

Unreviewed Safety Questions
Preparation Issues and Lessons Learned

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Introduction

DOE Order 5480.21 “Unreviewed Safety Question” was set forth to provide the definition and basis for determining the existence of an Unreviewed Safety Question (USQ). The Unreviewed Safety Question Order has a primary role of preserving the U.S. Department of Energy (DOE) authorization basis for each nuclear facility while allowing for “operational” flexibility. The authorization basis of a facility can be compared with a driver’s license (except that you cannot carry it in your pocket). The authorization basis encompasses those aspects of the facility design basis and operational requirements relied upon by DOE to authorize operation (of the facility). The concept of the Unreviewed Safety Question was established to allow contractors to make physical and procedural changes and to conduct tests and experiments without prior DOE approval. The changes can be performed without DOE approval as long as these changes do not explicitly or implicitly affect the authorization basis of the facility or result in a Technical Safety Requirement change.

A deficient broad-brush approach to preparing Unreviewed Safety Question Determinations (USQDs) has been practiced at some DOE-owned sites since the implementation of the DOE Order 5480.21. Whether the less-than-adequate approach to USQD preparation at a facility is first identified by DOE or by a contractor sponsored Sampling Team, the resultant effect on operation of the sites can be dramatic. USQDs that are deficient can indicate to DOE that the site is being knowingly operated outside of its approved authorization basis.

Considering the importance of current USQ Programs at DOE-owned sites, this paper discusses some of the key elements of DOE Order 5480.21 “Unreviewed Safety Question” requirements, establishing a USQ Program, maintaining an acceptable USQ Program, and establishing an excellent USQ Program. It also provides information concerning USQD preparation issues, lessons learned, and provides some checklists for preparing for sampling audits, and for preparing USQDs and screens.

Background

At U.S. Department of Energy facilities, Unreviewed Safety Question Determinations and screens that are noticeably deficient in that they only provide broad-brush treatment to the USQD process are a “red flag” to the regulators. USQD deficiencies indicate that careful consideration of whether a proposed activity is within the authorization basis has not actually occurred. In many cases, the activity or change has already been implemented at the site by the time DOE identifies the deficiencies. Therefore, a nuclear facility might already be operating outside of its approved authorization basis. This would mean that risk associated with facility operation might be greater

than what the U.S. Department of Energy (DOE) has been willing to accept based on the AB documentation provided by the site. The question then inevitably comes to mind concerning exactly what the prevalence is of the identified deficient condition, that is, whether it exists at a single facility, or, whether it is plant/lab wide. A USQ Program that is significantly less than excellent, or worse yet not even acceptable, can be viewed by the regulator to be potentially symptomatic of an operating philosophy and attitudes that might not reflect the safety culture required today at DOE owned nuclear facilities.

Recently, some nuclear facilities have been directed to upgrade their authorization documentation on a priority basis because the documentation has been determined to be deficient by today's standards. At those facilities, potentially inadequate safety analysis determinations could become common when a USQD is prepared. Hazard analyses are now being prepared to be much more complete and detailed to ensure that the correct accidents have been considered for inclusion in the Safety Analysis Report (SAR). This more thorough hazard analysis approach simplifies the USQ process as compared with a facility where important accidents were not carried forward for inclusion in the AB documentation. For sites where an upgraded SAR is being prepared, and the current AB has been officially declared to be deficient, the USQ process is even more crucial to ensuring that operations stay within the approved AB. Positive USQDs ensure that DOE review and buy-in occurs prior to implementing a change that represents an activity outside of the approved AB. Since, for a positive USQD, DOE must approve the change before implementation, a site is ensured that the proposed activity is within the modified authorization basis. A negative USQD is not reviewed by the DOE so the key is to make sure that the proposed activity is clearly within the approved authorization basis and that the negative USQD does not leave unanswered questions regarding the change having been covered adequately by the existing AB.

