



DOE/ID-10559  
Revision 12

U.S. Department of Energy  
Idaho Operations Office

RECEIVED  
OCT 24 2012  
DEPT. OF ENVIRONMENTAL QUALITY  
WASTE PROGRAM

# Annual Site Treatment Plan Report

November 2012

---

## Idaho Cleanup Project

DOE/ID-10559  
Revision 12

# **Annual Site Treatment Plan Report**

**November 2012**

**Prepared for the  
U.S. Department of Energy  
DOE Idaho Operations Office**

# CONTENTS

ACRONYMS.....	v
1. ANNUAL REPORT REQUIREMENTS.....	1
2. BACKGROUND.....	2
2.1 Federal Facility Compliance Act.....	2
2.2 Idaho National Laboratory Site Treatment Plan Finalization.....	2
2.2.1 Idaho National Laboratory Site Treatment Plan Quarterly Meetings and Updates.....	2
3. PURPOSE OF THE ANNUAL SITE TREATMENT PLAN REPORT.....	4
4. FISCAL YEAR 2012 IDAHO NATIONAL LABORATORY SITE TREATMENT PLAN PROGRESS SUMMARY.....	5
5. STATUS OF MILESTONES.....	6
5.1 Introduction.....	6
5.2 Milestones.....	6
5.2.1 Completion of Site Treatment Plan Fiscal Year 2012 Milestones.....	6
5.2.2 Changes to Site Treatment Plan Milestones or Planning Dates.....	6
5.2.3 Deletion of Site Treatment Plan Milestones.....	6
5.2.4 Upcoming Fiscal Year 2013 Milestones.....	7
6. STATUS OF WASTE STREAMS.....	8
6.1 Introduction.....	8
6.2 Volume Changes for Individual Waste Streams.....	8
6.3 Volume of Transuranic Waste to Waste Isolation Pilot Plant.....	10
6.4 New Waste Streams.....	10
6.5 Deletion of Waste Streams.....	11
6.6 Modifications to Waste Stream Treatment Plans.....	11
7. TREATMENT ACTIVITIES.....	11
8. REVISIONS TO SITE TREATMENT PLAN.....	12
8.1 Introduction.....	12
9. FUNDING.....	13
9.1 Introduction.....	13
9.2 Fiscal Year 2013 Idaho National Laboratory Site Treatment Plan Funding.....	13
9.3 Fiscal Year 2014 Idaho National Laboratory Site Treatment Plan Funding.....	13
9.4 Outyear Site Treatment Plan Funding.....	13
10. TRANSURANIC-CONTAMINATED WASTE MANAGEMENT.....	14
10.1 Introduction.....	14
10.2 Progress.....	14

## TABLES

1.	Volume changes for Site Treatment Plan Table 4-1 and 4-2 Mixed Low-Level and TRU Waste Streams (m <sup>3</sup> ).....	8
2.	TRU Waste Shipped to WIPP.....	10
3.	Site Treatment Plan-covered mixed waste treated, processed, or dispositioned from October 2011 through September 2012 .....	11

## ACRONYMS

AMWTP	Advanced Mixed Waste Treatment Project
ARP	Accelerated Retrieval Project
BEA	Battelle Energy Alliance, LLC
CH	contact-handled
CWI	CH2M♦WG Idaho, LLC
DOE	U.S. Department of Energy
DOE-ID	U.S. Department of Energy Idaho Operations Office
EPA	U.S. Environmental Protection Agency
FFCA	Federal Facility Compliance Act
FY	fiscal year
IDEQ	Idaho Department of Environmental Quality
INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
IWTU	Integrated Waste Treatment Unit
ITG	Idaho Treatment Group, LLC
LDR	land disposal restriction
MFC	Materials and Fuels Complex
MLLW	mixed low-level waste
NRF	Naval Reactors Facility
RCRA	Resource Conservation and Recovery Act
RH	remote-handled
RWDP	Remote Handled Waste Disposition Project
SBW	sodium-bearing waste
SCMS	Sodium Components Maintenance Shop
STP	Site Treatment Plan
TRU	transuranic contaminated waste
WIPP	Waste Isolation Pilot Plant

