

**HRSD Rehabilitation Plan / Final Condition Assessment Report Update 2014**  
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1	Rehab Plan	Section 1	2/12/2014	Removed the word "generally" because Plan is consistent with SSES Plan.	Response to EPA/DEQ Comment	2
2	Rehab Plan	Section 1.1.1	2/12/2014	Added Section 1.1.1 and 3.9 to address SOC-specific concerns	Response to EPA/DEQ Comment	1
3	Rehab Plan	Section 2, 2.1.1.2, 3.2	2/12/2014	The language presented in Sections 2, 2.1.1.2, 3.2 and 3.7 of the Plan have been updated to show HRSD's commitment to the plan.	Response to EPA/DEQ Comment	9
4	Rehab Plan	Section 3, Tables 3-1 and 3-2	2/12/2014	Updated costs to 2013 Dollars in accordance with HRSD Engineering practices	Updates required for FCAR 2014.	N/A
5	Rehab Plan	Section 3.1, Table 3-1, Table 3-2, Figure 3-2	2/12/2014	Additional project, GN-R13 added to Rehab Plan to address specific SCAT regulation concerns noted in Appendix B.	Response to EPA/DEQ Comment	24
6	Rehab Plan	Section 3.6	2/12/2014	Added language stating that HRSD will notify and seek approval from EPA/DEQ for schedule changes in the last sentence in Section 3.6 of the Plan.	Response to EPA/DEQ Comment	11
7	Rehab Plan	Section 3.6.1	2/12/2014	Added section 3.6.1 to list projects that were also identified for upgrade in the Comparative Analysis in response to EPA/DEQ comment	Response to EPA/DEQ Comment	3
8	Rehab Plan	Section 3.9	2/12/2014	Added language attesting to the suitability of scheduled repairs to Section 3.9	Response to EPA/DEQ Comment	10
9	Rehab Plan	Section 3.9, Table 3-9	2/12/2014	Added Section 3.9 and Table 3-9 to explain how projects were sorted into Phases 0, 1 and 2.	Response to EPA/DEQ Comment	8
10	Rehab Plan	Table 3-2, Section 4 - AT-R4 Map	2/12/2014	Updated Table 3-2 to include detailed footage on Rehab Project AT-R4, Updated Map for AT-R4 in Section 4	Response to EPA/DEQ Comment	16
11	Rehab Plan	Table 3-2	2/12/2014	Combined projects GN-R1 and GN-R2 into one project, GN-R1.	Updated for clarity as these two projects are being completed together. Addressing activities in App C - GM FCAR were updated to GN-R1 from GN-R2.	N/A
12	Rehab Plan	Table 3-2	2/12/2014	Updated "Asset Class" for projects GN-R7 and GN-R8 to provide additional clarity on project.	Updated for clarity.	N/A

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13	Rehab Plan	Table 3-2	2/12/2014	Valve guide number for NP-R4 was changed to NA1011 from NA1101	Typo in original plan.	N/A
14	Rehab Plan	Table 3-4	2/12/2014	Added three manholes from NG-109 which will be addressed in project GN-R1	Expansion of project scope.	N/A
15	Rehab Plan	Table 3-7	2/12/2014	Updated table based on results of 2013 CP inspections where applicable.	New, more specific condition data available from contractor.	N/A
16	App A Summary	Introduction	2/12/2014	Wording updates to define date range of report to include Update.	Updates required for FCAR 2014.	N/A
17	App A Summary	Page A-5	2/12/2014	Updated names from Appendix B and C.	Correct typos	N/A
18	App B PS FCAR	Section 2.3	2/12/2014	Wording update to include new date range for SSOs for FCAR update.	Updates required for FCAR 2014.	N/A
19	App B PS FCAR	Section 2.4	2/12/2014	Section 2.4, Pump Failure Alarms. Word "select" was removed. Pump fail alarms were tested at all stations.	Response to EPA/DEQ Comment	17
20	App B PS FCAR	Section 2.5	2/12/2014	Expanded and updated the SCAT Regulations comparison. Updates to the analysis can be found in Section 2.5 and Appendix B. Update details are listed in this change log by Section 2.5.1, 2.5.2, etc.	Response to EPA/DEQ Comment	19
21	App B PS FCAR	Section 2.5.1, Table B-8A	2/12/2014	Section 2.5.1 and Table B-8A were updated with details on the analysis including 25-yr and 100-yr flood plains.	Response to EPA/DEQ Comment	21
22	App B PS FCAR	Section 2.5.1, Table B-8A	2/12/2014	This analysis compared the peak observed flow during the FPR period with the design firm capacity calculated as part of the Preliminary Capacity Assessment Report. Table B-8A was updated with Y or N depending on whether or not the capacity exceeded the peak flow. The analysis has several noted caveats.	Response to EPA/DEQ Comment	20