Establishing a USQ Program

Establishing an Unreviewed Safety Question Program at a site that should be documenting 50 to 150 "changes" per year (physical changes, changes to procedures, and new tests or experiments) requires a significant degree of co-operation from site personnel. Site personnel referred to here are those who are needed to interact with the Authorization Basis (AB) Review Specialist (also known as the USQ Specialist).

The AB Review Specialist normally comes to a site with a background of USQD preparation, but with minimal detailed site-specific knowledge concerning information required for the review of changes. This relates both to lack of initial familiarity with the AB documentation and also with lack of knowledge concerning facility hardware, experiments, or procedures subject to potential or pending changes. This is especially true considering the level of knowledge of a site required to ensure that changes to the physical facility, facility procedures, or performance of new tests and experiments are not occurring without the changes having first been reviewed by the AB specialist. A change that would be a positive USQD, had it been fully evaluated, can be implemented in a facility in a single day in some cases. An AB Review Specialist is unlikely to notice an unreviewed change as having been implemented at an unfamiliar site. The probability of not being aware of an unreviewed change is even greater if the AB Specialist has not yet been granted unescorted access to the facility because site orientation videos, instructions, and tests have not been completed. In that case, the AB Review Specialist will be in the facility for

relatively brief periods and under the guidance of a facility person with escort privileges. The escort person might not have had USQ or AB training and therefore, might not speak “the language”. The escort might not have had the USQ Process experience required to know what the AB Review Specialist should be shown in the facility.

Technical areas affected by DOE Order 5480.21 “Unreviewed Safety Question” include “all technical aspects of the contractor organization responsible for design, engineering, maintenance, inspection, operations, and assessment of the nuclear facility or activity”. Technical personnel in any of these areas could initiate/participate in/or implement activities that could turn out to be inadvertently outside of the approved facility authorization basis. To ensure that this does not occur, appropriate USQD documentation must be prepared. Beyond the need to stay within the authorization basis there are other important benefits associated with performing a safety evaluation. When a safety evaluation is performed for a new activity, additional safety features/controls might be identified that would not have been conceptualized or considered, had there not been a screen or safety evaluation. This is especially true when site personnel prepare the first draft of the USQD before giving it to the AB Review Specialist. Depending on whether a site already has a “safety culture” and an activity approval procedure that dictates notifying the AB Review Specialist about a change, the reviewer could easily miss the implementation of a change since the change might never be brought to his or her attention.

The key to establishing a successful USQD program is for the lead USQD preparer to establish a working relationship with the division/site engineering and operations/process personnel. Writing a USQ successfully is highly dependent on the timely flow of accurate and complete technical information to the USQ preparer. The flow of technical information, which could take the form of discussions, notes, or, ideally, input on a Unreviewed Safety Question Determination and Screening Worksheet Form including providing detailed attachments, is crucial to the success of the USQ Program. The use of the Worksheet is a key to a successful USQ Program because the site technical personnel then think in terms of the end product, a complete USQD Worksheet. Simply providing the information available without consideration of the end product, greatly reduces the chance that the needed information will be supplied. Drafting USQD Worksheets causes site personnel to be thinking in terms of the authorization basis. The USQ preparer is usually a competent writer with a broad engineering/science knowledge base, experience in site operations, and a high level of familiarity with the facility Authorization Basis. However, the USQ preparer will be most successful if he/she recognizes their knowledge limits when it comes to detailed site-specific operations knowledge regarding a specific facility. Depending on whether the safety culture is established at a site, facility personnel might need some time, and at least a couple of meetings, to be convinced that the USQ Process is very important. Facility personnel should be shown that the USQ Process: 1) is worth the time and 2) absolutely a DOE Order requirement that DOE can choose to rigorously enforce at a given site. The first few USQDs and Screens prepared after an AB Reviewer is assigned to a site might require more time to prepare as the communication lines are established with the facility. It is suggested that the slow start helps establish the working relationship including trust, and that approach is needed before moving on to the preparer becoming higher profile in the facility. So, initially, information gathering might be from meetings and casual hallway conversations. Looking for related technical issues to assist site personnel on their daily issues can be helpful. This might include such support as interpretation of a DOE Order, etc. Also, where others made USQ preparation attempts in the facility, watch for ways to save personnel time and to compliment early attempts. Explain that

facility personnel should prepare a good quality draft the USQD or screen and then turn it over to the designated USQD preparer for finalization.

