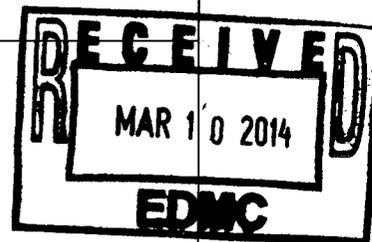


MEETING MINUTES																							
Subject: Double-Shell Tank Emergency Pumping Guide																							
Date of Meeting: 8/26/2013	Location: Ecology/Room 31 Time: 9:00-11:00																						
Attendees: Jeff Lyon, Ecology Michelle Hendrickson, Ecology Kristi Wold, Ecology Jeremy Johnson, ORP Jeff Voogd, WRPS	Steve Killoy, WRPS Tony Miskho, WRPS Mike Sheridan, WRPS David Little, WRPS Todd Blaak, WRPS																						
<p>1. Agenda:</p> <p>a. Previous Meeting minutes: The issues are not resolved on the past minutes. See new action.</p> <p>b. Presentation: DST Contingency Pumping Path Forward: A discussion occurred on "emergency space" in the DSTs, how it is used, and the need to reconstitute the space after it is used. See agreement below on emergency space. There was a discussion on how many plans are needed. Ecology suggested 27 and DOE suggested 4. See Issue below. DOE suggested that the 4 proposed templates would lead to development of a tank specific plan. Ecology took the action to discuss DOE's proposal of 4 templates.</p> <p>c. Flow Chart: The proposed flow chart was based on the concepts in the Catch Tank Leak Response Plan. The flow chart was agreed to as a good idea but gaps need to be filled. See action to revise flowchart.</p> <p>2. Issues:</p> <p>a. The 10-day pumping requirement from HNF-3484 was not met once the AY-102 leak was declared (May 30, 2013)</p> <p>b. A potential difference of interpretation on what leak scenarios are addressed by HNF-3484 (July 30, 2013).</p> <ul style="list-style-type: none"> ▪ Ecology: Specific scenarios listed in HNF-3484 are examples and not met to be all inclusive. It does not exclude any waste types or leak locations. ▪ DOE: HNF-3484 addresses the removal of supernatant. <p>c. Need to identify what an emergency is (July 30, 2013).</p> <p>d. The number of plans needed for revision of the DST Pumping Guide has not been agreed upon (New).</p> <p>3. Actions:</p> <table border="1"> <thead> <tr> <th>Action</th> <th>Description</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>2013-05-30-2</td> <td>ORP to identify preliminary conceptual ideas for document modification.</td> <td>Complete</td> </tr> <tr> <td>2013-05-30-3</td> <td>Discuss meeting minute process again to clarify process</td> <td>Complete</td> </tr> <tr> <td>2013-07-30-1</td> <td>Ecology to discuss comment resolution of 5/30/2013 minutes</td> <td>Open</td> </tr> <tr> <td>2013-07-30-2</td> <td>WRPS to determine schedule for performing Time Deployment Study for sludge and for salt cake, and updating Time Deployment Study for supernatant</td> <td>Open</td> </tr> <tr> <td>2013-08-26-1</td> <td>Ecology to discuss comment resolution of 5/30/2013 and 7/30/2013 minutes</td> <td>New</td> </tr> <tr> <td>2013-08-26-2</td> <td>Ecology will discuss DOE's proposal for 4 templates.</td> <td>New</td> </tr> </tbody> </table>			Action	Description	Status	2013-05-30-2	ORP to identify preliminary conceptual ideas for document modification.	Complete	2013-05-30-3	Discuss meeting minute process again to clarify process	Complete	2013-07-30-1	Ecology to discuss comment resolution of 5/30/2013 minutes	Open	2013-07-30-2	WRPS to determine schedule for performing Time Deployment Study for sludge and for salt cake, and updating Time Deployment Study for supernatant	Open	2013-08-26-1	Ecology to discuss comment resolution of 5/30/2013 and 7/30/2013 minutes	New	2013-08-26-2	Ecology will discuss DOE's proposal for 4 templates.	New
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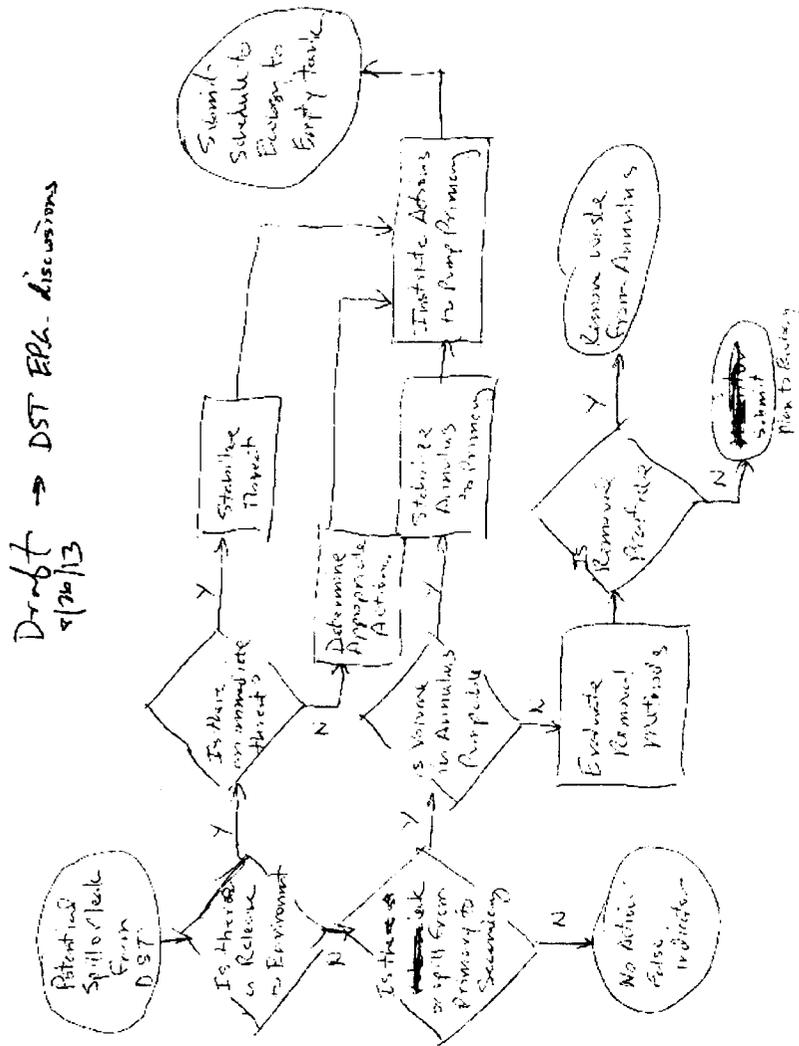


