

EPA Comments on the
25 Sites Proposed Plan, February 2010
Picatinny Arsenal, New Jersey
July 1, 2010

General Comments

1. The site figures located in the proposed plan are confusing in the following regards:

- Building numbers are lacking;
- Road and water body names are lacking;
- No identification is made as to whether buildings exist or not;
- Site locations being addressed are not identified; and
- All site boundaries whether they are the site in question are indiscriminately left in the site figures.

Basically all site figures should look like Figure 24, Site 166, which has an appropriate site boundary and number, road name, and building numbers. Specific comments will be made on each figure.

2. Site 113 is proposed for no further action but no information is provided in the proposed plan to justify this. It is requested that information be included in the proposed plan to document the NFA decision.

3. The site descriptions located in the Site Background section should contain any information regarding removal actions done in the past. Much of this information can be found in the PICA 001 Feasibility Study or the Report on the Investigation of Sumps and Dry Wells with Previously Identified COCs at Various Sites (June 2006). This information will support the Army's preferred alternative to only implement LUCs at these sites.

4. Site 162, Building 1071, is the presumed source of the RDX plume in the Mid-Valley area where a sump was removed that had high levels of RDX below it. In addition, Site 162 and its associated RDX sampling grid is located above the higher levels of RDX in groundwater. Therefore, EPA requests that elevated levels of RDX be removed from the sampling grid at Site 162.

5. Monitoring well 50MW-3 at Site 50 was last sampled in 1996 and had a TCE concentration of 9 ppb and radium concentration of 14.2 pCi/L. It is requested that this well be sampled for the referenced analytes in the groundwater monitoring program currently proposed for Sites 32, 50, 147, and 150 for lead.

6. The proposed plan must be modified to reflect EPA's letter from Walter Mugdan to Irene Kropp, NJDEP Assistant Commissioner, dated May 12, 2010 on the New Jersey Soil Remediation Standards (NJSRSs). Per the referenced correspondence, EPA does not recognize the soil cleanup standards based on the inhalation criterion. However, as

pointed out in a June 17, 2010 e-mail from Bill Roach to Ted Gabel the inhalation pathway must still be considered when developing soil cleanup standards.

Specific Comments

1. Introduction and Purpose, eighth paragraph, page 2 –
 - a. The first bullet should include also soil removal of for high RDX concentrations at Site 162. See General Comment 4.
 - b. A bullet should be added to include long-term groundwater monitoring of lead for four sites (32, 50, 147, and 150).
2. Site Backgrounds, Area D Site, Site 189, page 3 – Add the following statement: “The site layout is shown on Figure 3.” This statement referring the relative figure should be added to all sites described in this section.
3. Site Backgrounds, Area D Site, Site 146, page 3 – It is requested that a description of Site 146 which is being proposed for no further action be included in the section. Please refer to General Comment 2.
4. Site Backgrounds, Area I Sites, Site 16, page 3 – It is requested that the removal action on the Guncotton Line (GCL) that took place in 2000 that removed approximately 270 ft of the GCL and surrounding impacted soils to a maximum depth of 8 ft below ground surface be referenced in the Site 16 description.
5. Site Backgrounds, Area I Sites, Site 46, page 4 – The last two sentences of this section state: “A PCB-contaminated transformer was removed from Building 507 in 1989. No information exists to indicate whether any environmental studies related to the transformer were conducted.” Further information should be provided as to whether the location of the former transformer was known to allow for sampling during the remedial investigation.
6. Site Backgrounds, Area I Sites, Site 63/65, page 4 – Combine the last two sentences as follows: “Materials used at Building 506 included : fuel oil, coal, hydraulic oil, lubricating oils, compressed gases, and degreasers, as well as sodium hydroxide (NaOH), batteries, caustics, sodium sulfides, various solvents, paints, enamel thinners, and possibly pesticides.”
7. Site Backgrounds, Area I Sites, Site 105, page 4 – Drawing number 11 shows two areas located near Site 105 that have excavation samples. If there was a removal action associated with Site 105, then it should be documented in the site background.
8. Site Backgrounds, Area I Sites, Site 108, page 4 – 5 –
 - a. The removal of four sumps, one catch basin and 12 CY of soil in 2003 should be described in this section.