After a few weeks, schedule a site-specific training course for USQ preparation. Mention key points from the Order, discuss any DOE site documents that give guidance on USQ preparation, and show and discuss examples of successfully prepared USQDs and Screens. Provide general information about what can or cannot be done. For example, explain that physical changes to the facility cannot be screened out (Headquarters USQ Training), and the USQ Sampling Team scrutinizes very closely any and all screens that are prepared. Any suggestion from site personnel that the USQ Process is not needed, or being too rigorously implemented should be handled early and efficiently so the program is not undermined while it is being put in place. Later, but not too much later, present a course to orient personnel to the site authorization basis documents.

Two basic elements must be defined in order to properly implement the USQ Program since the Order is intended to allow for facility changes as long as these changes do not impact the authorization basis of the facility. Each facility must first identify the methods by which facility changes can be made (i.e., are changes made under an activity approval process, a modification process, etc.). Each, and every, means for performing a “change” must be covered because each means provides a direct input into the USQ process and must be integrated accordingly. Second, an understanding of what constitutes the facility authorization basis must be accurately defined in order to determine what constitutes a USQ. This is the basis for identifying the acceptable bounds of operation without requiring prior DOE approval.

Identifying the methods by which facility changes can be made is the reason for a site needing an Activity Approval Process as mentioned in the DOE Order. An activity approval process type procedure ensures that the site technical specialists responsible for a proposed activity consider the need for performing a USQD. New activities must be considered in light of the USQ Process to ensure the change is, in fact, within the AB. Second, the site must have a site specific Unreviewed Safety Question Process Procedure which has been approved by the DOE. There are several benefits to having the USQ Process Procedure including the obvious reason, compliance with the DOE Order. Site personnel who can refer to the site-specific USQ Process Procedure are more likely to catch on to USQD preparation much more rapidly than if a procedure does not exist.

Contractors are required by DOE Order 5480.21 to develop procedures that provide detailed guidance for the performance and review of USQ determinations. At a minimum, the USQ procedure defines the purpose of the procedure; its applicability; definitions of terms (such as those in the DOE Order); screening criteria and the basis for their application; detailed guidance on what must be considered and evaluated when performing or reviewing a safety evaluation; qualifications needed and responsibilities of personnel performing and reviewing safety evaluations; and documentation requirements for each USQ determination. The procedure should define its applicability including the facility(s) to which it applies and the type of change processes to which it applies. The contractor’s procedure is expected to provide detailed guidance on how to perform a safety evaluation to allow the site personnel to at least draft the necessary documentation. Asking site personnel to provide technical input is not as effective as actually performing a draft. The procedure should address personnel qualifications needed in order to perform or review a safety evaluation.

Documentation requirements are appropriate for discussion in the site-specific USQ implementing procedures. Documentation requirements should clearly state the level of detail necessary to document performance of the safety evaluation and conclusions reached. A complete list of references should be provided to identify additional documents, drawings, etc. that were relied upon to support the conclusion reported, as well as guidance for the retention of records.

A proposed change can be determined to be a positive USQD based upon filling out the USQD Worksheet. This does not mean or imply that the change can be concluded to be “safe”. A safety analysis level of documentation, with review and approval by the DOE of the change is required for that “safe” determination. Contractor procedures should clearly establish the differences between the concepts supporting a safety analysis and a safety evaluation. A safety evaluation is not intended to be a substitute for a safety analysis; it merely serves as a benchmark for whether the authorization basis is being preserved. A safety analysis may show that a proposed change is safe, yet the safety evaluation may determine that the change is an unreviewed safety question.

