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Title: Settlement Agreement and Stipulated Final Order (SFO), Ordered Action  
9 - Evaluation of P300 Integrated Work Management with Regards to  
Subject Matter Expert Engagement

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# memorandum

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**Subject: Settlement Agreement and Stipulated Final Order (SFO), Ordered Action 9 – Evaluation of P300 Integrated Work Management with Regards to Subject Matter Expert Engagement**

In accordance with the *LANL/NMED Settlement Agreement and Stipulated Final Order, Ordered Action 9, Attachment A*, the Respondents are required to provide a Memorandum documenting the Evaluation of Policy P300, *Integrated Work Management*, in regards to the role of Subject Matter Expert (SME) engagement in procedure review and approval. The purpose of the evaluation is to examine/document Laboratory institutional requirements in effect at the time of LANL’s 3706 Waste Re-packaging Campaign (conducted in accordance with the Framework Agreement) and subsequent revisions made to the Policy.

Laboratory Policy document P300 was issued in October 2008 under institutional authorization of the ADESH Directorate. The document is currently issued as Revision 7; revisions were made in October 2009, July 2010, October 2011, March 2012, January 2011, October 2014, and December 2015. The following table is an excerpt of, P300, Rev. 7, Section 10.0, *History* and reflects relevant changes to the document in light of Subject Matter Expert engagement in the integrated work management process.

### **P300 Revision Summary Changes Relevant to SME Engagement**

| <b>Effective Date of P300 Revision</b> | <b>Revision Number</b> | <b>Summary of Revisions</b>  |
|--|------------------------|--|
| 10/30/2009                             | Rev. 1                 | Updated Attachment A, <i>Integrated Work Management (IWM) Process for Research and Development (R&amp;D)</i> . Document was updated to emphasize critical thinking, strengthen guidance to reduce likelihood of “missed” moderate or high hazards in initial |



| Effective Date of P300 Revision | Revision Number | Summary of Revisions   |
|---------------------------------|-----------------|--|
|                                 |                 | hazard grading, and strengthen the hazard analysis review teams.   |
| 07/16/2010                      | Rev. 2          | Strengthened SME involvement and incorporation of a peer review process. Clarified SME types to be engaged and their level of involvement (Sections 3.1.2.a and 3.1.3.c). The peer review process was formalized (Section 3.1.3.b).  |
| 10/31/2011                      | Rev. 3          | Addition of two training courses for work document preparers: Course #12454 <i>IWM: Refresher</i> and Course #12494 <i>Integrated Work Management: What-If Checklist</i> .   |
| 10/16/2014                      | Rev. 6          | Clarified requirements for maintaining an institutional inventory of work activities. Formalized steps for determining an activity's hazard level based on an initial hazard screening process and documenting the determination. Worker authorization was redefined to be based on required training.   |
| 12/09/2015                      | Rev. 7          | Transition of the issuing authority from Associate Director for Environment, Safety, and Health (ADESH) to Associate Director for Nuclear and High Hazard Operations (ADNNHO). Responsible Manager changed from ADESH to Operations Support-Division Leader (OS-DL) and Responsible Office changed from ADESH to Operations Support-Division Office (OS-DO). |

The institutional requirement for hazard identification and control development has been an element dictated by P300 *Integrated Work Management* since its inception. The Policy has been strengthened by addition of peer reviews (Section 3.1.3.b) and SME involvement (Sections 3.1.2.a and 3.1.3.c). The addition of these requirements was applicable to all work activities. Revisions to the Policy, as documented in P300, section 10.0 - *History*, have strengthened the process and emphasized the need for SME input into hazard analysis and controls development. Systems have been provided to track and inventory work activities across the Laboratory.

The structure, formality and currency of P300 provides delivery of clear expectations for work definition, review, validation and documentation for all work activities across the Laboratory. P300, Revision 7, Section 10.0 – *History* is provided in Appendix 1.

MPH/lm

Attachment: 1. P300 *Integrated Work Management*, Rev. 7, effective 12/09/2015, Section 10.0 – *History*.

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## Appendix 1

### *P300 Integrated Work Management, Section 10.0 – History*

10.0 HISTORY

| Revision History |              |  |
|------------------|--------------|--|
| 10/31/08         | P300, Rev. 0 | Renumbered document, Implementation Procedure (IMP) 300, Integrated Work Management.   |
| 10/30/09         | P300, Rev. 1 | <p>Added the following new requirements:</p> <ul style="list-style-type: none"> <li>☐ procedure for extending the effective date of an Integrated Work Documents (IWD), and</li> <li>☐ Facility Operations Director (FOD) signature needed to approve work activities in multiple FOD jurisdictions (facility safety envelopes).</li> </ul> <p>Clarified the following:</p> <ul style="list-style-type: none"> <li>☐ Integrated Work Documents (IWDs) should address hazardous chemical spill control, mitigation, and cleanup, where appropriate.</li> </ul> <p>Updated Attachment A, Integrated Work Management (IWM) Process for Research and Development (R&amp;D), to emphasize critical thinking, identify the potential for interacting with the facility, the dangers of scope creep and getting fresh eyes and</p>  |
|                  |              | <p>outside help, including the following:</p> <ul style="list-style-type: none"> <li>▪ retained and reinforced the basic process for Integrated Work Management (IWM) and Integrated Safety Management (ISM),</li> <li>▪ strengthened guidance to reduce likelihood of “missed” moderate or high hazards in initial Person in Charge (PIC) grading,</li> <li>▪ strengthened hazard analysis review teams,</li> <li>▪ called for specific additional considerations in hazard analysis and development of controls,</li> <li>▪ added that PIC is to verify that workers from other line organizations are authorized by their own Responsible Line Managers (RLMs) to perform work, and</li> <li>▪ clarified annual review requirement for Research and Development (R&amp;D) IWDs.</li> </ul> <p>Reformatted to meet the requirements set forth in <u>P311-1</u>, <i>Creating, Revising, and Cancelling Institutional Documents</i>.</p> |