# Annual Site Treatment Plan Report

## 1. ANNUAL REPORT REQUIREMENTS

The U.S. Department of Energy (DOE) is required to submit an annual Site Treatment Plan (STP) update to the Idaho Department of Environmental Quality (IDEQ). Section 2.3.4 of the STP states: “At the same time and along with the annual update to the STP, DOE shall submit to the IDEQ an annual STP report to the STP for review and comment. The annual STP report:

- (a) Shall include and collate information from the quarterly project manager meetings and provide the IDEQ with information to track progress on milestones and planning dates
- (b) May include any proposed extensions, revisions (including proposed waste treatment plans for new waste streams), or other changes to the STP
- (c) Shall include information on DOE’s funding for the STP and identify any funding issues that may impact the STP schedules
- (d) May include notification of planning date extensions and changes in covered waste volumes
- (e) May be used as a vehicle for input from the public, affected states, and U.S. Environmental Protection Agency (EPA) if revisions to the STP are proposed.”

## **2. BACKGROUND**

### **2.1 Federal Facility Compliance Act**

Some federal facilities were generating and storing mixed hazardous and radioactive waste (mixed waste) without any available treatment or disposal capacity. Since the generated waste did not meet the requirements for mixed waste under the Land Disposal Restrictions (40 CFR 268), Congress passed the Federal Facility Compliance Act (FFCA). The FFCA requires federal facilities to develop a compliance plan, known as the Site Treatment Plan (STP), to handle the generation, storage, treatment, and disposal of mixed waste. Further, the FFCA makes federal facilities subject to potential fines and penalties for violations of the Resource Conservation and Recovery Act (RCRA)—the law that sets forth the requirements for management of hazardous waste.

### **2.2 Idaho National Laboratory Site Treatment Plan Finalization**

The STP is comprised of administrative provisions and technical provisions. Section 1 provides background information related to the development and statutory and regulatory requirements of the STP. Section 2 contains the administrative provisions necessary to implement the STP. Section 2 includes an array of requirements including: the requirements for the quarterly meetings, annual updates, and this annual report. In addition, Section 2 covers the addition of new waste streams, the process for extending milestones or planning dates, the process for making revisions to the STP, submittal and review of deliverables, and other related administrative requirements. Section 3 describes the treatment facilities, both on-Site and off-Site, that DOE plans to use to treat mixed waste. Section 4 lists both the on-Site and off-Site waste streams that are covered under the STP. Section 5 details the milestones and planning dates for treating or developing the treatment capacity necessary to treat the mixed waste covered in Section 4. Section 6 lists all the covered waste streams that will be treated at each of the facilities and includes detailed treatment plans for each.

#### **2.2.1 Idaho National Laboratory Site Treatment Plan Quarterly Meetings and Updates**

Sections 2.3.2 and 2.10.2 of the STP require project managers from DOE and IDEQ to meet quarterly to discuss progress and problems relating to work under the STP. Routine agenda items discussed at the quarterly meetings include progress and status of milestones and planning dates, changes in waste stream information (i.e., volume changes, deletions, or additions), modifications to treatment plans, status on the treatment of off-Site waste, and any potential IDEQ issues or problems regarding STP compliance.

To facilitate the quarterly meetings, DOE provides the IDEQ project manager with the requisite information and agenda one week prior to the meeting. After the meeting, DOE prepares draft meeting minutes and provides them to the IDEQ within 10 days. The IDEQ approves, disapproves, or approves with comments the items presented in the meeting minutes that are not considered revisions to the STP. The IDEQ disapproves, conditionally approves, or conditionally approves with modification, pending public comment and consultation with affected states and the EPA all proposed revisions. Section 8 of this Annual Report lists the items that constitute revisions that the IDEQ has conditionally approved.

The IDEQ's approval, conditional approval, or agreement is required before modifications can be made to the STP. Modifications are made to the STP quarterly and distributed to individuals that retain controlled copies. Distribution ensures that interested parties obtain current information regarding the status of Idaho National Laboratory (INL) mixed waste treatment activities outlined in the STP.

