0093670

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

11-AMRC-0068

JAN 18 2011

Mr. D. A. Faulk, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Blvd, Suite 115
Richland, Washington 99352

Dear Mr. Faulk:

TRANSMITTAL OF STATEMENT OF DISPUTE (SOD) FOR HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) CHANGE CONTROL FORM M-16-10-06

The purpose of this letter is to transmit the attached subject SOD to the U.S. Environmental Protection Agency (EPA). In accordance with Article XVI, paragraph 59 of the Tri-Party Agreement, this SOD will elevate the dispute to the Interagency Management Integration Team (IAMIT) level for resolution. This SOD concerns the disapproval of Change Package M-16-10-06 that requested modification of Interim Milestone M-016-140.

The U.S. Department of Energy Richland Operations Office (RL) has met with EPA at the project manager level to discuss and resolve this dispute. Because RL and EPA have not yet been able to resolve the dispute, in accordance with the Tri-Party Agreement process, RL is submitting the SOD to the IAMIT. RL looks forward to meeting with EPA at the IAMIT level to resolve this dispute.

If you have questions, please contact me or your staff may contact Tom Teynor, of my staff, on (509) 376-6363.

Sincerely,

Joe R. Franco, Assistant Manager
for the River Corridor

AMRC:RAQ

Attachments

cc w/attachs: (See Page 2)

cc w/attachs:
G. Bohnee, NPT
L. Buck, Wanapum
S. Harris, CTUIR
J. A. Hedges, Ecology
M. N. Jaraysi, CHPRC
R. Jim, YN
M. W. Johnson, CHPRC
R. A. Kaldor, MSA
K. L. Kehler, CHPRC
S. L. Leckband, HAB
R. L. Lobos, EPA
K. Niles, ODOB
J. F. Ollero, MSA
R. E. Piippo, MSA
Administrative Record, H6-08
Environmental Portal, A3-01

January 13, 2011

STATEMENT OF DISPUTE

Interim Milestone M-016-140

I. NATURE OF DISPUTE

This dispute is raised pursuant to Article XVI, paragraph 59, of the Hanford Federal Facility Agreement and Compliance Order (Tri-Party Agreement or TPA). It concerns the disapproval by the U.S. Environmental Protection Agency (EPA) of Tri-Party Agreement Change Control Form M-16-10-06 (change package). The U.S. Department of Energy (DOE) submitted the change package for EPA approval on December 10, 2010. The letter transmitting the M-16-10-06 change package, *MODIFICATION TO MILESTONE M-016-140, SUBMIT REVISED REMEDIAL DESIGN/REMEDIAL ACTION (RD/RA) WORK PLANS FOR 100-K ARE RODS AS PRIMARY DOCUMENT(S) PER HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) 11.6 WITH NEW PROPOSED MILESTONES*, requested discussions with EPA to address milestone changes that would allow credit for those items of Milestone M-016-140 that will be completed by March 31, 2011, and to gain agreement on a strategy for addressing the two remaining items. EPA disapproved the change package on December 14, 2010.

The letter transmitting the change package identified that DOE would meet all but two (highlighted in bold below) elements of the M-016-140 Tri-Party Agreement (TPA) Milestone. Milestone M-016-140 requires RL to "Submit revised RD/RA Work Plans for 100 K Area RODs as primary document(s) per HFFACO 11.6 with new proposed milestones including for the following:

- Complete removal of the K West Basin
- Complete removal of all sludge (includes container, settler tank sludge) from K West Basin except knock out pot contents
- Complete removal of knock out pot contents
- ***Complete treatment and packaging of first container of TRU sludge waste certifiable for disposal at WIPP***
- ***Complete treatment and packaging of sludge for disposal at WIPP***
- Begin 105-KW reactor interim safe storage
- Complete 105-KW reactor interim safe storage
- Initiate soil remediation under K West Basin
- Complete all interim response actions at the 100 K Area

The RD/RA Work Plans to initiate and then complete treatment and packaging of sludge certifiable for disposal at the Waste Isolation Pilot Plant (WIPP) (the fourth and fifth bullets bolded in the above list) cannot be submitted by the March 31, 2011 milestone due date because the sludge to be treated is unique and, to date, a safe and effective treatment technology has not been demonstrated. In addition, DOE has determined it is necessary to remove the sludge from the river corridor without treatment in order to reduce the potential risk to the Columbia River and to accomplish the "2015 Vision" for early completion of cleanup of the Columbia River corridor. DOE's primary objective for this milestone, the complete removal of radioactive and chemical wastes from the river corridor, would be accomplished much more rapidly with the approach that was proposed in the M-16-10-06 change package.

