/A	Tract 1 Rooftops on buildings A, B and C should be included with the exterior scans due to the potential for windblown material from the adjacent MED/AEC process buildings.	Clarification. Building A was built prior to MED/AEC processing operations. Building B and C were built after the MED/AEC processing operations. This would exclude Building B and C from a roof survey. Building A is approximately 1,000 ft from Plant 2 and 1,400 ft from Plant 6, where the majority of MED/AEC processing activities occurred. This is a great enough distance not to be considered adjacent to MED/AEC processing activities.
39	Page 95, section 4.2.4.4 and figure F-11	N/A	Building D is located next to a remediated area and is potentially impacted. Therefore, the building should receive a scoping survey and figure F-11 be updated to reflect this.	Concur. Section 4.2.4.4 second paragraph, second sentence was revised to read as follows: "The interiors and exteriors of Buildings A, B, and C in North Tract 1 and Building D in North Tract 2, in the vicinity of the accessible soil remediation, are potentially impacted and will be initially investigated via a scoping survey." Section 4.2.4.5 second paragraph, second sentence was revised to read as follows: "The interiors and exteriors of the three buildings in North Tract 1 and Building D in North Tract 2, in the vicinity of the accessible soil remediation, are potentially

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				impacted and will be initially investigated via a scoping survey." Figure F-11 was updated to reflect that Building D is proposed for surveying.
40	Page 105, section 4.2.9.1, last paragraph	N/A	Please update the text to indicate that DT-18 (Curly Collins) is currently owned by the City of St. Louis, and the property sits vacant and is fenced.	Concur. Text was revised.
41	Page 107, section 4.2.9.2, line 2 and Figure D-16	N/A	Please label sample SLD94733 and other sample with SOR >1.0 on Figure D-16.	Concur. Figure was revised.
42	Page 107, section 4.2.9.2, paragraph 1, line 5	N/A	Should read "docks and North" not "docksNorth"	Concur. Text was revised.
43	Page 107, section 4.2.9.2, paragraph 2, line 3	N/A	Should be Figure D-16 not D-17	Concur. Text was revised.
44	Page 107, section 4.2.9.2, paragraph	N/A	Please mark and label samples taken around DT-18 on Figure D-16.	Concur. Figure was revised.
45	Page 113, section 4.2.11.2, paragraph 4	N/A	States that only two samples collected had SOR > 1.0. However, there are three samples on Figure D-18 with SOR > 1.0. Sample SLD101278 is not mentioned in the narrative. Please address this discrepancy.	Concur. Text was revised.
46	Page 119, section 4.3.3, second paragraph	N/A	Sample IDs listed in the text should be identified on the corresponding figures.	Concur. Figures were revised.
47	Page 120, section 4.4, last paragraph, last line	N/A	D-11 should be DT-11	Concur. Text was revised.
48	Page 122, section 4.4.2, last paragraph, line 5	N/A	Space needed between "was" and "defined"	Concur. Text was revised.
49	Page 128, section 4.4.3.2.5, last paragraph, line 3	N/A	Replace comma with period	Concur. Text was revised.
50	Page 128, section	N/A	Explain "initial vertical boundary" or refer to	Concur. Text was revised to state that the vertical