During Fiscal Year (FY) 2012, DOE and IDEQ held quarterly meetings in January 2012 (first quarter), April 2012 (second quarter), July 2012 (third quarter), and October 2012 (fourth quarter).

### **3. PURPOSE OF THE ANNUAL SITE TREATMENT PLAN REPORT**

The purpose of this annual STP report is to provide the status of DOE's progress in treating and developing treatment capacity for the INL and off-Site mixed waste identified in the STP. Specifically, this annual STP report summarizes and describes DOE's progress toward meeting the requirements of the STP and collates the information provided to IDEQ as part of the STP quarterly meetings.

This annual STP report also provides IDEQ with information regarding anticipated funding and planned activities for fulfilling the requirements of the STP. The public and other interested parties can review and comment on DOE's activities and progress made pursuant to the STP.<sup>a</sup> Revisions to the STP are identified in Section 8 of this annual STP report.

---

a. Any revision to the STP requires publication of a notice of availability to the public and consultation with affected states and the EPA regarding the revision.

#### **4. FISCAL YEAR 2012 IDAHO NATIONAL LABORATORY SITE TREATMENT PLAN PROGRESS SUMMARY**

A status summary for fulfilling the STP requirements during FY 2012 (October 1, 2011–September 30, 2012) is as follows:

- The INL treated/processed a total of 3,281 m<sup>3</sup> of legacy mixed waste; of that total, 1,100 m<sup>3</sup> was mixed low-level waste (MLLW) shipped off-Site for treatment/disposal, and 2,181 m<sup>3</sup> was contact-handled (CH) transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP).

Of the 1,100 m<sup>3</sup> of MLLW, DOE formerly classified 1,065 m<sup>3</sup> of that waste volume as CH-TRU waste and subsequently dispositioned it as MLLW for off-Site treatment and disposal facilities. This volume also counts toward the Advanced Mixed Waste Treatment Project (AMWTP) milestone of 4,500 m<sup>3</sup>. The remaining 35 m<sup>3</sup> was MLLW backlog waste shipped off-Site for treatment/disposal.

- Three STP milestones were completed on or ahead of schedule.
- Eight STP milestones are scheduled for completion in FY 2013.

## 5. STATUS OF MILESTONES

### 5.1 Introduction

The STP provides overall schedules for achieving compliance with the RCRA land disposal restriction (LDR) requirements for mixed wastes at the INL. The schedules include those activities required to bring existing waste treatment facilities or technologies into operation and those required to develop new facilities and capacity for treatment. The STP schedules show milestones and planning dates for treatment technologies and facilities for covered wastes.

Milestones in the STP identify specific dates in a 3-year rolling period. These consist of the current fiscal year, plus two additional fiscal years (FY+1 and FY+2), by which a certain activity (including an event such as submittal of a deliverable) is scheduled to occur and which will be enforceable as set forth in the STP. Planning dates are dates beyond the 3-year rolling periods (e.g., FY+3 and FY+4) that are unenforceable, estimated schedule dates.

After expiration of a fiscal year, FY+1 milestones are converted to current fiscal year milestones; FY+2 milestones are converted to FY+1 milestones; and FY+3 planning dates are converted to FY+2 milestones. All conversions are automatic and remain in effect unless DOE notifies the IDEQ of any proposed changes. Milestones and planning dates are identified by reference to quarters, as outlined in the STP. The first quarter has December 31 as its corresponding date; the second quarter has March 31 as its date; the third quarter has June 30 as its date; and the fourth quarter has September 30 as its date.

### 5.2 Milestones

#### 5.2.1 Completion of Site Treatment Plan Fiscal Year 2012 Milestones

During FY 2012, three STP milestones were met. DOE submitted documentation verifying completion of the milestones to IDEQ as part of the quarterly meetings. The IDEQ conditionally approved completion of the following milestones during FY 2012:

- Commercial backlog treatment/disposal—16 m<sup>3</sup>
- SCMS/offsite backlog treatment—2 m<sup>3</sup>
- AMWTP processing—4,500 m<sup>3</sup>.