- b. The Summary of Site Risks mentions that there was “removal of mercury by an earlier action.” If this action was separate from the sump and catch basin removal, it should also be documented in this section.
9. Site Backgrounds, Area I Sites, Site 150, page 5 – The 2002 removal of a wooden filter box, soil, and debris that were removed from Site 150 should be documented in this section.
10. Site Backgrounds, Area L Sites, Site 17, page 6 – It is requested that the removal action of tetryl-contaminated soil that took place in 2002 be referenced in the Site 17 description.
11. Site Backgrounds, Area L Sites, Site 18, page 6 – It is requested the investigation of the wooden catch basin that took place in 2003 be referenced in this section.
12. Site Backgrounds, Area L Sites, Site 35, page 6 – 7 – It is requested that the removal action of 8.5 cubic feet of lead-contaminated soil and lead trough that took place in 1995 be referenced in the Site 35 description.
13. Site Backgrounds, Area L Sites, Site 91, page 7 – It is requested that the investigation of sumps and dry wells that occurred at Site 91 in 2002 that resulted in removal of 14 sumps and catch basins, 4 drainage troughs and approximately 62 cubic yards of soil and sediment be documented in this section.
14. Site Backgrounds, Area L Sites, Site 161, page 7 – It is requested that that the investigation of sumps and dry wells that occurred at Site 161 in April 2004 that resulted in the removal of two sumps and 4 CY of soil be documented in this section. It is also requested that the soil removal action for lead that occurred in November 2004 be documented in this section.
15. Site Backgrounds, Area L Sites, Site 162, page 7 – It is requested that more information be provided regarding the removal of the concrete catch basin in 2004. Specifically, high levels of RDX were found below the catch basin and soil was removed to bedrock. It is also assumed that this catch basin was the primary source of RDX in Mid-Valley groundwater.
16. Site Backgrounds, Area L Sites, Site 166, page 7 – It is requested that the removal of catch boxes and excavation of 0.33 cubic yards of soil that occurred in 2004 at Site 166 be documented in this section.
17. Site Backgrounds, Area L Sites, Site 168, page 7 – 8 –
- a. It is requested that the following information regarding removal actions that took place at Site 168 between 2003 and 2004 be added to this section:
 - At Building 1400, approximately 12 cubic yards of soil were removed from the locations of two catch basins and a pipe which connected them.

- Near Building 1403, approximately 8 cubic yards of soil were removed from a catch basin and sewer outfall.
 - b. Near the end of the paragraph on page 8, reference is made to “LOVA”. If this acronym has not been previously referenced with its associated term, it is requested that the term be spelled out here.
 - c. Near the end of the paragraph on page 8, the manufacturing process in Building 1403 is described in the current tense but the last sentence of the paragraph states that the building is currently inactive. Therefore, the current tense describing the manufacturing process at Building 1403 should be changed to the past tense.
18. Site Backgrounds, Area L Sites, Site 169, page 8 – It is requested that the results of the sump and dry well investigation that took place at Site 169 be documented in this section. Specifically, 2 sumps and 3 CY of soil were removed.
19. Site Backgrounds, Area L Sites, Site 171, page 8 – 9 – It is requested that the results from the removal action conducted at Site 171 in 2004 in which 180 cubic yards of lead-contaminated soil were removed from the site be included in this section.
20. Principal Threat Wastes, page 11 – The text at the top of the right column needs to be shifted below the text located immediately above Summary of Site Risks.
21. Summary of Site Risks, Area I Sites, Site 16, page 11 – The risk assessment for Site 16 indicated that metals and explosives exceeded levels of concern in sediment. Metals and explosives were also detected in tissue based on earthworm bioassays. Further, direct contact hazard quotients and food-web based hazard quotients indicated a potential for ecological risk. Therefore, further consideration of this site may be appropriate.
22. Summary of Site Risks, Area I Sites, Site 33, page 12 – Amend the third bullet to read: “Lead is not a concern at this site, and”.
23. Summary of Site Risks, Area I Sites, Site 46, page 12 – Amend the third bullet to read: “Lead is not a concern at this site, and”.
24. Summary of Site Risks, Area I Sites, Site 108, page 12 – It is noted that there are elevated risks associated with the surface soil (mercury 610 ppm, lead 4,480 ppm) at Site 108. It is also indicated that since the site has low habitat value, the ecological risk is not significant. However, the site is located on the shore of the Picatinny Lake and may represent a continuing source of contaminants. Sediment sampling in the lake adjacent to the site has indicated elevated lead, mercury, and PAHs. Therefore, further consideration is recommended.
25. Summary of Site Risks, Area K Sites, Site 199, page 12 – Revise the third bullet to state: Lead is not a concern at this site, however, a removal of elevated lead levels will be conducted; and”