Development of procedure(s) which govern the manner in which changes are made at a facility and the formal integration and documentation of these change processes were to be completed within nine months of promulgation of the DOE Order (12-24-91). Facility-specific safety evaluation procedures were to be completed in the same time frame.

The site-specific USQ Process Procedure should contain key information that helps expedite the USQD (and screen) preparation process. Information that would need to be searched for (every time a USQD is prepared) in the safety analysis report/authorization basis in various chapters can be organized and placed in separate appendices to the procedure. By placing key information from the authorization basis in the appendices, there is less chance it will be overlooked as compared with searching the authorization basis documentation that usually is many hundreds of pages in length. Some suggested material to include in the site-specific process procedure appendices includes:

- Guidance for basic and secondary screening of changes to the facility.
- Facility equipment (SSCs) described in the existing facility safety analysis/authorization basis.
- Procedures described in the existing facility safety analysis/authorization basis.
- Tests or experiments described in the existing facility safety analysis/authorization basis.
- Guidance for answering the Seven USQD Questions.
- Accidents evaluated in the Facility Authorization Basis.
- Equipment Malfunction Previously Evaluated in the Safety Analysis.
- Probabilities of Accidents.
- Consequences of Accidents.

- USQD Processing Traveler (to track the internal and external approval path of a USQD or screen).
- List of the Authorization Basis Documentation for the Facility.

Changes to a nuclear facility require analysis, but those that may affect the authorization basis require completion of a safety evaluation in accordance with the DOE Order. Changes to non-safety related systems might represent critical operational occurrences identified as initiators in the accident analysis. Any change that has the potential to alter the ability of a structure, system, or component to meet its expected performance based on the accident analyses may involve a USQ. Changes include previously undiscovered conditions, operational incidents, or results of new analyses or re-analyses that deviate from those described in the safety analyses or that could reduce existing margins of safety.

Maintaining an Acceptable USQ Program

Establishing an acceptable USQ Program (one that consistently achieves scores of about 60 to 70 percent) might prove to be more difficult than establishing an excellent USQ program. The reasoning is that doing an excellent job is easier to measure while the work is being performed, and easier to defend in a USQD sampling situation than just doing what might qualify as an acceptable set of USQDs to just “get by”. The following suggestions for maintaining an acceptable USQ Program should be considered a minimum list of items to implement:

- Multiple USQ preparers (signing the cover sheet as Preparer) will result in inconsistencies and more discussion to resolve differences regarding the documentation generated. Some of the preparers might have strong positions regarding the appropriate amount of input required and differences of opinion would be difficult to resolve in many cases.
- Use of any approach other than a formal process of preparing USQDs including a USQ Database, templates, or mentoring personnel will result in a mediocre product that will be noticeably inconsistent. Inconsistency indicates to auditors a lower quality standard.
- Read the USQ DOE Order every few months. This includes everyone actively participating in the USQ Program. Consider periodic meetings to discuss aspects of the Order.
- Communicate periodically with the group performing the sampling to ensure that communication lines are open when they are needed. This should occur between sampling periods.
- Double-check the worksheets and referenced attachments before placing them in the file as completed.
- Avoid shortcuts or duplication of answers. Auditors will recognize this quickly.

- Avoid repeating back any of the seven questions as the answers to the questions.
- Complete the Activity Approval Process and the Site Specific USQ Process Procedure as top priorities.
- Provide management support to the leader of the USQD Team. Ensure that individuals who want their USQD first, but are not responsible for the activity associated with the highest priority USQD, do not waste the time of the person preparing USQDs.
- Ensure that the USQ preparers, since they need to write a significant quantity of documentation, have the equipment and work environment (computer, local printer, storage space, desktop space, and quiet work location) they need to perform their work efficiently.
- Use a derivative classifier during the review and sign-off of every USQD and screen. None of the USQDs and screens should ever leave a site before being reviewed for possible classification.

