

Minimization of USQ Activity for WIPP Documents

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The paper presentation will explain the process used by Westinghouse Waste Isolation Pilot Plant (WIPP) to minimize the number of documents requiring Unreviewed Safety Question Determination in accordance with DOE 5480.21. The process includes four progressive steps: categorical exclusion of maintenance procedures, development of an applicable documents list, removal of Technical Safety Requirement Administrative Control implementing procedures, and pre-evaluation of potential worse case change to documents.

Maintenance procedures have been categorically excluded since 1995. Although this helped reduce the number of USQ Screenings for document changes, it didn't go far enough. USQ Determinations conducted by certain groups or individuals consumed a great deal of time. The primary reason was the lack of SAR understanding by the individual performing USQ Determinations. The development of the "applicable documents list" has made the USQ Determination process user friendly by clearly identifying which documents require screening. The "applicable documents list" consists of the following: documents referenced in or implementing the WIPP Safety Analysis Report (SAR), documents implementing or required by the WIPP Technical Safety Requirements (TSRs), and documents indirectly affecting the SAR or TSRs.

Next, procedures implementing Technical Safety Requirement Administrative Controls were removed from the "applicable documents list". The basis for this change is defined in DOE-STD-3009-94, Programmatic Commitments, para. 4 which states, "One overall commitment made in a SAR is that the contractor will not change the facility configuration underlying the documented safety basis without implementing and completing the unreviewed safety question (USQ) process. However, situations do occur where a USQ process is not necessary. For example, a stipulation to have a radiation protection program in the administrative control section of the TSR is a commitment; however, changes to specific program provisions do not require going through the USQ process."

Then the DOE Order 5480.21 USQ Screening and Safety Evaluation questions were applied to the potential worse case change of the 'applicable documents'. This further reduced the number of documents requiring Unreviewed Safety Question Determination. The remaining documents were then placed on the 'potential USQ list'.

Only documents on the "applicable documents list" require USQ Determination by USQ evaluators. New documents are reviewed by Safety Analysis in order to keep the "applicable document list" and "potential USQ list" updated. Cancellations of "applicable documents" are also reviewed by Safety Analysis.

This process change has resulted in a 90% reduction in the number of documents requiring USQ determination, a significant reduction in the quantity of required USQ evaluators, decreased need for USQ training, enhanced the evaluator's ability to correctly perform USQ Determinations, and helped identify all the SAR commitments and assumptions.

Paper for SAWG Workshop 2000

At the time the abstract for this paper was written the process as described for minimization of USQ Determination activity was in the initial stages of implementation. While much progress has been made, the product is an incomplete work. However, the following outlines the evolution of the process to-date:

- 1) Develop “Authorization Basis Implementing Documents” list
 - a) Identify documents explicitly or implicitly described in the “authorization basis”
 - b) Compile the “AB Implementing Documents” list
- 2) Perform Categorical Exclusions
 - a) Identify all documents for which the worst-case change could NOT result in a positive USQ Determination
 - b) Group documents in common categories, i. e, administrative procedures, maintenance procedures, etc.
 - c) Document categorical exclusions via completed USQ Determinations (Safety Evaluations) for each group of documents
- 3) Exclude TSR implementing procedures per DOE-STD-3009
 - a) Basis - DOE-STD-3009-94, Programmatic Commitments, para. 4 states, “One overall commitment made in a SAR is that the contractor will not change the facility configuration underlying the documented safety basis without implementing and completing the unreviewed safety question (USQ) process. However, situations do occur where a USQ process is not necessary. For example, a stipulation to have a radiation protection program in the administrative control section of the TSR is a commitment; however, changes to specific program provisions do not require going through the USQ process.”
 - b) Remove implementing procedures from “Authorization Basis Implementing Documents” list
 - i) TSR Administrative 5.9.8 Emergency Management states - “An Emergency Management Program and associated procedures shall be established, implemented, and maintained that provides preparedness, training, and operational readiness capabilities to minimize consequences to workers and the public from accidents involving WIPP operations”
 - ii) Leave program document WP 12-9, WIPP Emergency Management Program on the list and remove WP 12-ER3002, Emergency Operations Center Activation, WP 12-ER3003, Event Recovery, and WP 12-ER3004, Categorization and Classification of Operational Emergencies.
- 4) Implementation
 - a) Only documents on the “AB Implementing Documents” list require USQ Screening and/or Safety Evaluation for changes
 - b) All new documents must be reviewed.
 - c) Cancellation of “AB Implementing Documents” must be reviewed
 - d) List must be keep up-to-date
- 5) Benefits
 - a) Reduce the quantity of USQ Screenings required in the future
 - b) Reduce the number of required USQ evaluators
 - c) Enhance the evaluator's ability to correctly perform USQ Screenings
 - d) Identify and document all the authorization basis commitments and assumptions