CROSS ref - 0059667

2013-08-26-3	DOE to draft revised flow chart to present at next meeting. Will try to send the flow chart over prior to the meeting.	New
<p>4. Agreements:</p> <ul style="list-style-type: none"> a. Revision of HNF-3484 is necessary (May 30, 2013). b. Finalize the minutes in the meetings and then submit the approved meeting minutes for inclusion into the monthly project manager meeting (New). c. The emergency space limit of 1.265Mgallons will be used in future revisions of the document (New). d. A decision process flow sheet will be used in the document revision to outline decision points by the agencies in the case of a future event covered by the pumping guide (New). <p>5. Next Meeting:</p> <p>September 11, 2013, 11-2 (take over 242-A Evaporator time)</p> <p>Agenda: Decision Logic – key to development of plan, Appendix (2)</p>		

Appendix 1

Draft Flow Chart



Appendix 2

Presentation

DST Contingency Pumping Path Forward

Double-Shell Tank (DST) Contingency Pumping Path Forward

August 2013



8/26/2013

Purpose

This material provides information for discussion regarding the path forward for resolving requests to revise the TOC Emergency Pumping Guide and incorporate Lessons Learned from AY-102 experience to date.

To meet this purpose, this material identifies subjects which require further discussion and eventual consensus by all involved parties; as well as preliminary information and plans for the expansion of the Tank Farm Pumping Guide for identified tank waste types by the TOC (WRPS).

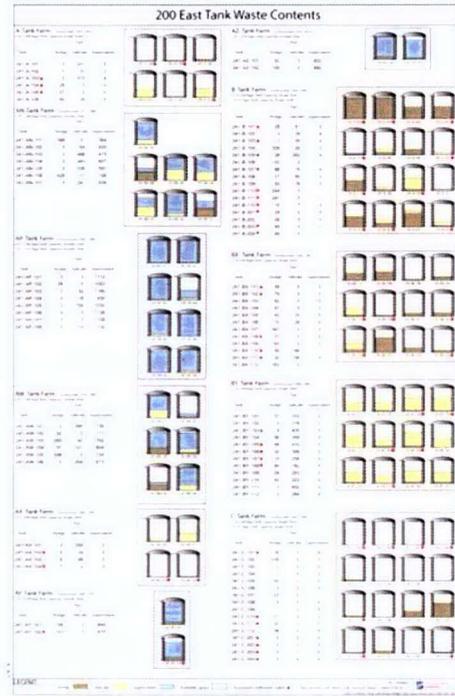
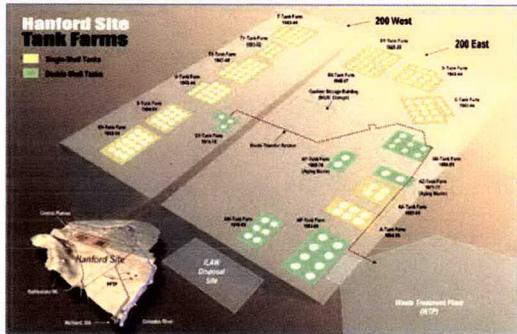
AGENDA

