

APPENDIX 0

Structure of the Appendices

F.M. Mann
CH2M HILL Hanford Group, Inc.

*RCRA Facility Investigation (RFI) Report
Tier 2*

This page is intentionally left blank.

As noted in Section 1.C of Tier 1, this entire (RCRA) facility investigation report is organized around the vision of a risk assessor. We start with requirements, proceed to the conceptual model, and follow the contaminants from their source to the receptor. Additionally, discussions on treatability of the waste and the system provide the information for decision makers. [Table App-1](#) shows the correspondence between the Tier 1 sections and the appendix sections. Also included in this tier are appendices of the new field investigation reports (Appendices L and M, separately published as [Connelly 2007a](#) and [2007b](#)), as well as Appendix N that contains the conclusions and recommendations from all of the field investigation reports.

Table App-1. Structure of the Appendices (2 Pages)

Tier 1 Section	Tier 2 (Appendices)
Introduction	
1 – 5	Not included. Background introductory material.
Project Results	
6 Summary of New Work	J. Summary of New Work
7 – 10	Not included. See corresponding sections in State of Knowledge
11 Interim Measures	K. Interim Measures
12 – 14	Not included. See corresponding sections in State of Knowledge
State of Knowledge	
15 Risk Assessment Requirements	Not included. See <i>Contents of Long-Term Performance Analyses to Support the Retrieval and Closure of Tanks for the Washington State Department of Ecology</i> (Mann et al. 2004), <i>Format and Content Guide for U.S. Department of Energy Low-Level Waste Disposal Facility Performance Assessments and Composite Analyses</i> (DOE 1999), <i>Performance Objectives for Tank Farm Closure Performance Assessments</i> (Mann et al. 2005), <i>Performance Objectives for the Hanford Immobilized Low-Activity Waste (ILAW) Performance Assessment</i> (Mann 1999), and <i>Computer Code Selection Criteria for Flow and Transport Code(s) to be Used in Vadose Zone Calculations for Environmental Analyses in the Hanford Site's Central Plateau</i> (Mann et al. 1999), which are included as Tier 3 documents.
16 Groundwater Conceptual Model	A. Conceptual Model
17 Inventory	B. Inventory
18 Recharge	C. Recharge
19 Contaminant Release	D. Contaminant Release
20 Geology	E. Geology
21 Moisture Flow in the Vadose Zone	F. Moisture Flow in Vadose Zone
22 Contaminant Transport in the Vadose Zone	G. Contaminant Transport in Vadose Zone

Table App-1. Structure of the Appendices (2 Pages)

Tier 1 Section	Tier 2 (Appendices)
23 Past and Current Groundwater Flow and Contamination	H. Groundwater Contamination Also see <i>Hanford Site Groundwater Monitoring for Fiscal Year 2006</i> (Hartman et al. 2007).
24 Hanford Site Groundwater Model	Not included. The Hanford Site groundwater model is being developed for the Tank Closure and Waste Management Environmental Impact Statement.
25 Dosimetry	Not included. See <i>Dosimetry Data Package for Human Health Risk Assessment for the RCRA Facility Investigation (RFI) Report</i> (Rittmann 2007), which is included as a Tier 3 document.
26 Computer Models	Not Included.
27 Future Impacts	Not included. See <i>Initial Single-Shell Tank Performance Assessment for the Hanford Site</i> (DOE/ORP-2005-01), which is included as a Tier 3 document.
28 Cumulative Impacts	Not included. The Tank Closure and Waste Management Environmental Impact Statement will contain the next version of the cumulative impacts from the Hanford Site.
Future Work	
29 Data Gaps	Not included. See <i>An Evaluation of Hanford Site Tank Farm Subsurface Contamination, FY 2007</i> (Mann et al. 2007), which is included as a Tier 3 document.
30 Path Forward	Not included. Activities will be documented in future planning documents.
Field Investigation Reports	
	L. Field Investigation Report for Waste Management Areas C and A-AX (Connelly 2007a)
	M. Field Investigation Report for Waste Management Area U (Connelly 2007b)
	N. Conclusions and Recommendations

Note: To avoid confusion, the letter I is not used to identify appendices.

REFERENCES

- Connelly 2007a, M.P. Connelly, *Field Investigation Report of Waste Management Areas C and A/AX*, RPP-35484, CH2M HILL Hanford Group, Inc., Richland, Washington. Also Appendix L of this RCRA Facility Investigation Report. (Chapters 4, 7, 8, and 10)
- Connelly 2007b, M.P. Connelly, *Field Investigation Report of Waste Management Area U*, RPP-35485, CH2M HILL Hanford Group, Inc., Richland, Washington. Also Appendix M of this RCRA Facility Investigation Report.
- DOE 1999, *Format and Content Guide for U.S. Department of Energy Low-Level Waste Disposal Facility Performance Assessments and Composite Analyses*, DOE G 435-1-1, U.S. Department of Energy, Washington, D.C.
- DOE/ORP 2005-01, *Initial Single-Shell Tank Performance Assessment for the Hanford Site*, DOE/ORP-2005-01, U.S. Department of Energy, Office of River Protection, Richland, Washington.

- Hartman et al. 2007, M.J. Hartman, L.F. Morasch, and W.D. Webber, editors, *Hanford Site Groundwater Monitoring for Fiscal Year 2006*, PNNL-16346, Pacific Northwest National Laboratory, Richland, Washington.
- Mann 1999, F.M. Mann, *Performance Objectives for the Hanford Immobilized Low-Activity Waste (ILAW) Performance Assessment*, HNF-EP-0826, Rev. 3, CH2M HILL Hanford Group, Inc., Richland, Washington.
- Mann et al. 1999, F.M. Mann, W.J. McMahon, C.T. Kincaid, and S.B. Yabusaki, *Computer Code Selection Criteria for Flow and Transport Code(s) to be Used in Vadose Zone Calculations for Environmental Analyses in the Hanford Site's Central Plateau*, HNF-5294, CH2M HILL Hanford Group, Inc., Richland, Washington.
- Mann et al. 2004, F.M. Mann, M. Connelly, and A.J. Knepp, *Contents of Long-Term Performance Analyses to Support the Retrieval and Closure of Tanks for the Washington State Department of Ecology*, RPP-14284, Rev. 1, CH2M HILL Hanford Company, Richland, Washington.
- Mann et al. 2005, F.M. Mann, J.D. Crumpler, and A.J. Knepp, *Performance Objectives for Tank Farm Closure Performance Assessments*, RPP-14283, Rev. 2, CH2M HILL Hanford Group, Inc., Richland, Washington.
- Mann et al. 2007, F.M. Mann, M. Connelly, D.A. Myers, T.E. Jones, R. Khaleel, M.I. Wood, M.D. Freshley, and R.J. Serne, *An Evaluation of Hanford Site Tank Farm Subsurface Contamination, FY 2007*, RPP-33441, CH2M HILL Hanford Group, Inc., Richland, Washington.
- Rittmann 2007, P.D. Rittmann, *Dosimetry Data Package for Human Health Risk Assessment*, HNF- SD-WM-TI-707, Rev. 5, Fluor Government Group, Inc., Richland, Washington.