The volume identified for each treatment unit is the identified milestone volume. For the total amount of waste treated by each unit, see Section 7 of this report.

#### 5.2.2 Changes to Site Treatment Plan Milestones or Planning Dates

DOE proposes that the milestones associated with the sodium-bearing waste (SBW) treatment be extended. Specifically, DOE proposes to extend the P-5 (Commence Operations) from 2Q 2012 to 3Q 2013, and extend the requirement to submit a System Backlog Schedule from 3Q 2012 to 4Q 2013. The extensions were necessary due to delays associated with the start-up of the SBW treatment facility (Integrated Waste Treatment Unit [IWTU]).

#### 5.2.3 Deletion of Site Treatment Plan Milestones

None.

#### 5.2.4 Upcoming Fiscal Year 2013 Milestones

During FY 2013, eight milestones are scheduled to be completed. Currently, DOE does not foresee any issues that will impact completion of these milestones. The FY 2013 STP milestones are as follows:

- Commercial backlog treatment/disposal—80 m<sup>3</sup>
- SCMS/Offsite backlog treatment—2 m<sup>3</sup>
- AMWTP processing—4,500 m<sup>3</sup>
- SBW Treatment Facility—P-5 Commence Operations 3Q 2013
- SBW Treatment Facility—P-6 System Backlog Schedule 4Q 2013
- Calcine Disposition Project—P-5 Schedule for Table 5-1 Milestones 1Q 2013
- Calcine Disposition Project—P-7 Submit RCRA Part B Application 1Q 2013
- RWDP—Submit Part B 2Q 2013.

## 6. STATUS OF WASTE STREAMS

### 6.1 Introduction

The STP and Consent Order address LDR requirements pertaining to storage and treatment of covered wastes, whether such wastes were generated or accumulated in the past, present, or future during the pendency of the STP and implementing Consent Order. Covered wastes are mixed wastes, as identified in Section 4 of the STP. New waste streams become covered wastes, in accordance with the STP provisions.

During FY 2012, a new table (Table 4-2a) was added to Section 4 of the STP. The current Table 4-2 list includes all of the mixed TRU contaminated waste streams subject to the STP that are also subject to the Settlement Agreement and Consent Order requirement that DOE ship the waste out of the State of Idaho by December 31, 2018. Only mixed TRU waste generated after the date of execution of the Settlement Agreement are included in the new Table 4.2a. This was done to ensure that the backlog of TRU waste inventories was given a priority.

### 6.2 Volume Changes for Individual Waste Streams

Several activities contributed to the volume changes in 12 MLLW streams. The reasons for the volume changes range from treatment activities to routine generation. DOE added two new waste streams and the corresponding storage volume of each. Table 1 contains information on these waste streams, including volume changes and a general explanation for the changes.

Table 1. Volume changes for Site Treatment Plan Table 4-1 and 4-2 Mixed Low-Level and TRU Waste Streams (m<sup>3</sup>).

Waste Stream	Oct 1 Vol	Sep 30 Vol	Net Change	Justification
CH-ANL-180CH	26.9441	21.9000	-5.0441	Treated at SCMS 3.30.
CH-ANL-180T	3.0100	2.5000	-0.5100	0.51 m <sup>3</sup> newly generated waste moved to Table 4-2a.
CH-ANL-180Ta	0.0000	0.5100	0.5100	Newly generated.
CH-ANL-241T	1.6600	0.0000	-1.6600	Changing for gross to net volume reduced the waste stream by 0.8800 m <sup>3</sup> . 0.78 m <sup>3</sup> newly generated waste moved to Table 4-2a.
CH-ANL-241Ta	0.0000	0.7800	0.7800	Newly generated.
CH-ANL-503T	0.2082	0.0000	-0.2082	Added one container 0.1118 m <sup>3</sup> . Moved 0.3218 m <sup>3</sup> of newly generated waste to Table 4-2a.
CH-ANL-503Ta	0.0000	0.3218	0.3218	Newly generated.
CH-ANL-716	1.9600	2.0600	0.1000	Volume correction.
CH-ANL-722	2.3523	6.1600	3.8077	Changing from net to gross volume increased the waste stream by 3.8077 m <sup>3</sup> .
ID-AMWTP-100	14.6420	131.208	116.566	Routine generation of 45.6m <sup>3</sup> and shipment offsite of 31m <sup>3</sup> .