- I. **Purpose**
- II. **General Overview**
- III. **Volume Topic**
 - i. Space Requirements;
- IV. **Contingency Pumping Guide Revision**
 - i. Generic Templates (4)
 - ii. Schedule
 - iii. Time Deployment Studies

General Overview

Double-Shell Tank Farms

- 28 DSTs were built in 200E & 200W Areas constructed between 1968 and 1986;
- DSTs are organized into 6 separate Tank Farms; 5 in 200E, 1 in 200W (SY);
- 25 DSTs in 200E, 3 DSTs in 200W;
- Approximately 27 million gallons of waste are currently stored in the DSTs;



(Excerpt from HNF-EP-0182)

Volume Topic - Space

1. What are the actual space requirements? Does it include WTP volumes?

A. DOE M 435.1-1, *RADIOACTIVE WASTE MANAGEMENT MANUAL*, Chapter II-High-Level Waste Requirements

H. Contingency Actions. The following requirements are in addition to those in Chapter I of this Manual.

- 1) **Contingency Storage.** For off-normal or emergency situations involving high-level waste storage or treatment, spare capacity with adequate capabilities shall be maintained to receive the largest volume of waste contained in any one storage vessel, pretreatment facility, or treatment facility. Tanks or other facilities that are designated for high-level waste contingency storage shall be maintained in an operational condition when waste is present and shall meet all the requirements of DOE O 435.1, *Radioactive Waste Management*, and this Manual.
- 2) **Transfer Equipment.** Pipelines and auxiliary facilities necessary for the transfer of waste to contingency storage shall be maintained in an operational condition when waste is present and shall meet the requirements of DOE O 435.1, *Radioactive Waste Management*, and this Manual.

B. DST EPG Rev 10 (HNF-3484)

Section 3.1: DOE Order 435.1, Part II, Section H, Contingency Actions, paragraph (1) & (2)

Section 3.2: "... assure a minimum of 1.265 million gallons of emergency storage capacity is available prior to any transfer."

C. WTP largest tank volume is accommodated in the emergency tank space (1.265 Mgal).

D. WAC 173-303 Requirements:

- DSTs are Double Walled Tanks (Interim status: 40 CFR 265.193(e)(3), Final status: [WAC 173-303-640(4)(e)(iii)])
- Regulations state a release from inner tank is contained by outer shell
- No specific requirement to have contingency space

E. Requirement to empty a failed tank (Interim status: 40 CFR 65.196(b), Final status: [WAC 173-303-640(7)(b)]) to perform inspection and repair/close.

Contingency Pumping Guide Revision

- 1. WRPS developing 4 generic sub-guide Templates based upon tank waste type.**
 - a. Annulus Supernate Pumping/Recycle to Primary Tank;
 - b. DST to DST Supernate Pumping;
 - c. DST to DST Sludge Pumping;
 - d. DST to DST Salt Cake Pumping;
- 1A. Guiding Assumptions for template development;**
 - a. For 1.b. through 1.d. above, templates will be based upon worst case distance between DSTs;
 - b. Pumping will be based upon emptying the leaking tank (DST) from a maximum fill height of 460 inches for the largest DST;
 - c. All templates will include provision for pumping drainable liquids, as appropriate, prior to efforts to completely reduce tank sludge/salt volumes;
 - d. Sludge & Salt Cake Pumping Template will be modeled after past experience and equipment in TOC Retrieval activities;
 - e. Equipment selection will be based upon commonly used TOC systems and currently available and appropriate technology;
 - f. Meeting regulatory requirements in particular Environmental & Nuclear Safety will be assumed to be required;
 - g. Time deployment studies will be conducted to determine ROM estimates for equipment installation, pumping operations, durations required, and cost;
 - h. A schedule will be developed for each of the templated guides to estimate duration from leak identification to DST

Contingency Pumping Guide Revision

- 2. WRPS is expediting development of a Schedule of activities for Pumping Guide Revision**
 - a. A DRAFT SOW has been developed and is being routed for internal consideration for expedited procurement;
 - b. Schedule includes required activities for performance of time deployment studies;
 - c. Required activities include field walkdowns, gathering appropriate technical information, analysis of applicable regulatory requirements, etc.
 - d. Work planned to expedite simplest to the most complex pumping/transfer activities;