Establishing an Excellent USQ Program

An excellent USQ Program is herein defined as a Program that consistently achieves a USQ Sampling score of at least 75 to 80 percent each quarter. For the excellent Program, it is assumed that each of the previously identified Acceptable USQ Program items will have also been implemented at a site. Items that contribute to establishing an excellent USQ Program are as follows:

- One USQ Specialist should sign each USQD or screen prepared by a facility as the Document Preparer. This ensures that the documents will be prepared consistently. By organizing the Program in this way a single person is, and feels, responsible for the USQ Program and ensures there are no loose ends in the reasoning included in each document. This approach also establishes a single point of contact between the facility and the Institutional Group. Since a single person has personal responsibility for the outcome of the sampling, he/she will ensure that there are no weak points in the submittal. The individual will know he/she will be needed to answer any questions asked regarding the submittals later during USQ Sampling.
- Prepare Templates for USQD preparation. The templates would be based on institutional guidance and/or would be specific to a category of change frequently performed at the facility. Templates help to ensure that the USQDs are prepared consistently and that required points are covered. Templates have been found to work successfully for adding electrical circuits and certain changes to process systems.
- Prepare a database, like FileMaker Pro to set up the records for the Unreviewed Safety Question Determination and Screening Worksheet. Benefits include being able to cut and paste paragraphs or phrases from previously prepared USQDs into the USQD currently being written (Cut and paste approach needs to be implemented with discretion.)

- Establish a mentoring program for the USQD program. Select interested site personnel with a desire to prepare their own draft USQDs for changes in their technical discipline or area. Separate experimenters may need to learn to draft USQDs because the documentation for new hazards and accidents might involve more complex considerations than changes to the electrical systems or the process piping and other equipment in the facility. New experiments can introduce previously unreviewed hazards, and accident analyses might be required to be submitted if the facility decides to proceed with a request for DOE approval.
- Make improvements to the Authorization Basis documentation when the need or opportunity arrives.
- Conduct weekly meetings concerning USQDs and establish priorities. Determine who will be the Subject Matter Experts (SME) responsible for drafting a USQD for an activity in the meetings. Establish the system by which Team Leaders or managers will handle/remove any roadblocks to the successful performance of the USQ Process. Facility leaders must be involved for the process to succeed.
- Perform walk-downs of changes. Not only before preparing the USQD but also after it is prepared to ensure the USQD reflects the change that was made after the USQD was prepared.
- Present facility specific training courses. Explain the reason why USQDs are needed and seek buy-in. Train on the facility-specific Activity Approval Process, the USQD Process Procedure, and on the facility Authorization Basis documents. Demonstrate the USQD preparation process with examples. Make sure everyone who is involved in the USQ Process has a current book of AB documents at their desk.
- Encourage further discussions with the Institutional Group if you did “the right thing” in preparing a USQD or screen. The Institutional Group does not work at the various facilities and might need further descriptions of the changes to fully understand the site approach.
- Get Institutional Group’s opinions in writing when they are asked to provide technical guidance on USQD preparation.
- Prepare Positive USQDs and submit them through the Institutional Group.
- For proposed activities clearly within the SAR, screen it out in accordance with the Order unless it is a change in the facility.
- Develop and use a checklist to prepare fully for USQ Sampling each quarter.
- Facility Team Leaders and other SMEs should periodically attend Sampling Kick-off Meetings and USQ Lessons-Learned Meetings with the USQ Specialist. Current topics and concerns are discussed and give the Team Leader or SME another viewpoint and greater appreciation concerning USQD preparation and sampling. This leads to increased support to the USQD preparers.

- Review all AB books and files before each round of USQD Sampling occurs.

Preparation Issues

In early 1998 some facilities were preparing USQDs and screens in a manner that resulted in very poor scores (percentage acceptable) when their completed USQDs and USQ Screens were audited.