The remaining seven elements in the M-016-140 Milestone will be addressed as proposed new milestones in draft TPA change packages that will be submitted to EPA by the milestone due date of March 31, 2011. DOE is also developing new RD/RA Work Plans to meet the remaining requirements of M-016-140. The new RD/RA Work Plans will be submitted to EPA for review by the milestone due date.

DOE disagrees with the disapproval of the M-16-10-06 change package by EPA and seeks to re-negotiate the M-016-140 milestone in order to align the submittal of a work plan for treatment

and packaging of sludge certifiable for disposal at WIPP with 1) demonstrated technical safety and technology readiness, and 2) the decision to accelerate removal of the untreated sludge from the river to reduce the potential risk to the Columbia River in support of the 2015 Vision. This Statement of Dispute (SOD) describes a comprehensive and defensible path forward for addressing the modification to the milestone.

II. DOE'S POSITION ON THE DISPUTE

DOE disagrees with EPA's disapproval of the Change Package based on two good causes for modification of the two treatment and packaging elements in the milestone.

First, the TPA anticipates adjusting milestones as a result of any event arising from causes beyond the control of the Party. (Paragraph 120.A, HFFACO Article XL, Good Cause for Extensions.) The sludge waste at issue is unique and despite several years of DOE's best efforts, including having highly qualified waste management contractors test technology for treating the composite, no existing sludge treatment technology has been proven to be safe and effective.

Second, the TPA accepts adjusting milestones as a result of a delay caused, or likely to be caused, by the grant of an extension in regard to another timetable and deadline or schedule. (See Paragraph 120.D, HFFACO Article XL, Good Cause for Extensions.) The Hanford 2015 Vision is to complete the cleanup of the river corridor including the 100 K Area by 2015. As anticipated by the Hanford 2015 Vision, and detailed in the M-16-10-06 change package, accelerated removal of the sludge away from the river corridor will increase public safety, reduce risk to public health and the environment, and accelerate 100 K Area remediation.

DOE firmly believes that good cause exists to revise the milestone and remove the two elements for treatment and packaging of sludge certifiable for disposal at WIPP because a phased approach providing for the prompt removal of the sludge from the river corridor by 2015, without the delay of treatment prior to removal, reduces the potential risk to the Columbia River and supports the Hanford 2015 Vision and accelerates the 100 K Area remediation .

Discussion of Sludge Uniqueness Justifying a Technology Based Milestone Change

The K Basin sludge has unique characteristics that make it difficult to treat and package. The sludge is highly variable in composition, highly radioactive, extremely erosive of process equipment, and includes significant amounts of uranium metal that is chemically reactive and generates explosive hydrogen gas. No similar sludge has been known to be successfully treated. Due to the unique composition of the sludge, remote handling is required. In addition, the difficult working environment in the K West Basin limits the types of equipment and technology that can be deployed.

To date, no known technology has been developed and successfully demonstrated that addresses all the technical challenges presented by the K Basins sludge. DOE has attempted several different technical approaches to disposition the sludge, using various technologies and contracting approaches. Previous technical approaches failed to demonstrate the technical feasibility and maturity necessary to design, construct, and operate a sludge treatment and packaging facility capable of processing and packaging sludge into containers suitable for disposal at WIPP . Most recently, in 2007, a sludge treatment and packaging system that was nearing completion of final design was cancelled because critical technology elements were not sufficiently mature to support start of construction. The primary barriers to technology development were insufficient characterization data, unavailability of sludge simulants for demonstration testing, and the lack of a technology testing capability.