Waste Stream	Oct 1 Vol	Sep 30 Vol	Net Change	Justification
ID-AMWTP-200	39.1400	274.74	235.6	Routine operation
ID-INL-800	0.2649	0.7179	0.4530	Addition of two newly generated containers; one additional container was moved to ID-TEC-805.
ID-INL-805	1.2681	1.5330	0.2649	Addition of one container from waste stream ID TEC-800.
ID-MFC-100	20.2474	0	-20.2474	Treated and grouted in place; delete waste stream
ID-RWDP-RH	8.1703	3.2300	-4.9403	4.9453 m <sup>3</sup> newly generated waste moved to Table 4-2a.
ID-RWDP-RHa	0	4.9453	4.9453	Newly generated.
ID-TEC-172	0.2265	0.0000	-0.2265	HEPA filters sent off-Site for treatment and disposal.

HEPA = high-efficiency particulate air

SCMS = Sodium Components Maintenance Shop

### 6.3 Volume of Transuranic Waste to Waste Isolation Pilot Plant

Table 2 identifies the volume for each Item Description Code that was shipped to WIPP. The volume of these shipments counts toward the AMWTP milestone of 4,500 m<sup>3</sup>.

**Table 2, TRU Waste To WIPP**

STP ID	IDC	WIPP	TSDf	STP ID	IDC	WIPP	TSDf
ID-RFO-001T	RF001	79.124	0	ID-RFO-371T	RF371	0.212	17.384
ID-RFO-002T	RF002	64.548	0	ID-RFO-374T	RF374	0	55.332
ID-RFO-003T	RF003	244.24	0	ID-RFO-376T	RF376	0	1.696
ID-RFO-004T	RF004	4.24	0	ID-RFO-440T	RF440	0.424	3.816
ID-RFO-005T	RF005	0	741.556	ID-RFO-441T	RF441	0.212	0.212
ID-RFO-007T	RF007	9.964	0	ID-RFO-442T	RF442	0	0.848
ID-RFO-112T	RF801	1.06	0	ID-RFO-464T	RF464	0	0.636
ID-RFO-292T	RF820	6.148		ID-RFO-480T	RF480	0	26.504
ID-RFO-300T	RF300	0.424	0	ID-RFO-481T	RF481	0	0.956
ID-RFO-302T	RF302	0	0.212	ID-RFO-490T	RF490	0	0.212
ID-RFO-320T	RF320	0	4.56	ID-RFO-900T	RF900	0	1.484
ID-RFO-330T	RF330	2.968	36.996	ID-RFO-950T	RF950	0	1.908
ID-RFO-336T	RF336	0.212	35.944	ID-MDO-835T	MD835	1.696	0
ID-RFO-337T	RF337	1.06	6.044	ID-MDO-835T	MD835	1.272	0
ID-RFO-338T	RF338	0	0.424	ID-MD-836T	MD836	4.664	0
ID-RFO-339T	RF339	0	0.212	ID-MDO-847T	MD847	0.424	4.876
					BN508, BN510, BN550, BN701and BN702 Legacy		
ID-RFO-360T	RF360	0	5.3		Waste	1758.2	119.32
				<b>Total</b>		<b>2181.1</b>	<b>1066.4</b>

The total volume of waste shipped off-Site is 3,247.482 m<sup>3</sup> (2,243.5 m<sup>3</sup> to WIPP and 1003.91m<sup>3</sup> to a Subtitle C Disposal Facility off-Site).

### 6.4 New Waste Streams

DOE proposed four new waste streams during FY 2012. These four waste streams have the same treatment plan as their parent waste streams, meaning that no revision to the STP for inclusion of these waste streams is required. The new waste streams are newly generated subset streams from existing waste streams and are listed below:

- CH-ANL-180Ta SODIUM – TRU
- CH-ANL-241Ta TRU-CD-HOTCELL WASTE

- CH-ANL-503Ta TRU WASTE USED PREFILTERS
- ID-RWDP-RHa WASTE TO BE PROCESSED BY RWDP.