- The facility should have an activity approval process procedure that tells them when to enter the USQ process with a “change” to determine first that a USQD or screen might need to be prepared.
- Facility personnel should be trained in the current approved facility authorization basis at least once each year.
- Technical personnel who are part of the contractor organization and are responsible for design, engineering, maintenance, inspection, operations, and assessment of the nuclear facility or activity should be familiar with the requirements of the DOE USQ Order and the USQ Process at their facility.
- SMEs should be USQD trained so they identify changes that could require a USQD and assist by drafting the input technical information. USQ preparers and especially the AB Reviewer will not know to prepare a USQD if they are unaware of a pending change.
- Facility personnel at times think their USQD is the only one that is a priority. If the preparer is not a manager, he needs someone to make sure everyone knows the current priorities.
- People who have not bought into the concept that a safety culture is needed should not be drafting or actually preparing (final) USQDs. Deficient drafts slow the process since these same people usually have time to discuss in detail their draft submittals.
- Preparation must be in accordance with not only the Order and the USQ Process Procedure, but in a manner that complies with institutional requirements and DOE Facility Representative Requirements.
- An information summary of the analyzed accidents, equipment important to safety and failure modes of equipment in the approved facility Authorization Basis is a great benefit to personnel preparing USQDs. Providing the summaries helps to eliminate the need to read and search the SAR each time a USQD is prepared.
- Facility Engineering and Operations must be on board with the need to comply with the USQ Process. Preparation personnel and the AB Reviewer must be in regular contact and talk with SMEs on USQD topics. The technical knowledge and hazards identification must come

from subject matter experts on the topics. More USQD preparers are not necessarily the answer if good quality technical information is not provided in a timely manner.

- The nuclear facility must be defined in a logical and technically correct manner in the facility-specific USQ Process Procedure.
- Facility Management must be supportive of the USQ concept or the USQ Team cannot succeed. Funding pressure can affect performance as can work load.
- Regular meetings should occur (weekly) to ensure that the AB Reviewer, Team Leaders, and SMEs know the USQD preparation priorities. Publish the priorities weekly by e-mail.

Lessons Learned

The lessons learned that follow were gathered from various sources.

- Place overall responsibility for the USQ Program in the hands of one (appropriate) technical person. This includes input to the Activity Approval Process, the USQ Process Procedure, preparing final versions of USQDs and screens using draft input from Subject Matter Experts, representing the facility during USQ Sampling by the Institutional Organization. The USQ Program leader needs to be able to interact successfully with everyone at the facility so that obtaining the technical information needed on a topic is straightforward. Multiple technical resources on each topic allow a crosscheck of information.
- Give full credit to the USQD process and the impact it can have on your facility. Its tie to the facility authorization basis is clear. The authorization basis is a driver's license and a USQD written as negative but determined by DOE or the OIC to be positive indicates that the facility is making changes, probably more than one, that should go to DOE for approval
- In addition to working to the Order and the USQ Process HQ and Site Specific Training, communicate regularly with the sampling team from the Institutional Group. This will help ensure that the LANL requirements and preferences are met when USQDs and Screens are prepared.
- When using local USQD quality improvement documents, ensure that they are followed closely. If blocks 5.1, 5.3, and 5.5 require some of the same information, repeat the information in response to each question or it could be missed and result in a reduced score.
- For maximum effectiveness, attach pertinent materials to USQDs. This would cover more information than one would wish to include in their USQD write-up and shows openness in the information provided to the sampling team.
- If a gray area USQD exists (could go positive or negative), be sure to discuss it with the Institution and the DOE (if needed), in order to reach an agreement. Submit in accordance with the agreement reached.

- Whenever possible, make institutional communication with various sites positive. This is especially true in large meetings where multiple sites are represented.
- If funding allows, keep the USQ specialist or the AB Reviewer independent of the site to which they are assigned.
- Discuss differences of opinion in a professional manner with sites being sampled.
- Assist sites that take the time to ask questions concerning USQDs being prepared.
- New proposed activities may include new hazards as compared with similar previous activities.
- When pushed hard to complete a USQD by site personnel, look again and ask more questions to ensure you have the full story.
- Talk informally with DOE when a USQD comes along that is border-line positive. Ask for guidance. Establish trust concerning the facility USQ Program by openly discussing key issues.
- For a USQ screen, especially when it involves a test or experiment that can be screened out, be sure to reference the pages in the authorization basis that discuss explicitly or implicitly the activity. This applies when the authorization basis discusses the test or experiment implicitly since it is more difficult for an auditor to know where or if a SAR includes an implicit discussion.