DOE enacted several initiatives to address these issues. DOE initiated a program to sample and characterize the sludge currently stored in engineered containers in the K West Basin. DOE established a full scale technology testing facility in the Hanford 400 Area. DOE consulted with sludge chemistry experts at the Pacific Northwest National Laboratory to develop a bounding range of sludge simulants which have been used to perform rigorous technology testing and development. DOE initiated a treatment technology evaluation to identify viable technology options that could potentially be used to process and package the sludge in containers suitable for disposal at WIPP. DOE also conducted an exhaustive analysis to evaluate alternatives for removal of the sludge from the K West Basin, considering options both with and without treatment. The outcome of the alternative analysis was a two-phase approach for sludge treatment: a) remove sludge from the Columbia River Corridor and place it in safe interim

storage (Phase 1); and b) remobilize, treat, and package the sludge for shipment to a national repository (Phase 2). DOE developed and implemented the two-phase approach in 2008-2009 with EPA knowledge and input.

Disposition of K Basin sludge has been and continues to remain a high priority for DOE as its timely removal impacts the completion of the 2015 Vision. Despite the technical challenges of treating the sludge, the sludge treatment project has made significant progress toward removal of K Basin sludge from the river and placement of it into interim storage on the Central Plateau by 2015. All floor and pit sludge originating from the KE and KW Basins is currently stored in five underwater engineered containers in the KW Basin. Settler tank sludge previously generated from spent nuclear fuel washing has been successfully retrieved into a sixth container. Characterization sampling of all six in-basin containers has been completed to support future processing. The conceptual design for removal of the Engineered Container (KE & KW floor, pit, and settler tank) sludge retrieval system has been completed, as well as the preliminary design for the knockout pot material. A rigorous testing program to ensure the technical readiness of the sludge retrieval systems to be deployed in the KW Basin has been implemented.

DOE is also pursuing development of treatment and packaging technologies for K Basin sludge and is currently evaluating eight different sludge treatments and packaging options that have been proposed by five vendors. A formal down-select process will commence after the evaluations have been concluded and a recommended treatment option will be proposed during Fiscal Year 2011. The selection of a recommended treatment option will not occur until after the M-016-140 milestone is due on March 30, 2011. EPA project staff will be invited to participate in the down select process to gain a clear understanding of the sludge treatment and packaging options proposed by the vendors. The recommended treatment option will represent only a pre-conceptual level of design and will require further development before reaching the 30% design level required for a RD/RAWP.

Previous efforts with sludge treatment have shown that treatment milestones did not allow sufficient time for development of treatment technology, attempted to force treatment technology to work prematurely, and thus were based on unachievable milestone dates and durations. DOE's position is that treatment milestones cannot be established until treatment capability is

developed and demonstrated at a preliminary design level. Therefore, DOE has proposed the attached change package solution which allows for developing and implementing a performance management baseline before proposing milestone dates, rather than prepare an RD/RA Work Plan based on an unproven technology that could repeat past failures and potentially be unsafe to deploy and not protective of human health and the environment.

Discussion on the 2015 Vision Acceleration In Sludge Removal Schedule Cause

The M-016-140 milestone was part of a TPA change package proposed in 2009 to align Hanford cleanup work with near-term priorities. When the milestone was established, DOE was initiating implementation of the 2015 Vision to reduce the active area of cleanup to the Hanford Central Plateau and shrink the site footprint from approximately 586 square miles to only 75 square miles. A key component of the 2015 Vision is accelerating cleanup of the river corridor to reduce potential risk to the Columbia River. The 2015 Vision was implemented with regulator and stakeholder input. For example, discussion of the 2015 Vision was included in March 2009 TPA Fact Sheet requesting public comment on the proposed TPA change package that included M-016-140.

Accomplishment of the 2015 Vision requires accelerated removal of the K Basin sludge. Removal of the sludge prior to treatment accelerates removal of the sludge from the river by 5 to 9 years versus treating the sludge near the river while it is being stored in an aged basin facility. Therefore, RL reevaluated and made a decision to change its approach from performing treatment of sludge in the 100K area near the river to accelerating the removal of the sludge away from the river corridor and placing it in interim safe storage on the Central Plateau where it can safely await treatment by a proven technology. There are many benefits that occur from the accelerated removal of sludge. The removal of structures and remediation of soil and groundwater will also be accelerated. Public safety will be enhanced through avoidance of potential accidents and consequences to the public associated with treatment and storage of sludge near the river. The environmental risk associated with storing, treating and packaging sludge near the river is eliminated. The cost of designing, constructing, testing, and operating a nuclear treatment facility near the Columbia River that is focused on a single waste stream is avoided as well as the future costs associated with decommissioning, demolishing, and disposing of the treatment facility.

