

MFFFNPEm Resource

From: Tiktinsky, David
Sent: Friday, March 19, 2010 8:26 AM
To: 'DWGwyn@moxproject.com'; 'dbadkins@moxproject.com'
Cc: Morrissey, Kevin; Oesterle, Eric; MFFFHearingFile Resource
Subject: FW: MOX PPP RAI Mar 2010.doc
Attachments: MOX PPP RAI Mar 2010.doc

Importance: High

Questions related to the PPP. If you have any questions on them, please let me know. Thanks.

From: Wray, Barry
Sent: Friday, March 19, 2010 6:06 AM
To: Tiktinsky, David
Subject: MOX PPP RAI Mar 2010.doc

Dave,

As promised, If they have any questions they can call me.

301-415-0232

Hearing Identifier: MixedOxideFuelFabricationFacility_NonPublic
Email Number: 1677

Mail Envelope Properties (0A64B42AAA8FD4418CE1EB5240A6FED11164C8B99E)

Subject: FW: MOX PPP RAI Mar 2010.doc
Sent Date: 3/19/2010 8:25:52 AM
Received Date: 3/19/2010 8:25:53 AM
From: Tiktinsky, David

Created By: David.Tiktinsky@nrc.gov

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Tracking Status: None

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Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	314	3/19/2010 8:25:53 AM
MOX PPP RAI Mar 2010.doc	64110	

Options

Priority: High

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

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Shaw AREVA MOX Services
Mixed Oxide Fuel Fabrication Facility

Technical Assistance Review
Docket No: 070-03098
License No: N/A

TAC No: L32350

Request for Additional Information (RAI)

March 16, 2010

During a review of Revision (2) of the Physical Protection Plan (PPP), Revision (1.1) of the Safeguards Contingency Response Plan dated 9 June 2009, and Revision (1.1) of the Training and Qualifications Plan (T&QP) dated 16 December 2009 for MOX Services in accordance with 10 CFR 70.34, the following additional information is needed before a determination can be made on the approval request.

Physical Protection Plan

PP-1: Section 1.1, page 11, Applicable Regulations.

Revise this section to include all documents used or referenced in the PPP. This will include DOE regulations/design basis threat (DBT), Vulnerability Assessments (VA), and Independent Analysis. Include the title, originating agency, and document date for each entry.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

PP-2: Figure 1-3, page 18 of 103, MFFF Facility Layout.

Provide a clear site drawing. Drawings can be provided in electronic format to facilitate larger scale printing.

The drawings are difficult to read when printed in gray scale. The text within the shaded boxes is illegible.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects

PP-3: Section 3, page 28, Design Basis Threat and Section 6.2, page 56, Access to the Material Access Areas and Controlled Access Areas.

Revise these sections to include parameters of the Insider Mitigation Program/Human Reliability Program to be used in lieu of the requirements in 10 CFR 26. Provide analysis/justification on how the proposed program meets or exceeds NRC regulations.

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The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects. The regulations in 10 CFR 26 define the requirements for the NRC Fitness for Duty (FFD) and Human Reliability Programs, particularly as applicable to licensees who are authorized to possess, use, or transport formula quantities of SSNM under 10 CFR 70.

PP-4: Section 4, pages 30 and 31 Security Organization.

Revise section 4.1 to indicate where in the security organization the Technical Support Coordinator is located. Identify in figure 4-1 or 4-2 as appropriate.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

PP-5: Section 4.1, page 30-31, Establishment of Security Organization.

Revise this section when the MOU with the SRS have been finalized.

The regulations in 10 CFR 73.46(h)(2) include the requirement to establish an MOU with local law enforcement.

PP-6: Section 4.3, page 35, Qualifications for Employment in Security.

Revise this section to show the correct referenced section in the T&QP. Section 4.3 of the PPP refers to Section 3.2 of the T&QP, which does not exist.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

PP-7: Section 4.6, page 36, Force on Force Exercises.

