

Table 1: Summary of Implementation Plan Commitments and Deliverables

Number	Commitment	Deliverable	Record of Completion
5.1.1	Identify Environmental Management (EM) defense nuclear facilities for which a criticality safety program is required (per DOE O 420.1B) and relies upon <i>in situ</i> NDA.	List of EM defense nuclear facilities for which a criticality safety program is required per DOE O 420.1B and relies upon <i>in situ</i> NDA.	January 29, 2008, Department letter identifying and prioritizing EM defense nuclear facilities for which a criticality safety program is required (per DOE O 420.1B) and relies upon <i>in situ</i> NDA. This letter satisfies the completion of Commitments 5.1.1 and 5.1.3 of the Department of Energy Implementation Plan for DNFSB Recommendation 2007-1.
5.1.2	Identify National Nuclear Security Administration (NNSA) defense nuclear facilities for which a criticality safety program is required (per DOE O 420.1B) and relies upon <i>in situ</i> Non-destructive Assay (NDA).	List of NNSA defense nuclear facilities for which a criticality safety program is required per DOE O 420.1B and relies upon <i>in situ</i> NDA.	January 30, 2008, Department letter regarding National Nuclear Security Administration's (NNSA) deliverables required to fulfill commitments 5.1.2 and 5.1.4 of the Department's Implementation Plan responding to Board Recommendation 2007- 1.
5.1.3	Prioritize EM defense nuclear facilities based upon criticality accident risk for those facilities identified in Commitment 5.1.1.	Prioritized list of EM defense nuclear facilities based upon criticality accident risk.	January 29, 2008, Department letter identifying and prioritizing EM defense nuclear facilities for which a criticality safety program is required (per DOE O 420.1B) and relies upon <i>in situ</i> NDA. This letter satisfies the completion of Commitments 5.1.1 and 5.1.3 of the Department of Energy Implementation Plan for DNFSB Recommendation 2007-1.

5.1.4	Prioritize NNSA defense nuclear facilities based upon criticality accident risk for those facilities identified in Commitment 5.1.2.	Prioritized list of NNSA defense nuclear facilities based upon criticality accident risk.	January 30, 2008, Department letter regarding National Nuclear Security Administration's (NNSA) deliverables required to fulfill commitments 5.1.2 and 5.1.4 of the Department's Implementation Plan responding to Board Recommendation 2007- 1.
5.2.1	Establish criteria for conducting state of the practice reviews of; a) training and qualification; b) design requirements for new facilities and equipment; c) standards for conducting NDA holdup measurements; d) implementation of standards; e) research and development; f) quality assurance; and g) oversight.	Review criteria for training and qualification; design requirements for new facilities and equipment; standards for conducting NDA holdup measurements; implementation of standards; research and development; quality assurance; and oversight.	December 22, 2008, Departmental letter regarding the completion of Commitments 5.2.1, 5.2.2, 5.2.3, and 5.5.2 in the Implementation Plan for Board Recommendation 2007-01.
5.2.2	Establish schedule to conduct state of the practice reviews (to be completed within one year) of EM facilities identified in Commitment 5.1.3.	Schedule of reviews.	December 22, 2008, Departmental letter regarding the completion of Commitments 5.2.1, 5.2.2, 5.2.3, and 5.5.2 in the Implementation Plan for Board Recommendation 2007-01.
5.2.3	Establish schedule to state of the practice reviews (to be completed within one year) of NNSA facilities identified in Commitment 5.1.4.	Schedule of reviews.	December 22, 2008, Departmental letter regarding the completion of Commitments 5.2.1, 5.2.2, 5.2.3, and 5.5.2 in the Implementation Plan for Board Recommendation 2007-01.

5.2.4	Conduct EM state of the practice reviews per the schedule established in Commitment 5.2.2 with the assistance of the NDA Technical Support Group.	Reports to the Program Secretarial Officer (PSO) indicating the results of the reviews, any concerns and the actions necessary to address the concerns.	November 18, 2009, Department letter forwarding the deliverables for commitments 5.2.4 and 5.2.5 in the 2007-1 Implementation Plan.
5.2.5	Conduct NNSA state of the practice reviews per the schedule established in Commitment 5.2.3 with the assistance of the NDA Technical Support Group.	Reports to the PSO indicating the results of the reviews, any concerns and the actions necessary to address the concerns.	November 18, 2009, Department letter forwarding the deliverables for commitments 5.2.4 and 5.2.5 in the 2007-1 Implementation Plan.
5.2.6	Identify good practices discovered during the state of the practice reviews with respect to training and qualification, design requirements for new facilities and equipment, standards for conducting <i>in situ</i> NDA holdup measurements, implementation standards, research and development, quality assurance, and oversight.	Report identifying good practices with respect to training and qualification, design requirements for new facilities and equipment, standards for conducting <i>in situ</i> NDA holdup measurements, implementation standards, research and development, and oversight.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.1	Identify good practices, for both commercial and within the Department, for NDA training and qualification.	Report identifying good practices for NDA training and qualification.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.2	Identify good practices for both commercial and within the Department, for NDA design requirements for new facilities and equipment.	Report identifying good practices for NDA design requirements for new facilities and equipment.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.