26. Summary of Site Risks, Area L Sites, Site 35, page 13 – Revise the third bullet to state: Lead is not a this site, however, a removal of elevated lead levels will be conducted; and”
27. Summary of Site Risks, Area L Sites, Site 161, page 13 – Revise the third bullet to state: “Lead is not a concern following removal actions conducted at this site; and”.
28. Summary of Site Risks, Area L Sites, Site 168, pages 13 – 14 - The summary of the ecological risk for Site 168 indicates that ecological risks are minimal. However, the site contains several PAHs which exceed levels of concern in sediment and soil. It is noted in the Feasibility Study (August 2009) that there is wooded habitat on the site and ecological receptors may be exposed to these contaminants. Additionally, the food web exposure modeling indicated that adverse effects on reproduction in small mammals and birds may occur. Therefore, it may be appropriate to further evaluate this area.
29. Identification of Contaminants of Concern and Site Cleanup Levels, Area K Sites, Site 199, page 15 – A statement should be added that although lead was not identified as a COC, elevated lead levels at Site 199 will be addressed by a limited removal action.
30. Identification of Contaminants of Concern and Site Cleanup Levels, Area L Sites, Site 35, page 15 – A statement should be added that although lead was not identified as a COC, elevated lead levels at Site 35 will be addressed by a limited removal action.
31. Identification of Contaminants of Concern and Site Cleanup Levels, Area I Sites, Site 97, page 15 – It is requested that a period be place at the end of the sentence.
32. Identification of Contaminants of Concern and Site Cleanup Levels, Area I Sites, page 15 – In the last sentence of the paragraph delete “in this FS”.
33. Scope and Role of the Remedial Action, page 16 – Delete “for” from the last sentence of the paragraph.
34. Summary of Response Actions Evaluated, second paragraph, page 16 – Add “Land Use Controls” to the end of the last sentence, i.e., “The ‘Preferred Response Action’ for all sites (except Site 113, which is proposed for No Further Action) is Alternative SL-2SD-2, Land Use Controls.”
35. Summary of Response Actions Evaluated, Response Action SL-2/SD-2: Land Use Controls, first paragraph, page 17 – Revise the fourth sentence to state: “Alternative SL-2/SD-2 will prevent unacceptable exposure to contaminants in surface soil, subsurface soil, sediment, surface water, and groundwater.”
36. Summary of Response Actions Evaluated, Response Action SL-2/SD-2: Land Use Controls, fourth paragraph, page 17 – It is requested that Site 162 be included in the list for focused removals. Please refer to General Comment 4.

37. Summary of Response Actions Evaluated, Response Action SL-3/SD-3: Soil Cover with Land Use Controls, first paragraph, page 17 – Revise the fifth sentence to state: “A soil cover will remove....”.
38. Summary of Response Actions Evaluated, Response Action SL-3/SD-3: Soil Cover with Land Use Controls, Area I Sites, Site 33, page 18 – The first section refers to “Section 3.6.4” which does not exist in this proposed plan. Revise as necessary.
39. Summary of Response Actions Evaluated, Response Action SL-3/SD-3: Soil Cover with Land Use Controls, Area I Sites, Site 46, page 18 – In the last half of the last sentence describing the areas to be covered, revise the area to cover 46-SS-2A and 46-SS-4 from “1 15 x 30 ft area” to “a 15 x 30 ft area”.
40. Summary of Response Actions Evaluated, Response Action SL-3/SD-3: Soil Cover with Land Use Controls, Area L Sites, Site 17, page 19 –
- a. In the first sentence revise “USEPA” to “USEPA’s”.
 - b. In the second sentence delete the first “the” as in “Within the this range....”.
41. Summary of Response Actions Evaluated, Response Action SL-3/SD-3: Soil Cover with Land Use Controls, Area L Sites, Site 35, page 20 – In the last sentence of the section insert “and” between “35-SB-5” and “35-SS-7”.
42. Comparative Analysis of Response Actions, Compliance with ARARs, page 22 – The first sentence states: “The promulgated NJ Site Remediation Standards were used at these sites to establish screening levels and provide the basis for the risk based approach to remediating these sites consistent with the CERCLA process.” Please refer to General Comment 6.
43. Comparative Analysis of Response Actions, Reduction in Toxicity, Mobility, or Volume through Treatment, page 23 –
- a. In the last sentence, change “site” to “sites”.
 - b. There are two periods located at the end of the last sentence.
44. Comparative Analysis of Response Actions, Implementability, page 23 – 24 – It is requested that the last sentence be revised to state: “Alternatives SL-3/SD-3 and SL-4/SD-4 will require site clearing and UXO clearance for implementation.”
44. Summary of the Preferred Alternative, first paragraph, page 24 –
- a. It is requested that Site 162 be included in the list for focused removals. Please refer to General Comment 4.
 - b. The description of the Preferred Alternative should include long-term groundwater monitoring of lead for four sites (32, 50, 147, and 150).
45. Summary of the Preferred Alternative, fifth paragraph, page 24 – It is requested that Site 162 be included in the list for focused removals. Please refer to General Comment 4.