Revise to explain if MOX operations is an 8 or 24 Hour operation 5 days or 7 days per week. Explain how the shifts will be managed to match the information shown in Table 4.6-1.

The regulations in 10 CFR 73.46 (b)(9) provide the requirements for Force on Force activities.

PP-8: Section 5.3, page 40, Vehicle Barricades/Barriers.

Revise this section to clarify the procedures on entry inspections on vehicles entering the Protected Property Area (PPA)(Owner Controlled Area)

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It is stated in the PPP that approximately 5% of passenger vehicles are subject to entry inspections. It is not clear whether all passenger vehicles entering the PPA are inspected at a 5% rate or if only 5% of visitor vehicles entering the PPA are inspected.

PP-9: Section 5.4, page 42, Material Access Area Barriers.

Revise this section to clarify the following points: a) The safe havens are described as being part of the Material Access Area (MAA) and at the same time being external to the MAA. b) The safe havens are described as meeting the NRC DBT but the MAA is designed to meet the DOE DBT.

The safe havens cannot be external to the MAA and at the same time be described as part of the MAA perimeter.

PP-10: Section 6.2, page 56, Access to the Material Access Area and Controlled Access Areas.

Revise the title line to correct the reference to 10 CFR part 11(a). Revise this section to include the requirements as spelled out in 10 CFR 11.11(a).

PP-11: Section 7.5, page 71, Central and Secondary Alarm Stations.

Explain how the operations of the Central Alarm Station (CAS) are transferred to the Secondary Alarm Station (SAS) in the event of a failure of the CAS. (10CR73.46(e)(5))

PP-12: Figure 7-1, page 77, MFFF Perimeter Intrusion Detection and Assessment System (PIDAS) Layout. (U)

Provide a clear diagram of the MFFF PIDAS.

Diagrams can be submitted in electronic form to allow for local printing in larger formats that are easier to read. The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

PP-13: Section 10.3, page 86, Tactical Response Force.

Revise this section to include the following information:

- a) the total number of armed PF within the PA per shift.
- b) the number of PF personnel dedicated to response activities per shift.
- c) the number of PF personnel utilized for patrol functions per shift.
- d) how the PF is managed to allocate personnel for non-fulltime duties such as escort, vehicle inspection, alarm response/assessment, truck bay duties, and other PF duties, without creating manning shortfalls in fulltime positions such as PA/MAA ECFs.
- e) section 10.3, subparagraph 4, states that a number of tactically-trained PF will deploy within the MAA. however, the plan does not identify them as dedicated responders and does not indicate what positions they are relinquishing when called to respond.

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f) figure 4-2 lists security positions, but there is a caveat that states that the number of PF to be assigned to the MFFF has not been determined.

g) the contingency plans should the DOE-SRS be unavailable or delayed due to other commitments. If not previously considered, this scenario should be considered for inclusion into the analysis for PF requirements.

10 CFR 73.46(h)(3) requires a tactical response team (TRT) consisting of a minimum of five members to be available to fulfill assessment and response requirements. The effectiveness of the alternate measures cannot be determined based on the information provided in Section 10.3, without knowing how many PF are available per shift, their duty positions, (full time-part time-dual purpose) and the information contained in the Sandia National Laboratories Penetration Delay Analysis Report.

PP-14: Section 3, page 28, Design Basis Threat.

Revise this section, particularly paragraph 2, to accurately describe the NRC DBT as depicted in 10 CFR 73.1 and Regulatory Guide 5.70 (C). Discuss the comparison between the DOE DBT and the NRC DBT and why the DOE DBT was selected for use when conducting the Final Design Vulnerability Assessment Study (FDVAS) Report (U) dated 15 April 2008, and the PPP. Include a statement that when alternate methods are requested the alternate methods will be provided along with adequate analysis/justification on how and why they are equal to or more stringent than NRC requirements.

Safeguards Contingency Response Plan

SCR-1: Global.

Revise the plan to ensure consistency in the use of the terms "SNM" and "SSNM". SNM should be used to denote less than formula quantities of special nuclear material and SSNM is used to denote formula quantities of special nuclear material.