It is DOE's position that implementation of the two-phase approach consistent with the 2015 Vision and reduction of risk to the Columbia River represents good cause for adjusting the M-016-140 milestone treatment components as presented in the letter and the M-16-10-6 change package.

III. SUPPORTING INFORMATION

A. Milestone History

Change Control Form M-16-08-09 was approved on August 11, 2009 and established a new M-016-00C major milestone and six new M-16 interim milestones. Milestone M-016-140 is one of the new interim milestones.

In 2008 DOE conducted an alternative analysis for removal of sludge from the K West Basin. The alternatives considered included treatment and packaging of the sludge either before or after removal from the basin. The recommended alternative was a two-phase approach: retrieve and transport sludge without treatment to T Plant for interim storage until a new facility located on the Central Plateau is built for treatment and packaging. In 2009 an External Technical Review of subject matter experts concurred with the recommended alternative and DOE formally decided to implement the two phase approach.

Phase 1, removal of sludge from the K West Basin and transport to T Plant for interim safe storage is currently in the preliminary design phase and is expected to start removal of sludge in October 2013 and complete removal in December 2014.

For Phase 2, treatment and packaging of sludge, a treatment technology evaluation is currently in process and expected to produce a technology recommendation in 2011 based on the bench scale testing, pre-conceptual design information, and rough order-of-magnitude (ROM) cost estimates. Since 2008, in support of Phase 1 and Phase 2 activities, DOE has also retrieved sludge contained in the K West Basin settler tanks into an engineered container, completed sampling of all sludge currently stored in all six underwater engineered containers in the K West Basin, and

implemented a technology testing program using full scale mockups and a range of bounding simulants.

The remaining seven elements in the M-016-140 Milestone will be addressed as proposed new milestones in draft TPA change packages that will be submitted to EPA by the milestone due date of March 31, 2011. Two currently approved RD/RA Work Plans address three elements of the M-016-140 milestone: initiation of ISS of the 105-KW reactor, completion of ISS of the 105-KW reactor, and initiation of soil remediation under the K West Basin. The three new RD/RA Work Plans that DOE is developing to meet the remaining requirements of M-016-140 (complete removal of the K West Basin, complete removal of all sludge from K West Basin, and complete removal of the knock out pots) will be submitted to EPA for review by the milestone due date. Submittal of the RD/RA Work Plans and the change packages with proposed new milestones will demonstrate completion of the seven remaining elements of the M-016-140 Milestone.

IV. HISTORY OF ATTEMPTED RESOLUTION

RL informed EPA at the 100K Area Project Managers Meeting on August 19, 2010 that the sludge treatment and packaging elements of M-016-140 would not be met during the 100K Area Project Managers Meeting. This status has been discussed at each 100K Area Project Managers Meeting convened since August. DOE also notified EPA in the December 16, 2010 100K TPA Quarterly Milestone Review that information for sludge treatment and packaging was not sufficiently mature to prepare a useful RD/RA Work Plan and propose corresponding new milestones. Informal discussion on the delay in meeting the sludge treatment and packaging component of the milestone have been ongoing between the DOE and EPA project managers since August 2010.

RL transmitted Tri-Party Agreement Change Control Form M-16-10-06 to EPA on December 10, 2010. EPA disapproved the change package on December 14, 2010 and did not provide an explanation for disapproval as required by Hanford Federal Facility Agreement and Consent Order section 12.3.3 Response to Requests for Modifications, "If a Party disapproves a requested modification, it shall explain the basis for the disapproval in writing." RL submitted a timely

formal notice invoking dispute to EPA on December 21, 2010 and has continued discussions with EPA project staff on an approach to resolve the dispute.