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23	App B PS FCAR	Section 2.5.2, Table B-8A	2/12/2014	Text was added in Section 2.5.2 explaining available information and steps taken to investigate dual feed power. Added Figure B-1.	Response to EPA/DEQ Comment	24
24	App B PS FCAR	Section 2.5.2, Table B-8A	2/12/2014	Text was added in Section 2.5.2 explaining available information and steps taken to investigate dual feed power. Added Figure B-1.	Response to EPA/DEQ Comment	25
25	App B PS FCAR	Section 2.5.2, Table B-8A	2/12/2014	Added explanation of further activities conducted related to generators in Section 2.5.2 and Table B-8A. Also noted projects that included generators.	Response to EPA/DEQ Comment	26
26	App B PS FCAR	Section 2.5.3, Table B-8A	2/12/2014	The 10% generator allowance was removed and Table B-8A was updated. Additionally, text was added for explanation in Section 2.5.3.	Response to EPA/DEQ Comment	28
27	App B PS FCAR	Section 2.5.3, Table B-8B	2/12/2014	Several columns related to NEC/VOSH were added to Table B-8B in accordance with text in Section 2.5.3.	Response to EPA/DEQ Comment	27
28	App B PS FCAR	Section 2.5.4, Table B-8B, Table B-11, Table B-12	2/12/2014	Updated Appendix B with analysis related to portable equipment and response times in Section 2.5.4, Table B-8B, Table B-11 and Table B-12.	Response to EPA/DEQ Comment	29
29	App B PS FCAR	Section 2.5.4, Table B-8B, Table B-11, Table B-12	2/12/2014	Updated Appendix B with analysis in Section 2.5.4 and Table B-8B. The method to provide continuous operability is listed in Table B-8A for every station. An example calculation was added as Figure B-2.	Response to EPA/DEQ Comment	30
30	App B PS FCAR	Section 2.5.5, Table B-8C	2/12/2014	Text in Section 2.5.5 explaining the adequacy of HRSD's system compared to the requirement of having an audio-visual alarm and the requirement to have test circuits. Updated Table B-8C	Response to EPA/DEQ Comment	31
31	App B PS FCAR	Section 2.5.6, Table B-8C	2/12/2014	Added new section to Table B-8C "9VAC25-790-430. Alternatives". Updated language in Section 2.5.6.	Response to EPA/DEQ Comment	32

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32	App B PS FCAR	Section 2.6, Table B-9	2/12/2014	Updated language in Section 2.6 to reference correct version of Table B-9. Table B-9 replaced with most up-to-date version that was submitted as part of the Preliminary Capacity Assessment Report.	Response to EPA/DEQ Comment	33
33	App B PS FCAR	Tables B-8A, B-8B, B-8C, Section 6	2/12/2014	Updated Facility install dates for Ashland Cir, Dovercourt Rd, and Ingleside Rd	Correct typos	N/A
34	App B PS FCAR	Section 6, Page B-223	2/12/2014	Corrected typo in Norchester Pump Station Inspection results to match Table B-3.	Response to EPA/DEQ Comment	39
35	App B PS FCAR	Table B-6	2/12/2014	Updated SSO Summary for Pump Stations.	Updates required for FCAR 2014.	N/A
36	App B PS FCAR	Table B-10	2/12/2014	Corrected typo in Table B-10 to reflect accurate project number for project at Dozier's corner PS.	Response to EPA/DEQ Comment	37
37	App C GM FCAR	Section 2.5	2/12/2014	Updated wording of Section 2.5 by removing the last sentence of the third paragraph for consistency with Rehab Plan.	Response to EPA/DEQ Comment	9
38	App C GM FCAR	Section 2.6	2/12/2014	Wording update to include new date range for SSOs for FCAR update.	Updates required for FCAR 2014.	N/A
39	App C GM FCAR	Section 3, Table C-9	2/12/2014	Updated Table C-9 rows: MH-NG-124-2489 /MH- 125-2475 (J-box) has uncoded IR defect. Rehab required. MH-NG-125-1163. Pipeline work will not occur here, removed addressing activity MH-NG-125-1594 has uncoded IR defect. Rehab required. MH-NG-125-1992 has uncoded IR defect. Rehab required.	Updated based on new information and moving manholes to be addressed from Rehab Plan to Interim System Improvements (BH-112)	N/A
40	App C GM FCAR	Table C-3	2/12/2014	Updated SSO Summary for Gravity System	Updates required for FCAR 2014.	N/A
41	App C GM FCAR	Table C-8	2/12/2014	Updated name of MH-NG-109-185x to MH-109-242 on page C-55.	Update reflects updated HRSD GIS.	N/A
42	App C GM FCAR	Table C-9	2/12/2014	Updated name of MH-NG-109-256 to MH-109-242 on page C-73.	Update reflects updated HRSD GIS.	N/A
43	App C GM FCAR	Table C-9	2/12/2014	Added addressing activity of GN-R1 to manholes MH-NG-109-135, MH-NG-109-185, MH-NG-109-242.	Expansion of project scope.	N/A