The regulations at 10 CFR 73.2 provide the definitions used in the CFR.

SCR-2: Tables 4-2 thru 4-5, pages 29 to 35, Penetration, Disturbance, Emergency, and Missing PuO₂ Events and Objectives for Contingency Response.

Revise the response objective columns so that they are readily identifiable with the corresponding section of the condition/events column. A suggested method would be to use the method of section marking that is used in Table 4-1.

As the tables are currently laid out, it can be confusing to align the condition/event with appropriate response objectives. The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

SCR-3: Table 4-1, page 29, Penetration Threat (TC2): Events and Objectives for Contingency Responses.

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Revise TC2-3 so that the section heading and the content of the section are in alignment.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

SCR-4: Section 5.1, page 38, Organizational Structure.

Revise the last paragraph in this section to correct the reference to section 9 of the PPP which relates to the Test and Maintenance Program vice protective force (PF) training.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

SCR-5: Section 5.3, page 38, Systems Hardware.

Revise sub-paragraph 4 of this section to add a reference to section 7.8 of the PPP. Section 7.8 of the PPP pertains to the external protected area monitoring and assessment.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

Training and Qualification Plan

TQ-1: Section 1.5, page 9, Terms and Definitions.

Revise this section to remove the "bad weather" exemption. 10 CFR 73, Appendix B. I.C. sets the time requirements for medical and physical fitness requalification. Exemptions to this requirement are described in 10 CFR 73.46(b)(10)(B).

TQ-2: Section 4.1, page 19, Employment Suitability.

Revise section header and paragraph 1 to show the correct references. 10 CFR 73, Appendix B.I.A, contains information on employment suitability and qualifications.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

TQ-3: Section 4.1, page 20, Employment Suitability.

Revise the first sub-paragraph to show the parameters of the alternate physical fitness program or to refer to the section of the T&QP that contains the program details.

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Section 5.2 of this T&QP contains the request to utilize an alternate physical fitness plan in accordance with (IAW) 10 CFR 73.46(a) and 73.46(b)(12).

TQ-4: Section 5.1, page 22, Physical and Mental Qualifications of Uniformed Security Personnel.

Revise this section to show the correct reference. 10 CFR 73, Appendix B.I.B contains information on physical and mental qualifications.

Section 5.1 references 10 CFR 73.46(b)(4), which contains information on PF training, qualifications, and requalification.

TQ-5: Section 5.1.2, page 24, Initial Mental and Behavior Observation Qualifications.

Revise this section to correctly identify referenced regulations. Revise this section to add the requirements of 10 CFR 73, Appendix B. I.B.2.c.

This section references 10 CFR 26.22(a)(4) which does not exist. This section also includes a reference to the requirements set forth in 10 CFR 73 Appendix B. I.B.2.c, but does not include those requirements within this section.

TQ-6: Section 5.1.3, pages 25-26, Fitness-For-Duty Program.

Revise this section to incorporate the alternate measures to be used in lieu of the NRC Fitness For Duty (FFD) Program under 10 CFR 26 and the Behavioral Observation Program (BOP) (Insider Mitigation Program) under 10 CFR 26.29 and 26.33. Provide a differential analysis of the alternate measures and the NRC requirements and a justification for why it meets or exceeds NRC requirements. Ensure that this section is in alignment with FFD and BOP contents of the PPP.

TQ-7: Figure 5.2-1, page 28, Physical Fitness Training Program Flow Chart.

Review and revise this section to ensure that the sequence of events is in accordance with the revisions to Section 5.2 of this T&QP and regulatory medical procedures.

The second box from the top is titled, "Enters Physical Fitness Training Program." In parenthesis underneath the title it states, "within 30 days preceding Medical Certification." The first box is entitled "Medical Exam & Certification". This contradicts the information provided in Section 5.3 of this plan.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

TQ-8: Section 5.3.1, page 29, Physical Fitness Performance Testing.