V. RECOMMENDED RESOLUTION

DOE recommends and looks forward to meeting with EPA to discuss potential options to resolve the dispute concerning Milestone M-016-140. DOE recommends modifying the M-016-140 interim milestone to remove the requirement to prepare the RD/RA Work Plan and milestones for treatment and packaging of sludge certifiable for disposal at WIPP, and instead establish separate target dates to provide annual status on developing the technology and capability to treat and package the K Basin sludge, and a target date for submitting a RD/RA Work Plan addendum for K Basin sludge treatment and packaging following a Critical Decision 2 approval by DOE. The proposed milestone modifications are contained in draft TPA Change Request M-16-11-01, attached.

As described in this statement of dispute, and reflected in the draft change request, the DOE believes that good cause has been demonstrated to modify the M-016-140 interim milestone to remove the requirement to prepare the RD/RA Work Plan and milestones for initiation and completion of sludge treatment and packaging, and instead establish separate target dates to provide annual status on developing the technology and capability to treat and package the K Basin sludge. Therefore, DOE proposes that DOE and EPA meet as soon as possible to discuss the draft change request and work together to identify a mutually agreeable approach for sludge treatment and packaging and completion the interim remediation of the 100K Area.

ATTACHED M-16-11-01 CHANGE PACKAGE

Change Number M-16-11-01 DRAFT	**Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.**	**Date** 1/10/2011

Originator Jose R. Franco, Jr. **Phone** (509) 376-4343

Class of Change

[ ] I - Signatories [X] II - Executive Manager [ ] III - Project Manager

Change Title

Modification of *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-016-140 Interim Milestone

Description/Justification of Change

Approval of this change package will provide for additional time to adequately prepare a RD/RAWP for K Basin Sludge Treatment and Packaging. The requirement to prepare the RD/RAWP will be removed from M-016-140, and separate target milestone dates are established to provide annual status on developing the technology and capability to treat and package the K Basin sludge until a Critical Decision 2 (CD-2) is approved. Following CD-2 approval, a RD/RA Work Plan addendum will be submitted for K Basin sludge treatment and packaging. Additional interim milestone dates and target milestone dates are being established for activities that accelerate removal of the sludge from the 105-K West Basin.

Impact of Change

This change allows the schedule for development of the RD/RAWP for K Basin Sludge Treatment and Packaging to coincide with the expected progress of the project. Additional milestones have been developed to track progress toward achieving treatment and packaging capability for K Basin Sludge.

Affected Documents

The *Hanford Federal Facility Agreement and Consent Order*, as amended and Hanford Site internal planning management, and budget documents (e.g., USDOE contractor Baseline Change Control documents).

Approvals

N/A _____ _____Approved_____Disapproved
Ecology Date

_____ _____ _____Approved_____Disapproved
DOE-RL Date

_____ _____ _____ Approved_____Disapproved
EPA Date

Description/Justification, Continued from Page 1

The RD/RA Work Plan to complete treatment and packaging of sludge certifiable for disposal at WIPP will not be available by the March 31, 2011 Milestone completion date, thus placing the entire M-016-140 interim Milestone in jeopardy.

The M-016-140 Milestone was established in 2009 to promote integration of K Basin Sludge Treatment Project (STP) with 100 K Area closure activities and premised upon establishing a treatment facility within the 100 K Area. Consistent with reducing the potential risk to the Columbia River and the DOE-RL 2015 Vision to complete cleanup of the River Corridor by 2015, RL has shifted its approach from performing treatment and packaging of sludge at the 100 K area to accelerating removal of the sludge from the river corridor prior to treatment and placing it in safe storage on the Central Plateau pending development of final sludge treatment capabilities. This approach accelerates removal of the sludge from the river corridor by 5 to 9 years.

Treating sludge away from the 100 K Area provides the following advantages:

- Accelerates removal of sludge from the river corridor by approximately 5-9 years, reducing risk to the Columbia River and groundwater.
- Accelerates the removal of 100 K Area structures and completion of soil remediation activities.
- Reduces the environmental risk associated with storing and treating sludge near the river.
- Increases public safety through avoidance of potential accidents and consequences to the public associated with treatment and storage of sludge near the river.
- Avoids the cost of designing, constructing, testing, and operating a Category 2 Nuclear Treatment Facility on the Columbia River focused on a single waste stream.
- Avoids the future costs associated with decommissioning, demolishing, and disposing of the treatment facility.
- Enhances worker safety and equipment operability by minimizing the placement of new equipment within the K West Basin and in-basin sludge handling activities.