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44	App C GM FCAR	Table C-12	2/12/2014	Updated rows for NG-045-15097 and NG-045-15096.	Correct typos	N/A
45	App D FM FCAR	Introduction	2/12/2014	Wording updates to include new date ranges and totals for FCAR update.	Updates required for FCAR 2014.	N/A
46	App D FM FCAR	Section 2.9	2/12/2014	Updated external inspection summary to present information gathered for segment NA-SS-0168.	Updates required for FCAR 2014.	N/A
47	App D FM FCAR	Section 2.11	2/12/2014	Wording update to include new date range for SSOs for FCAR update.	Updates required for FCAR 2014.	N/A
48	App D FM FCAR	Table D-1.1	2/12/2014	Corrected typo in first line of table from BH-NTS-0005 to correct segment number BH-NS-0005, Corrected Typo in SF-0143 to SF-143	Correct typos	N/A
49	App D FM FCAR	Table D-2	2/12/2014	Corrections to Group Ferrous Inspection Summary to correct inspections that were not actually reported on in previous version, specifically Lucas Creek segment.	Incorrect summary in original plan.	N/A
50	App D FM FCAR	Table D-2	2/12/2014	Table updated with new group ferrous force main inspection summaries.	Updates required for FCAR 2014.	N/A
51	App D FM FCAR	Table D-3.1	2/12/2014	Corrected typo in Table to correct NF-007 to SF-007. Also corrected type in line number from "SF-197" to "SF-097"	Correct typos	N/A
52	App D FM FCAR	Table D-3.2	2/12/2014	Updated Inspection results for L2-38, L2-64, and L2-65 that had a "Pending" status in FCAR 2013.	Updates required for FCAR 2014.	N/A
53	App D FM FCAR	Table D-4	2/12/2014	Table D-4 updated with new group ferrous inspection results.	Updates required for FCAR 2014.	N/A
54	App D FM FCAR	Table D-5	2/12/2014	Table D-5 updated with new BEM inspection results.	Updates required for FCAR 2014.	N/A
55	App D FM FCAR	Table D-8	2/12/2014	Updated table based on results of 2013 CP inspections where applicable.	New, more specific condition data available from contractor.	N/A
56	App D FM FCAR	Table D-9	2/12/2014	Updated SSO Summary for Force Main System	Updates required for FCAR 2014.	N/A
57	App D FM FCAR	Table D-10	2/12/2014	Duplicate found for SF-143 in Table D-10	Duplicate corrected in Table D-10	N/A
58	App E Rehab During CAP	Introduction, Section 1.1	2/12/2014	Wording updates to include new date ranges for FCAR update.	Updates required for FCAR 2014.	N/A
59	App E Rehab During CAP	Table E-1	2/12/2014	Updated Prompt Repair Table.	Updates required for FCAR 2014.	N/A

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60	App E Rehab During CAP	Table E-2	2/12/2014	Updated CIP Project Completion.	Updates required for FCAR 2014.	N/A
61	All Sections		2/12/2014	Minor updates to language throughout to correct typos or provide additional clarity.	General updates to language as needed.	N/A
62	Rehab Plan	Executive Summary, Section 3.1, Table 3-1, Table 3-2, Section 3.5, Figure 3-2	11/21/2014	Updated costs to account for addition of project elements from Interim System Improvements	Project elements added to Rehab Plan due to Interim System Improvements update from Consent Decree Modification #3.	Letter dated June 10, 2014
63	Rehab Plan	Section 3.4	11/21/2014	Updated section to explain the addition of Table 3-10. Consent Decree Modification No.3 Project Elements.	Project elements added to Rehab Plan due to Interim System Improvements update from Consent Decree Modification #3.	Letter dated June 10, 2014
64	Rehab Plan	Table 3-2	11/21/2014	Updated CIP reference number for project AT-R3.	Condition issues will be addressed by CIP AT-115-1.	N/A
65	Rehab Plan	Table 3-2, Table 3-4	11/21/2014	Removed 16 manholes from project GN-R1. Manholes will be addressed in the CIP according to Table 3-10.	These manholes will be addressed by Ivy Home-Shell Road Sewer Extension Division I Replacement. This project had been identified for as an alternative to GN-R1 for design and construction efficiency but was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014
66	Rehab Plan	Table 3-2	11/21/2014	Removed 13 LF of gravity pipeline (North Shore Rd) From project GN-R5. Pipeline will be addressed in the CIP according to Table 3-10.	The section of pipe will be addressed by Army Base 24-Inch and 20-Inch Transmission Main Replacements. This project had been identified for as an alternative to GN-R5 for design and construction efficiency but was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014