46. Acronyms and Abbreviations, page 26 – Include the following acronyms/abbreviations

- a. CO₂
- b. HAZMIN
- c. INGAS
- d. OSWER
- e. CFR
- f. N₂
- g. PA/SI
- h. PICA
- i. frTNT
- j. TR
- k. USAEHA
- l. U.S.C.

47. Figure 3, Site 189 – Identify building numbers and label site number 189 on the figure. Please refer to General Comment number 1.

48. Figure 4, Site 16 –

- a. Remove all site location boundaries except for Site 16 in the figure and the detail. In addition, label Site 16 in the figure.
- b. Identify the following roadways: Whitmore Ave., 13th Ave., Buffington Rd., and Babbitt Rd.
- c. Label Picatinny Lake on the figure.
- d. Identify all major building numbers in the vicinity of Site 16 in the figure and detail.
- e. Move data box for sample I-16-SD-008 in order to reveal the extent of Site 16.

49. Figure 5, Site 32 –

- a. Identify Buildings 553 and 544.
- b. Identify Site 32 and remove other site boundaries in the figure.
- c. Identify 21st Ave. and Bott Rd.

50. Figure 6, Site 33 –

- a. Identify Buildings 527 and 527A and indicate that they are former buildings.
- b. Delete site boundary lines other than Site 33. In addition, identify Site 33
- c. Identify Babbitt Rd. and Picatinny Lake.

51. Figure 7, Site 46 –

- a. Identify Buildings 506, 507, 507A and 507B.
- b. Delete site boundary lines other than Site 46. In addition, identify Site 46.
- c. Identify Babbitt Rd.

52. Figure 8, Site 50 –

- a. Identify Buildings 519, 519A, 521, 523, 540 and 554. Also indicate that they are former buildings.

- b. Delete site boundary lines except for Site 50. In addition, identify Site 50.
 - c. Identify 21st Ave. and the road located to the north of former Building 521.
53. Figure 9, Site 63/65 –
- a. Identify Building 506 and other buildings in the surrounding area.
 - b. Delete site boundary lines except for Site 63/65. In addition, identify Site 63/65.
 - c. Identify Whitmore Ave., Babbitt Rd., Water Rd., and Picatinny Lake.
54. Figure 10, Site 97 –
- a. Identify Building 506 and 501.
 - b. Delete site boundary lines except for Site 97. In addition, identify Site 97.
 - c. Identify Picatinny Lake.
55. Figure 11, Site 105 –
- a. Show location of former Building 501. In addition, identify Buildings 501, 510 and 511 and indicate that they are former buildings.
 - b. Delete site boundary lines except for Site 105. In addition, identify Site 105.
 - c. Identify Lake Picatinny and Bott Rd.
56. Figure 12, Site 108 –
- a. Identify buildings within Site 108.
 - b. Delete site boundary lines except for Site 108. In addition, identify Site 108.
 - c. Identify Lake Picatinny and Fidlar Rd.
57. Figure 13, Site 147 –
- a. Identify Building 520 and 520B and indicate that they are former buildings.
 - b. Delete site boundary lines except for Site 147. In addition, identify Site 147.
 - c. Identify Water Rd. (road located west of former Building 520).
58. Figure 14, Site 148 –
- a. Identify Buildings 519, 521, 523, 527 and 527A and indicate that they are former buildings. Also identify existing buildings 525 and 534 on the figure.
 - b. Delete site boundary lines except for Site 148. In addition, identify Site 148.
 - c. Identify Babbitt Rd. and the road located to the north of former Building 521. Also, identify Picatinny Lake.
59. Figure 15, Site 150 –
- a. Identify Buildings 555, 540 and 551. Indicate that Buildings 540 and 555 are former buildings and designate the same for Building 551 if it no longer exists.
 - b. Identify the location of the former sawdust filter box that has been removed from Site 150.
 - c. Identify Site 50 on the figure.
 - d. Identify 21st Ave. and Bott Rd.
60. Figure 16, Site 184 –