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	4.4.3.2.5, last paragraph, last line		SAG. Will there be additional vertical sampling if contamination is encountered at the 6-foot interval? The Department recommends additional sampling if either the lab results or field screening tools indicate contamination exists at the bottom of the borehole and further drilling will be required. The goal is to bound the extent of contamination.	and/or horizontal boundaries will be increased if elevated radiation readings are detected during sampling or if analytical results are above PCOC screening levels."
51	Page 129, section 4.4.3.2.6, paragraph 1, line 3	N/A	Should be "At" not "A"	Concur. Text was revised.
52	Page 129, section 4.4.3.2.6, paragraph 1, last sentence, Figure D-25	N/A	DT-7 should be mentioned with regard to Angelrodt Street due to the remediation that occurred adjacent to the street.	Concur. Text was revised.
53	Page 129, section 4.4.3.2.7	N/A	Please discuss the remediation of a unpaved section of Buchanan Street along DT-4S and DT-7 that was previously done when DT-4S was remediated.	Concur. Text was revised to state "Buchanan Street dead ends at the DT-7 property boundary (Figure D-25) and portions of the unpaved roadway between DT-7 and Gunther Salt (DT-4) South were remediated as part of the accessible soils remediation activities at DT-4 South (Figure D-9). No inaccessible soil areas associated with Buchanan Street remain east of the DT-6 property boundary."
54	Page 134, section 4.5.1.3, paragraph 2, line 4	N/A	Add period at end of sentence	Concur. Text was revised.
55	Page 135, section 4.5.1.5	N/A	The Department suggests creating a separate figure for Plant 4/10 because it's difficult to refer to Figure E-1.	Concur. A figure for Plant 4/10 (new Figure E-6) has been added to Appendix E.
56	Page 138, section 4.5.3.1, first line	N/A	Should be "DPL055, DPL057"	Concur. Text has been revised to "DPL055, DPL057".
57	Page 138, section 4.5.3.1, paragraph 4	N/A	There is no sample labeled DP100 on Figure E-4 on the northeast corner of Plant 6W. There is a sample labeled DPL100 located on the northeast corner of Plant 6EH. Please reconcile this discrepancy.	Concur. Text has been revised as follows: "One of these (DPL100, located at the northeast corner of Plant 6EH)"
58	Page 139, section	N/A	Figure E-4 has sample GM-2/MH-13 with a SOR	As stated, the screening level PDI sample at this

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	4.5.3.4, paragraph 1, line 5		> 1.0 symbol (red triangle). Please reconcile this inconsistency.	location (GM-2) had an SOR _N value of zero. The red triangle on Figure E-4 represents a historical exceedance at the same location (MH-13). The text was revised as follows to clarify:
				"The PDI screening sample from GM-2 had an SOR_N value of zero. This differs from the historical sampling results from the same manhole location (then designated MH-13), which had concentrations of radiological COCs resulting in an SOR_N value >1.0."
59	Page 139, section 4.5.3.5	N/A	Figure E-5 is labeled Plant 7N and section is titled Plant 7. Is the existing data evaluated for all of Plant 7 or only Plant 7N?	The existing sewer data for all of Plant 7 was evaluated. The figure is titled Plant 7N because no sampling is proposed for other portions of Plant 7.
60	Page 139, section 4.5.3.5, paragraph 2, line 4	N/A	Should be "DPL102" not "DP102"	Concur. The text has been revised to "DPL102".
61	Page 139, section 4.5.3.5, paragraph 2, sentence two	N/A	Suggest writing out the seven samples mentioned in the second sentence, indicating which ones had SOR > 1.0 and < 1.0.	Concur. The text has been revised as follows: "Five of the sediment samples (MH-8, MH-17, MH-18, MH-19, and MH-20) contained concentrations of radiological PCOCs resulting in an SOR _N ≥1.0. The remaining two sediment samples (MH-22 and MH-23) did not exceed this screening level."
62	Page 139, section 4.5.3.5	N/A	MH-20 is identified as having a SOR > 1.0 on Figure E-10. Since MH-20 is identified on the figure please explain in the narrative the reason MH-20 is not proposed for sampling.	MH-20 has not been proposed for sampling because it is located along the portion of the sewer that only served commercial operations, as shown on Figure E-4. This statement has been added to the Plant 7N paragraph in Section 4.5.4.1.
63	Page 139, section 4.5.3.6, paragraph 4, line 2 Figure E- 6	N/A	The text uses the label MH-02 while the figure is labeled MH-2. Please make labeling consistent.	Concur. The text has been revised to MH-2 to be consistent with the figure.
64	Page 139, section 4.5.3.6, paragraph 4, line 5	N/A	Please indicate the IDs of the other two samples in the text.	Concur. The sentence has been revised as follows: "The other two samples (MH-1 and MH-3) did not exceed the screening level."
65	Page 147, section	N/A	Please explain where the free water will be	The following statement has been added as a last