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67	Rehab Plan	Table 3-2	11/21/2014	Park Ave Pump Station Replacement moved to Phase 2; Ferebee Ave Pump Station Replacement/Rehabilitation moved to Phase 1.	HRSD is reconfiguring the system in the Park Ave/Ferebee Ave area. Ferebee Ave pump station will discharge directly to the terminal force main; necessitating it's construction ahead of improvements to Park Ave PS.	N/A
68	Rehab Plan	Table 3-9	11/21/2014	Updated comments and Phase for Park Ave and Ferebee Ave Pump Station projects.	HRSD is reconfiguring the system in the Park Ave/Ferebee Ave area. Ferebee Ave pump station will discharge directly to the terminal force main; necessitating it's construction ahead of improvements to Park Ave PS.	N/A
69	Rehab Plan	Table 3-10	11/21/2014	Added table of project elements that were being addressed by the Interim System Improvements projects that were removed from the Consent Decree.	Project elements added to Rehab Plan due to Interim System Improvements update from Consent Decree Modification #3.	Letter dated June 10, 2014
70	Rehab Plan	Section 4, Table 3-2	11/21/2014	Updated figure numbers	Project elements updated due to Interim System Improvements update from Consent Decree Modification #3.	Letter dated June 10, 2014
71	Rehab Plan	Section 4	11/21/2014	Removed one map figure from GN-R4.	Project elements updated due to Interim System Improvements update from Consent Decree Modification #3.	Letter dated June 10, 2014
72	App B PS FCAR	Table B-10	11/21/2014	Added Suffolk Pump Station Flomatcher to table.	Suffolk PS was removed from the Interim System Improvements with Consent Decree Modification #3. HRSD will utilize the CIP to address controls issues. See Table 3-10.	Letter dated June 10, 2014
73	App B PS FCAR	Section 2.5.2	11/21/2014	Updated wording for Lucas Creek Pump Station on Page B-14	Lucas Creek PS was removed from the Interim System Improvements with Consent Decree Modification #3.	Letter dated June 10, 2014
74	App C GM FCAR	Table C-4	11/21/2014	Project number for SG-003-19883 updated to AB-100.	The section of pipe was being addressed by Army Base 24-Inch and 20-Inch Transmission Main Replacements in the Interim System Improvements (ISI). This project was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014

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75	App C GM FCAR	Table C-4	11/21/2014	Project number for SPS-117-10384 updated to AB-105.	The section of pipe was being addressed by Section W Force Main Replacement in the Interim System Improvements (ISI). This project was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014
76	App C GM FCAR	Table C-5	11/21/2014	Project number for MH-SG-003-3889 updated to AB-100.	This manhole was being addressed by Army Base 24-Inch and 20-Inch Transmission Main Replacements in the Interim System Improvements (ISI). This project was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014
77	App C GM FCAR	Table C-5	11/21/2014	Project number for MH-SPS-117-1476 updated to AB-105.	The section of pipe was being addressed by Section W Force Main Replacement in the Interim System Improvements (ISI). This project was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014
78	App C GM FCAR	Table C-9	11/21/2014	Project number for MH-NG-141-4467; MH-NG-141-5073; MH-NG-142-1002; MH-NG-142-1390; MH-NG-142-1780; MH-NG-142-2183; MH-NG-142-2371; MH-NG-142-2610; MH-NG-142-2867; MH-NG-142-3125; MH-NG-142-3282; MH-NG-142-3628; MH-NG-142-3793; MH-NG-142-4110; MH-NG-142-470; MH-NG-142-750 updated to BH-145	These manholes were being addressed by Ivy Home-Shell Rd Sewer Extension Division I Replacement (ISI). This project was removed from the ISI by Consent Decree Modification #3.	Letter dated June 10, 2014
79	App C GM FCAR	Table C-12	11/21/2014	Project numbers for NPS-216-1718, NPS-216-1904, NPS-216-1905, NPS-216-1906 updated to JR-106.	Lucas Creek PS was removed from the Interim System Improvements with Consent Decree Modification #3.	Letter dated June 10, 2014