5.2.6.3	Identify good practices, for both commercial and within the Department, for standards for conducting <i>in situ</i> NDA.	Report identifying good practices for NDA for standards for conducting <i>in situ</i> NDA.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.4	Identify good practices, for both commercial and within the Department, for implementation of NDA standards.	Report identifying good practices for implementation of NDA standards.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.5	Identify recent and ongoing research and development applicable to <i>in situ</i> NDA, and identify commercially available (domestic and international) instrumentation/methods.	Report identifying ongoing R&D in the US/international laboratories and commercially available instrumentation that would, if implemented, reduce the uncertainties associated with <i>in situ</i> NDA.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.6	Identify good practices, for both commercial and within the Department, for implementation of NDA quality assurance.	Report identifying good practices for implementation of NDA quality assurance.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.7	Identify good practices, for both commercial and within the Department, for implementation of NDA oversight.	Report identifying good practices for implementation of NDA oversight.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.
5.2.6.8	Identify roles and responsibilities for NDA oversight personnel.	Report identifying good practices for effective oversight.	January 19, 2010, Department letter transmitting the report that supports completion of the Section 5.2.6 commitments in the 2007-1 IP.

5.3.1	Identify DOE NDA holdup measurement needs and technical bases for personnel training and qualification; equipment capabilities; directives; research and development; quality assurance; oversight; and any interim actions.	Report identifying DOE NDA holdup measurement needs with technical bases for personnel training and qualification; equipment capabilities; directives; research and development; quality assurance; oversight; and any interim actions.	June 7, 2010, Department letter informing of the completion of Commitments 5.3.1.4, 5.3.1.5, and 5.3.1.6 in the Implementation Plan for Recommendation 2007-01.
5.3.1.1	Identify NDA personnel training and qualification needs and any interim actions.	Report identifying NDA personnel training and qualification needs.	March 31, 2010, Department letter transmitting the report that supports completion of the Section 5.3.1 commitments in the 2007-1 IP.
5.3.1.2	Identify NDA equipment capabilities and needs and any interim actions.	Report identifying NDA equipment capabilities and needs.	March 31, 2010, Department letter transmitting the report that supports completion of the Section 5.3.1 commitments in the 2007-1 IP.
5.3.1.3	Identify <i>in situ</i> NDA directive needs and any interim actions.	Report identifying <i>in situ</i> NDA directive needs.	March 31, 2010, Department letter transmitting the report that supports completion of the Section 5.3.1 commitments in the 2007-1 IP.
5.3.1.4	Identify and incorporate the needs for R&D through the Planning, Programming, Budgeting, and Execution process of nuclear safety R&D.	Report identifying the R&D projects for which funding is requested.	June 7, 2010, Department letter informing of the completion of Commitments 5.3.1.4, 5.3.1.5, and 5.3.1.6 in the Implementation Plan for Recommendation 2007-01.
5.3.1.5	Identify quality assurance needs to ensure effective implementation of NDA activities and any interim actions.	Report identifying NDA quality assurance needs.	June 7, 2010, Department letter informing of the completion of Commitments 5.3.1.4, 5.3.1.5, and 5.3.1.6 in the Implementation Plan for Recommendation 2007-01.

5.3.1.6	Identify oversight needs consistent with DOE O 226.1 to ensure effective implementation of NDA activities.	Report identifying NDA oversight needs.	June 7, 2010, Department letter informing of the completion of Commitments 5.3.1.4, 5.3.1.5, and 5.3.1.6 in the Implementation Plan for Recommendation 2007-01.
5.4.1	Perform gap analysis and identify areas for improvement in training and qualification; equipment capabilities; directives; research and development; quality assurance; and oversight.	Gap analysis report identifying areas for improvement in training and qualification; equipment capabilities; directives; research and development; and oversight.	September 20, 2010, Department letter transmitting formal notice of completion of commitment for 5.4.1 of Recommendation 2007-1.
5.4.2	Define and prioritize requirements, programs, and guidance to address gaps in training and qualification; equipment capabilities; directives; research and development; quality assurance; and oversight.	Prioritized action plan with schedule and milestones to address the gap analysis results.	February 15, 2011, Department letter transmitting Deliverable 5.4.2 for the Implementation Plan of Board Recommendation 2007-1.
5.5.1	Establish the NDA Technical Support Group that is responsible and accountable for the identification and resolution of NDA issues and communicating NDA lessons learned.	NDA Technical Support Group established with approved Charter.	August 7, 2008, Departmental letter regarding the completion of Commitment 5.5.1 in the Implementation Plan for Board Recommendation 2007-01.
5.5.2	Identify methods for capturing and clearly communicating NDA lessons learned, new technology, innovative techniques, and areas in NDA in which research and development is needed.	“Information sharing” mechanism functioning for NDA.	December 22, 2008, Departmental letter regarding the completion of Commitments 5.2.1, 5.2.2, 5.2.3, and 5.5.2 in the Implementation Plan for Board Recommendation 2007-01.
5.5.3	Conduct triennial reviews of the need for new NDA holdup measurement technology and the status of ongoing NDA-related research and development programs.	Report to NA-17 on the need for new NDA holdup measurement technology and the status of ongoing NDA-related research and development programs.	Closed by this correspondence.

5.5.4	Conduct periodic reviews to ensure that NDA holdup measurement programs are using technology adequate for their intended purpose.	Schedule of periodic reviews (either incorporated with existing review schedule or as a standalone review).	Closed by this correspondence.
6.3.1	The Department will provide briefings to the Board and Board Staff. These briefings will include updates on the status of completing actions identified in the various reviews indicated in this IP.	Briefings.	Last Board Staff briefing was 22 March 2012.