| Revision History |              |  |
|------------------|--------------|--|
| 07/16/10         | P300, Rev. 2 | <p>Revised to improve LANL activity-level work and integration of safe work practices. Revised to improve IWM implementation including strengthening Subject Matter Expert (SME) involvement, incorporating a peer review process, and clarifying other elements of IWM as follows:</p> <ol style="list-style-type: none"> <li>1. Clarified applicability of document when implementing within or across the IWM work categories, e.g., R&amp;D, operations, facilities maintenance, and subcontractors.</li> <li>2. Added requirement for confirming use of <i>Hazard Grading Table</i> (new requirement).</li> <li>3. Clarified applicability of IWD elements for low-hazard activities, e.g., forms.</li> <li>4. Clarified SME types and involvement.</li> <li>5. Added Peer Review requirement (new requirement).</li> <li>6. Added requirement for validation walk down documentation (new requirement).</li> <li>7. Revised complete security section to clarify annual review requirements and Security Requirements Tool (SRT) implementation.</li> <li>8. Added requirement for safety basis consideration (new requirement).</li> <li>9. Removed requirement for RLM or FOD to determine adequacy of IWD and communicate approval via memo (new requirement).</li> <li>10. Added requirement for IWDs and specific work activity procedures to be kept current (new requirement).</li> <li>11. Revised instructions for extending effective dates of IWDs.</li> <li>12. Removed requirement for RLMs to maintain listing of IWDs requiring qualified workers.</li> <li>13. Revised Attachment A to include requirements for peer review (flowchart revised); annual IWD review and expiration date established; PIC to involve SMEs throughout the process, as needed; PIC to appoint SMEs for Hazard Analysis team; and peers selected by RLM. (new requirements).</li> <li>14. Updated forms as applicable.</li> </ol> |
| 10/31/11         | P300, Rev. 3 | <p>Added two new required training courses: <u>Course #12454, IWM: Refresher</u>, and <u>Course #12494, Integrated Work Management: What-If Checklist</u> (2-day Course).</p> <p>Clarified existing requirements to align with current practice.</p> <p>Modified to reflect that this Quick Change does not require an Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) review.</p> <p>Added "Note 1" and reference to Box 12 instructions to Fig. A-1.</p> <p>Updated links, titles, and acronyms. Clarified references to forms.</p>   |

| Revision History |              |   |
|------------------|--------------|---|
| 03/30/12         | P300, Rev. 4 | <p>Revised <a href="#">IWM Toolbox</a> references to be consistent with Toolbox format changes.</p> <p>Clarified existing requirements to align with current practice.</p> <p>Clarified and improved alignment of Attachment A with the main body of the document.</p> <p>Clarified use of “workers or a representative set of workers...” for High-Hazard Complex hazard analysis team.</p> <p>Clarified process for RLM, or RLM designee, authorization of workers from other organizations. Incorporated optional <a href="#">Form 3024, Responsible Line Manager Delegation Form</a> into the <a href="#">IWM Toolbox</a>.</p> <p>Eliminated requirements for use of Security Requirements Tool (SRT).</p> <p>Clarified requirement for documenting feedback and lessons learned. Incorporated acceptance of organizational-specific methods that capture lessons learned on a periodic basis.</p> <p>Added “Note” to clarify requirement to keep IWDs or equivalent current to match referenced Institutional Documents.</p> |
| 01/22/14         | P300, Rev. 5 | <p>Section 3.1.2, Identify and Analyze Hazards, was modified to be consistent with an existing requirement in P101-32, Worker Exposure Assessments. Specifically, RLMs must involve ESH deployed personnel in work planning activities to ensure worker exposure assessments are completed when required during the hazard identification and analysis stage of work planning.</p> <p>Updated language in Section 5.0 to reflect Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) process and implementation dates for affected facilities.</p>   |
| 10/16/14         | P300, Rev. 6 | <p>Performed three-year review in accordance with <a href="#">PD311, Requirements System and Hierarchy</a>.</p> <p>Clarified requirements associated with maintaining an institutional inventory of work activities, determining an activity's hazard level based on an initial hazard screening process, and documenting the determination.</p> <p>Redefined worker authorization to be based on training requirements.</p> <p>Revised Attachment A to be consistent with the clarified requirements associated with the <a href="#">Work Management System</a> and completing an initial hazard screening that supports the activity hazard level determination.</p> <p>Reordered Attachment B questions to be from high hazard to low hazard.</p> <p>Deleted references to the JHA tool.</p> <p>Updated language in Section 5.0 to reflect Unreviewed Safety Question/Unreviewed Safety Issue (USQ/USI) process and implementation dates for affected facilities.</p>  |

| Revision History |              |  |
|------------------|--------------|--|
|                  | P300, Rev. 7 | <p>Section 2.1: The Issuing Authority (IA), Responsible Manager (RM), and Responsible Office (RO) were changed as follows:</p> <ul style="list-style-type: none"> <li>▪ IA changed from Associate Director for Environment, Safety, and Health (ADESH) to Associate Director for Nuclear and High Hazard Operations (ADNHHO)</li> <li>▪ RM changed from ADESH to Operations Support-Division Leader (OS-DL)</li> <li>▪ RO changed from ADESH to Operations Support-Division Office (OS-DO)</li> </ul> <p>Section 5.0: Updated to reflect that this document is effective on the date of issue.</p> <p>Section 9.2: Updated acronyms.</p> <p>Section 14.0: Update contact information</p> |