## 6.5 Deletion of Waste Streams

During FY 2012, one waste streams was deleted. The stream is no longer generated, and the backlog for this waste stream has been treated and disposed of:

- ID-MFC-100 D&D Sodium/Nak.

## 6.6 Modifications to Waste Stream Treatment Plans

None.

## 7. TREATMENT ACTIVITIES

The primary goal of the FFCA is to require treatment of the backlog of mixed waste to meet the RCRA LDR. DOE has aggressively pursued treatment as outlined under the STP. Table 3 identifies the treatment unit, the amount of INL waste treated, and the amount of off-Site waste treated in FY 2012.

Table 3. Site Treatment Plan-covered mixed waste treated, processed, or dispositioned from October 2011 through September 2012.

Treatment Unit	Volume (m <sup>3</sup> )
Commercial Treatment or Disposal	31.6
SCMS Backlog Treatment	3.3
AMWTP Mixed TRU to WIPP	2,181.0
AMWTP Mixed LLW to Off-Site Treatment/Disposal	1,066.0
TOTAL	3,281.

AMWTP = Advanced Mixed Waste Treatment Project

LLW = low-level waste

SCMS = Sodium Components Maintenance Shop

TRU = transuranic

WIPP = Waste Isolation Pilot Plant

## **8. REVISIONS TO SITE TREATMENT PLAN**

### **8.1 Introduction**

A revision to the STP requires publication of a notice of availability to the public and consultation with affected states and EPA pursuant to the STP and Section 3021 (b)(2) through (4) of RCRA for those affected portions of the STP. A revision to the STP is defined as (a) the addition of a treatment facility at the INL or technology development not previously included in the STP, (b) extension to a milestone or planning date for a period greater than one year, or (c) waste treatment plans for a new waste stream.

DOE has requested milestone extensions for the IWTU facility P-5, Begin Operations, and P-6, Submit a System Backlog. The milestone requests may now constitute revisions as the cumulative total of time of extensions exceeds one year. DOE is requesting that the P-5 milestone be extended to 3Q 2013 and the P-6 milestone be extended to 4Q 2013.

DOE requested a RCRA Part B Permit Modification Request for a new INL treatment facility. The Accelerated Retrieval Project (ARP) V Repackaging Facility will manage sludge waste drums currently in storage at AMWTP. The sludge waste includes various organic and inorganic waste streams. The ARP V will process the waste at WMF-1617 by opening the drums, emptying the contents onto a sorting tray or table, sorting and segregating the waste by removing any prohibited items, adding absorbent to any liquids, performing certified visual examination, performing any required sampling and characterization (e.g., radiological assay), and repackaging the waste to meet the WIPP waste acceptance criteria. The facility will also store the waste pending transfer back to AMWTP Transuranic Storage Area facilities prior to shipment to WIPP or to other DOE acceptable disposal sites.

## **9. FUNDING**

### **9.1 Introduction**

DOE and IDEQ recognize that successful implementation of the STP is dependent upon prudent use of resources and the effective management of those resources be considered during the work planning, budget formulation, and budget execution process. To ensure the development of responsible budget requests consistent with the requirements of the STP and applicable federal/state laws, regulations, and statutes, along with DOE orders, DOE and IDEQ continue to work cooperatively to this end.

As outlined in the STP, DOE is required to take all necessary steps to obtain sufficient funding to comply with the provisions of the STP through consultation with IDEQ and submission of timely budget requests. Furthermore, the DOE and IDEQ STP project managers meet periodically to discuss projects being funded in the current fiscal year and any events or new information that might cause significant changes to schedules or other issues relevant to activities being performed under the STP.

### **9.2 Fiscal Year 2013 Idaho National Laboratory Site Treatment Plan Funding**

Federal budgets will be funded under a Continuing Resolution for the first six months of FY 2013. The Continuing Resolution will not affect the possibility of major cuts that could occur under sequestration if Congress fails to agree to a deficit reduction plan by January 2, 2013, in accordance with the Budget Control Act. However, when finalized, the FY 2013 budget allocation to Idaho from DOE Headquarters is expected to provide sufficient funds to support the STP milestones and planning dates.