Comment Number	Page, Paragraph, Sentence	Quote	Comment	Response
	5.3.2, bullet 7		drained?	bullet: "Water generated from sampling and decontamination activities will be containerized and analyzed for later handling and disposal as IDW."
66	Page 149, section 5.4.1 bullet 5	N/A	Spacing between bullets is not consistent.	Concur. Spacing was corrected.
67	Page 150 to 158. Table 5-1 Proposed Inaccessible Soil Sampling Locations	N/A	Sample depths should be revised based on findings from nearby remedies. See Comment #8 regarding section 3.4.1.1 for more information.	Please see response to comment 8. Additionally, the text on page 149 was modified to state that "The proposed sampling locations, number of samples, rationale for sampling, and sampling depth are identified in Table 5-1 by plant area or property. The sampling locations and depths were determined through the evaluation of the historic use of the area, the proximity to MED/AEC processing activities, and the existing characterization and verification data as presented in Section 4. The soil sampling locations and depths were defined based upon the likelihood of radiological contamination."
68	Table 5.2, Proposed Building Survey Locations	N/A	Please provide a caveat stating that the actual scoping survey location along with related work plans have yet to be prepared and submitted to regulators, landowners, and tenants for review. We do have numerous questions regarding the proposed survey locations that would best be answered on a building-by-building basis. For example various buildings that existed during MED/AEC operations have exterior rooftop and exterior surveys proposed. Some of these should likely have their interiors surveyed because of potential dust entering the buildings through the ventilation systems. On the other hand, some of the buildings that were adjacent to soil remediation areas are listed as needing exterior and interior surveys conducted. But, rooftops are omitted. We would like to more information regarding the rationalization for this.	Clarification. Please see the response to Comment 13. Regarding the rational for roof surveys, if the structure was constructed prior to or during MED/AEC processing operations and is located on, or adjacent to, MED/AEC processing areas the roof is considered potentially impacted and therefore, will be subject to a scoping survey. Subsequently, an appropriate MARSSIM based survey will be conducted in accordance with the Structures FSSP.
69	Page 173, section 6.0, third	N/A	Remove "evaluate"	Concur. Text was revised.

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	paragraph, sentence 4			
70	Figure 2-1, Inaccessible Areas at the St. Louis Downtown Site	N/A	Either the title is a misnomer or there are some details missing from the drawing. No demarcation is given of areas deemed likely to be inaccessible other than shading given to the buildings. Of these, all the buildings are shaded no matter whether they are within SLDS or not.	Concur. Figure title was revised.
71	Figure 2-1, Inaccessible Areas at the St. Louis Downtown Site	N/A	The blue dashed line used to depict ore processing areas, omits plants 1, 10, and 7E. These need to be added according to section 2 of the Record of Decision.	Clarification. There is only one source for the definition of the uranium-ore processing areas included in the 1998 ROD which is Figure 5-7. The boundary marked on this Figure does not include Plant 1, 10, or 7E.
72	Page A-7, section A-3.0, second and third paragraphs	Therefore, arsenic and cadmium are considered soil PCOCs for the ISOU when investigating inaccessible areas at Plants 2, 6, and 7 and at DT-10. Because drain/sewer lines may contain residual materials not previously characterized for metals, these specific metals will be included as PCOCs in the ISOU RI for drains and sewer lines at Plants 2, 6, and 7, and VP DT-10, and the sewer lines downstream of these areas.	Per section 2.0 of the ROD, include Plant 1 and Plant 4(10). DT-8 (PSC Metals) needs to be included as well due to non-radiological PCOCs being present at this property as reported by the USACE on numerous occasions during conference calls.	See response to Comment 36 and 71.
73	Figure D-1 and F-1	N/A	The inaccessible area shaded in red south of building X is different than what is in the Plant 1 PRAR. Please reconcile or explain this discrepancy.	Concur. Figure was revised.
74	Figure D-1 and F- 1	N/A	Remediation took place around tank 116 located south of building X. Tank 116 is not shown in the figures. Please explain the reason why tank 116 is not included in the Plant 1 narrative, figures and why a scoping survey is not necessary for the exterior of the tank.	Concur. Figure D-1 and F-1 were revised to include the tank and will indicate that the tank is proposed for surveying.
75	Figure D-6 and F-	N/A	Sample DE1380N1130 is written twice on the	Concur. Figure was revised.