The Sludge Treatment Project has made significant progress toward removal of K Basin sludge for interim storage and identification of an appropriate treatment technology; accomplishments include:

- Successful retrieval of all settler tank sludge into an in-basin container.
- Completed sampling of sludge in five of the six in-basin containers; sampling of the sixth container is in progress and will be completed early in FY2011.
- Completed conceptual design for the removal of the Engineered Container (KE & KW floor, pit, and Settler Tube) sludge retrieval system.
- Completed preliminary design for the knockout pot material processing system.

Description/Justification, Continued from Page 1

- Implemented a rigorous testing program to ensure the technical readiness of the sludge retrieval systems that will be deployed in the KW Basin.
- Started a treatment and packaging technology evaluation that will be concluded with a formal down-select process and treatment recommendation in FY2011. EPA will be invited to participate in the down-select process.

RL intends to prepare a single RD/RA Work Plan to complete the scope of the second through fifth elements of the M-16-140 milestone . As design levels advance towards 90% completion, Remedial Design Reports (RDRs) will be prepared and added as addenda to the RD/RA Work Plan. This approach was successfully implemented, with EPA involvement, in the 221-U Facility RD/RA Work Plan. This single RD/RA Work Plan will include proposed target dates and interim milestones that build on recent project accomplishments and provide measureable progress to select and establish a suitable sludge treatment and packaging capability. The proposed milestones are identified in this change package.

Description/Justification, Continued from Page 1

Modifications to existing Tri-Party Agreement milestone M-016-140 are denoted with ~~strikeout~~; new milestones/text are denoted with double underline.

M-016-140	Submit Revised RD/RA Work Plans For 100 K Area RODs As Primary Document(S) Per HFFACO 11.6 With New Proposed Milestones Including For The Following: • Complete Removal Of The K West Basin • Complete Removal Of All Sludge (Includes Container, Settler Tank Sludge) From K West Basin Except Knock Out Pot Contents • Complete Removal Of Knock Out Pot Contents • ~~Complete Treatment And Packaging Of First Container Of TRU Sludge Waste Certifiable For Disposal At WIPP~~ • ~~Complete Treatment And Packaging Of Sludge For Disposal At WIPP~~ • Begin 105-KW Reactor Interim Safe Storage • Complete 105-KW Reactor Interim Safe Storage • Initiate Soil Remediation Under K West Basin • Complete All Interim Response Actions At The 100 K Area	03/31/2011
M-016-170-T01	Complete KOP material pre-treatment	09/30/2011
M-016-171	Complete K Basin sludge treatment and packaging technology evaluation report	03/31/2012
M-016-172-T01	Complete KOP material removal from 105-K West Basin	09/30/2012
M-016-173-T01	Select K Basin sludge treatment and packaging technology	03/31/2013
M-016-174-T01	Complete final design of sludge retrieval and transfer system	09/30/2013
M-016-175	Begin sludge removal from 105-K West Basin	09/30/2014
M-016-176-T01A	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2011
M-016-176-T01B	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2012

Description/Justification, Continued from Page 1

M-016-176-T01C	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2013
M-016-176-T01D	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2014
M-016-176-T01E	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2015
M-016-176-T01F	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2016
M-016-176-T01G	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2017
M-016-176-T01H	Submit annual update (e.g., letter report)on development of treatment and packaging capability until a performance management baseline can be developed and implemented upon STP Phase 2, CD-2 approval	09/30/2018
M-016-177	Complete sludge removal from 105-K West Basin	12/31/2015
M-016-178-T01	Following CD-2 approval, submit RD/RAWP addendum for K Basin sludge treatment and packaging, including new proposed milestone dates for the following: • Complete treatment and packaging of first container of TRU sludge waste certifiable for disposal at WIPP • Complete treatment and packaging of sludge for disposal at WIPP	6 months from CD-2 approval