### **9.3 Fiscal Year 2014 Idaho National Laboratory Site Treatment Plan Funding**

The Congressional Budget Act of 1974 requires that the President of the United States submit to Congress, on or before the first Monday in February of each year, a detailed budget request for the coming federal fiscal year, which begins on October 1. The President's FY 2014 budget request to Congress will be issued in February 2013. In support of the President's budget request, the Department of Energy Idaho Operations Office (DOE-ID) field budget process included the estimated funding levels required to achieve full compliance with the STP.

### **9.4 Outyear Site Treatment Plan Funding**

Although it is prepared annually, the President's FY 2014 budget request must anticipate program needs for five years in the future. DOE-ID funding requests identify all STP milestones and activities as high priority, and the annual approval of funds sufficient to meet all STP activities is anticipated.

## 10. TRANSURANIC-CONTAMINATED WASTE MANAGEMENT

### 10.1 Introduction

Per Section 5.4 of the pending update to the STP, DOE is providing information in this annual report regarding the progress in the management of TRU-contaminated waste at the INL.

### 10.2 Progress

TRU waste at the INL is managed by Idaho Treatment Group, LLC (ITG), Battelle Energy Alliance (BEA), and CH2M♦WG Idaho, LLC (CWI).

ITG has maintained operational responsibility of the AMWTP during FY 2012. During this reporting period, ITG processed and shipped over 2,137 m<sup>3</sup> of CH-TRU waste to WIPP. In addition, the AMWTP processed 1,066 m<sup>3</sup> of waste that was declared legacy MLLW, and 31 m<sup>3</sup> of newly generated MLLW, which were shipped off-Site for treatment/disposal at EnergySolutions, or the Nevada National Security Site (NNSS).

CWI manages the Idaho Cleanup Project contract at the INL and has responsibility for achieving disposition of the stored remote-handled (RH) TRU waste previously stored in the Intermediate-Level Transuranic Storage Facility and additional INL RH-TRU waste generated by other site facilities. During FY 2012, CWI continued the characterization, certification, and shipment of RH-TRU waste to WIPP. Through the end of FY 2012, a total of 289 shipments have been sent to WIPP. This waste is non-hazardous, and these data are provided for information only.

Efforts to dispose of INL RH-TRU subject to the Idaho Settlement Agreement are underway. RH-TRU waste containers stored at the Materials and Fuels Complex (MFC) Radioactive Scrap and Waste Facility were retrieved and shipped to the Idaho Nuclear Technology and Engineering Center (INTEC) for processing. These wastes, originally generated at the MFC Hot Fuel Examination Facility (and from Argonne National Laboratory) are processed and repackaged into containers suitable for characterization and shipment to WIPP.

Repackaging of waste containers from MFC continued in FY 2012 at INTEC. Retrieval of sodium-contaminated waste at MFC was initiated in FY 2012 for future processing at INTEC. The remaining mixed waste product drums will be shipped to WIPP as waste stream approvals are received from WIPP and shipping schedules allow for completion of disposal of this inventory of waste.

Repackaging RH-TRU waste containers from the Naval Reactors Facility (NRF) to INTEC was initiated in FY 2011 and completed in FY 2012. As of the end of FY 2012, 61 of the original 68 containers were repackaged into a configuration suitable for characterization and shipment to WIPP. The remaining seven containers were sent to M&EC for treatment and eventual disposal at (NNSS). Additionally, the 25 containers of NRF waste, contained in five concrete vaults and shipped to INTEC in FY 2011, were successfully recovered and repackaged into containers suitable for characterization and shipment to WIPP. Two of these containers were classified as low-level waste and will be disposed of at NNSS. The TRU waste stream is now approved by WIPP regulators for disposal at WIPP. A total of 21 shipments of NRF waste have been made to WIPP. The remaining NRF waste will be shipped to WIPP and NNSS in FY 2013.