- a. Identify Buildings 519, 521 and 523 and indicate that they are former buildings.
 - b. Delete site boundary lines except for Site 184. In addition, identify Site 184.
 - c. Identify Babbitt Rd and the road located to the north of former Building 521.
61. Figure 17, Site 199 –
- a. Locate Building 3054 in the figure.
 - b. Identify Bott Rd. and Site 199.
62. Figure 18, Site 17 –
- a. Identify Buildings 1095, 1053, 1093, and 1094 in the figure.
 - b. Delete site boundary lines except for Site 17. In addition, identify Site 17.
 - c. Identify the following roads in the figure: Bott Rd., 17th and 18th Ave., and 12th and 13th St.
 - d. Delete any soil sample data that is not related to Site 17.
 - e. Identify the areas in the detail as limits of tetryl-contaminated soil removed and treated.
63. Figure 19, Site 18 –
- a. Identify Building 1068 and indicate it is a former building. Also identify Building 1054 and the buildings near the intersection of 19th Ave. and 13th St. Identify these buildings as “former” as applicable.
 - b. Delete site boundary lines except for Site 18. In addition, identify Site 18.
 - c. Identify 19th Ave., 13th St., and Bott Rd.
64. Figure 20, Site 35 –
- a. Identify the following buildings: 1350, 1357, 1359, 1361, 1361A, 1363A, 1363, 1362, 1377, and 1365. Also indicate if any of the buildings no longer exist.
 - b. Delete site boundary lines except for Site 35. In addition, identify Site 35.
 - c. Identify Upper H,X,E Road.
65. Figure 21, Site 91 –
- a. Identify the following buildings: 1301, 1302, 1303, 1305, 1306, 1307, 1308, 1410, 1411, 1408, 1408B and 1408C. Also indicate if any of these buildings no longer exist.
 - b. Delete site boundary lines except for Site 91. In addition, identify Site 91.
 - c. Identify Double Base Rd. and Rocket Production Rd.
66. Figure 22, Site 161 –
- a. Identify the following buildings in the figure and detail: 1031, 1029, 1030 and 1033.
 - b. Delete site boundary lines except for Site 161 in the figure and detail. In addition, identify Site 161 in the figure and detail.
 - c. Identify 19th Ave., 12th St., Upper X, H, E Rd., and NG Rd.
 - d. Identify Robinson Run.

67. Figure 23, Site 162 –
- Locate the catch basin/sump removed in 2004 in the figure where high levels of RDX were found below it.
 - Identify the following buildings in the figure: 1071, 1071B, 1071C, 1071E and 1033. Also indicate that Building 1033 no longer exists as well as any other of the buildings referenced above.
 - Delete site boundary lines except for Site 162. In addition, identify Site 162.
 - Identify 18th and 19th Ave., and 12th and 13th St.
 - Identify Robinson Run.
 - Delete soil data not related to Site 162.
68. Figure 25, Site 168 –
- Identify the following buildings in the figure: 1400, 1402, 1402A, 1409, and 1403.
 - Delete site boundary lines except for Site 168. In addition, identify Site 168. Also identify or delete the circle located between Buildings 1409 and 1403.
 - Identify Farley Ave., N. Cast Propellant Rd. and Rocket Production Rd.
69. Figure 26, Site 169 –
- Identify the following buildings in the figure: 1408, 1408A, 1408B, 1408C, 1403, 1406 and 1411. Also indicate if any of these buildings no longer exist.
 - Delete site boundary lines except for Site 169. In addition, identify Site 169.
 - Identify Rocket Production Rd. and Double Base Rd.
70. Figure 27, Site 171 –
- Identify the removal area of the lead-contaminated soil removal that occurred in 2004.
 - Identify the following buildings in the figure: 3106, 3109, 3111, 3144 and 3145.
 - Delete site boundary lines except for Site 171. In addition, identify Site 171.
 - Identify the following roads: N.G. Road, Belt Rd., 13th St., and East Tower Rd.
 - Identify the former railroad track bed shown on the figure.