Revise this section to comply with 10 CFR 73.46(a) and 73.46(b)(12) that allow alternate measures to be used and impose specific requirements on the alternate measures.

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10 CFR 73.46(b)(12) The licensee may elect to comply with the requirements of this paragraph instead of the requirements of paragraphs (b)(10) and (b)(11) of this section. In addition to the physical fitness qualifications of paragraph I.C of Appendix B of this part, each licensee subject to the requirements of this section shall develop and submit to the NRC for approval site specific, content-based, physical fitness performance tests which will--when administered to each Tactical Response Team member, armed response person, or guard--duplicate the response duties these individuals may need to perform during a strenuous tactical engagement.

(i) The test must be administered to each Tactical Response Team member, armed response person, and guard once every 3 months. The test must specifically address the physical capabilities needed by armed response personnel during a strenuous tactical engagement at the licensed facility. Individuals who exceed 3 months without having been administered the test due to excused time off from work must be tested within 15 calendar days of returning to duty as a Tactical Response Team member, armed response person, or guard.

(ii) Within 30 days before the first administration of the physical fitness performance test, and on an annual basis thereafter, Tactical Response Team members, armed response personnel, and guards shall be given a medical examination including a determination and written certification by a licensed physician that there are no medical contraindications, as disclosed by the medical examination, to participation in the physical fitness performance test.

(iii) Guards whose duties are to staff the central or secondary alarm station and those who control exit or entry portals are exempt from the performance test specified in paragraph (b)(12) of this section, provided that they are not assigned temporary response guard duties.

TQ-9: Section 5.3.4, page 30, TRF/SRT Fitness Standard.

Revise this section as necessary, to ensure that it is in accordance with the PPP Section 10.3. 10 CFR 73.46(h)(3) requires that a TRT be available at the facility (i.e., at the PA) to fulfill assessment and response requirements.

Note: A revision to the PPP Section 10.3 may require revisions to other sections of this Plan that pertain to physical fitness training and testing.

TQ-10: Table 6-1, page 34, Standard Protective force Equipment.

Revise the table to include the number of rounds of ammunition to be associated with the M134D mini-gun and the Squad Automatic Weapon system, 223 cal/5.56mm. Revise this table to show that a "helmet, combat", is part of the standard PF equipment in accordance with 10 CFR 73 Appendix B.V.5.

TQ-11: Section 6.2, page 35, Armed Protective Force Personnel.

Revise this section to align the weapons to be utilized with the ammunition listed as being available in accordance with Table 6-1.

The sub-paragraph entitled "Ammunition" lists ammunition that would be available for shotguns without listing shotguns as an available weapon. The section does not include the 30cal/7.62mm weapon, the M134D, or Squad Automatic Weapon systems, if used.

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The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

TQ-12: Section 6.4, page 36, Tactical Response Team.

Revise this section to ensure alignment with the PPP, Section 10.3 in accordance with 10 CFR 73.46(h)(3).

TQ-13: Section 7.6, page 43, DOE-SRS LE, PF, SRT and Off-Site LE Support.

Revise sub-paragraphs 1, 2, 4, and 5, or paragraph 2. sub-paragraphs 1 and 5 and sub-paragraphs 2 and 4 are duplicative.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

TQ-14: Section 8.3.2, page 54, Weapons Requalification.

Revise this section header to show 10 CFR 73.46(b)(4), (b)(7), and Appendix B: III & IV. Revise this section to ensure all aspects of weapons requalification training are addressed.

TQ-15: Section 10.2, page 73, Physical Requalification.

Revise this section to correct the reference to Section 3.3 of this Plan. Section 3.3 does not exist.

The regulations in 10 CFR 70.9(a) require that information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects.

TQ-16: Section 10.11, page 75, SRT Records.

Revise this section as necessary, to ensure that it is in accordance with the PPP Section 10.3. 10 CFR 73.46(h)(3) requires that a TRT be available at the facility (i.e., at the PA) to fulfill assessment and response requirements.

Note: A revision to the PPP Section 10.3 may require revisions to other sections of this Plan that pertain to records.

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