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	6		figure. Additionally, the thick black line indicating the security gate area does not surround the entire property.	
76	Figure D-13	N/A	Suggest adding the name of the property after DT-15 to keep consistent with other figures.	Concur. Text was revised.
77	Figure D-22	N/A	Suggest labeling the figure with "DT-12 (Burlington Northern RR)" to keep consistent with the other figures	Concur. Figure was revised.
78	Figure D-23	N/A	Suggest labeling the figure with "DT-12 (Burlington Northern RR)" to keep consistent with the other figures	Concur. Figure was revised.
79	Figure D-25 and F-25	N/A	Please show the inaccessible areas on DT-4N, DT-4S and DT-7. All the remediated areas at Plant 6 are not depicted on these figures. These two figures show extensive remediation of Plant 7W. If extensive remediation has occurred at Plant 7W, then why is it excluded from this document? Please refer to comment number 3.	Clarification. The hatching for inaccessible areas on the figure is incorrect and was revised. The hatching is included only for the roadways in this figure. There are no inaccessible areas remaining at DT-7 and the inaccessible areas remaining at DT-4N and 4S are only those associated with the buildings and therefore are not identified on this figure. In regard to Plant 7W, the area should not be shaded as remediated but rather as out of scope.
80	Figure D-25 and F-25	N/A	Please show the remediated areas on DT-4N, DT-4S, DT-7 and Buchanan Street.	Concur. Figures were revised.
81	Figure E-3, E-8 and G-2	N/A	The figure states that the section of the 12-inch sewer located south of building 509 is in "fair condition several leaking pipe joints." Is the sewer in fair condition or does it have leaking pipe joints?	The text concerning pipe condition is based on a 1985 Mallinckrodt Drawing (No. 6326-201-5). The drawing states "Line in fair condition. Can be sealed. Several leaking pipe joints." No additional information is available.
82	Figure E-5 and E-10, legend	N/A	The sample IDs in comment 1 from the figure should be SDT1899 and SDT2100. Additionally, indicate on figure the location of these samples.	Concur. The figures have been revised to indicate the locations are SDT1899 and SDT2100. There are no location coordinates available for these screening level samples. Their approximate locations have been added to these figures.
83	Figure E-5, E-10 and G-4	N/A	Identify the Hazardous Materials Storage Building located on Plant 7N. The FUSRAP water treatment plant is no longer located on Plant 7N but was relocated to Plant 7S. Suggest identifying the water treatment plant as "FUSRAP Water Treatment Plant."	Concur. The figures have been revised as suggested.
84	Figure E-6	N/A	Please label Destrehan Street on figure since it's	Concur. The figure has been revised as suggested.

Comment Number	Page, Paragraph, Sentence	Quote	Comment	Response
			mentioned in the text.	
85	Figure E-6, E-11 and G-5	N/A	Correct "PCS" with "PSC"	Concur. The figures have been revised as suggested.
86	Figure E-9	N/A	The unlikely impacted sewer located on the far eastern portion of the property should have dashed lines on the yellow line.	Concur. The figure has been revised to show the dashed line for the sewer located at the far western portion of the property.
87	Figure F-5	N/A	Change "Lots" to "Lot"	Concur. Figure title was revised.
88	Figure F-11	N/A	Building D needs to indicate a scoping survey since it is located next to a remediated area.	Concur. See response to Comment 39.
89	Figure F-12	N/A	The storage structure and saw/metal storage buildings should be in blue indicating that they will receive scoping surveys.	Concur. The Figure F-12 was revised.
90	Figure F-22	DT-9 Terminal RR Association	Change to "DT-12 Burlington Northern RR"	Concur. Figure was revised.
91	Figure F-23	DT-9 Terminal RR Association	Change to "DT-12 Burlington Northern RR"	Concur. Figure was revised.
92	Figure G-4	N/A	Building 700 is written as 701	Concur. Figure G-4 has been revised as suggested
93	Figure G-6	N/A	The note pertaining to Plant 6 and 7 exterior yards included in this figure does not appear to be necessary.	Concur. The note has been deleted.
94	B-16 Tables B-2 and B-3	On page B-16, the document states, "For the SLDS, Ra-228 and Pb-210 were not determined to be significant dose contributors as shown in Table B-6; therefore, all beta-emitting PCOCs are accounted for in the gross alpha DCGL." 2.) Tables B-2 and B-3 list Ra-228 as NA for dose	The question from DHSS stems from feedback received from Argonne National Laboratory that an error exists in the RESRAD-Build output for Ra-228. They recommend summing the pathway-specific doses for Ra-228 in the Pathway Detail of Doses section of the Dose and Risk outputs. Please can you tell us how this impacts your judgment that Ra-228 would not be a significant dose? Is it possible that it could be after this correction is made?	Concur. A second evaluation using Argonne National Laboratory's recommendation determined that Ra-228 is still not a significant dose contributor. Tables will be updated to note the specific contribution made by Ra-228.

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