Attachments

Pre-Quarterly Sampling Checklist

USQD Preparation Checklist

Pre-Quarterly Sampling Checklist

The following is a list of suggested items to review before submitting the USQDs and Screens to the institutional USQ Sampling Team.

- O Prepare a list of Screens and USQDs signed off during the sampling period.
- O Identify all Positive USQDs submitted during the sampling period.
- O Re-confirm current training of each person who has signed a USQD or Screen during the period.
- O Co-ordinate with Team Leaders regarding the USQDs and Screens to be sampled. For the initial with the USQD Sampling Team, invite those Team leaders who provided technical input to the USQD and screen preparation.
- O Coordinate with the site Subject Matter Experts. Invite those SMEs involved in a proposed change (for which a USQD or screen was prepared and is part of the audit) to the initial meeting with the USQ Sampling Team.
- O Double-check all attachments to USQDs and Screens. Review each file copy if there are multiple copies in various locations.

- O Check Authorization Basis binders. Ensure that any new Positive (+) USQDs have been added to the binders. Ensure that OSR/TSR changes are inserted in the books.
- O Check progress on resolving any past USQDs and Screens that there were commented on (less than perfect grade) in previous quarterly sampling.
- O Check progress on the Site Specific USQ Process Procedure if it has not yet been completed.
- O Prepare a List of Improvements made to the USQ Program since the last quarter. Give these to the USQ Sampling Team.
- O Check both the hard copy files, and the USQ database, to ensure that everything is in order and available for review by the USQ Sampling Team.
- O Cooperate with the Sampling Team and make sure all requested submittals be on time when they are provided to the Team.

USQD Preparation Checklist

Preparation of USQDs and Screens should include the following steps to ensure that technically excellent documentation is prepared.

- O Maintain a USQ Priority List based on input from Team Leaders so the USQDs are prepared in a sequence that coordinates with programmatic needs. Include priority listing, a brief description, and identify the SME or Team Leader who is the lead for the proposed activity. The leader would also be the person who prepares the draft input documentation for the USQD preparer.
- O Discuss the proposed activity with the USQD leader and perform a walk down of the location, where the physical change will occur. Obtain a copy of the procedure that will change if applicable.
- O Obtain detailed information on a proposed new test or experiment as input to USQD preparation. Procedures and other documentation, if used as attachments, should include at least one signature.
- O Search current SAR/AB documents for mention of the activity, procedure, or test or experiment pertaining to the change. Reference as appropriate or attach pertinent pages.
- O Obtain copies of attachments for USQDs and screens being prepared. These would include pertinent procedures, drawings, flow charts, work instructions, radiation work permits, etc.
- O Perform at least a second walk down of a proposed change with a different SME.

- O Ask lots of questions.
- O Discuss the proposed activity with several other facility personnel who have knowledge about it and might need to participate in some manner. This could include an RCT, Waste Management Person, or another discipline.
- O Set up a file on pertinent documents received.
- O Watch for the unidentified hazard, malfunction of equipment, or additional unanalyzed accident.
- O Provide a draft USQD or Screen to the Sampling Team to get their opinion about preparing the documentation if the correct approach is not clear cut. Get their opinion/direction in writing.
- O Ask more questions. Perform an extra walk-down after a week or two has passed.
- O Find/attach any SAR/AB references to the activity. Handle UNCI/classified appropriately.
- O While working on the USQD, have pertinent pages from the SAR close by for easy reference.
- O Take an appropriate amount of time to prepare the USQD. When rushed, consider slowing down and looking for the reason for being rushed.