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Mr. Ralph Stein, Associate Director
for Systems Integration and Regulations
Office of Civilian Radioactive Waste Management
U. S. Department of Energy, RW 30
Washington, D.C. 20585

Dear Mr. Stein:

SUBJECT: STAFF GUIDANCE ON THE DEVELOPMENT OF TECHNICAL POSITIONS

In response to a request from Ms. Linda Desell of your staff, enclosed is a copy of "Division of High-Level Waste Management Work Plan for the Development of Staff Technical Positions." This guidance is the work plan used by the staff in the development of Technical Positions. If you have any further questions, please feel free to contact Mr. Joe Holonich at (301) 492-3403.

Sincerely,

ORIGINAL SIGNED BY

John J. Linehan, Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure:
As stated

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C. Gertz, DOE/NV
S. Bradhurst, Nye County, NV
M. Baughman, Lincoln County, NV
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D. Weigel, GAO

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DIVISION OF HIGH-LEVEL WASTE MANAGEMENT

WORK PLAN FOR THE

DEVELOPMENT OF STAFF TECHNICAL POSITIONS

Revision: 0
Issued: SEP 30 1989

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Enclosure 1

Table of Contents

1. INTRODUCTION

The purpose of this document is to provide a work plan on the development of technical positions (TPs) for the Division of High-Level Waste Management (HLWM) staff. This document should be used when a TP needs to be developed. By following this guidance, the staff will be able to issue TPs that are consistent, standard in content and format, of high quality, and useful in the licensing process.

2. BACKGROUND

The document which controls the licensing process for the high-level waste (HLW) repository is Title 10, Code of Federal Regulations, Part 60 (10 CFR Part 60). In 10 CFR Part 60, the U. S. Nuclear Regulatory Commission (NRC) has identified the requirements that the U. S. Department of Energy (DOE) must meet in order to receive a construction authorization and eventually a license to receive nuclear materials. Because the requirements in 10 CFR Part 60, in some instances, are necessarily general, the staff must issue guidance on demonstrating compliance with Part 60.

This guidance can take three forms. The first form is the Regulatory Guide (Reg Guide). The Office of Nuclear Regulatory Research (RES) issues these. They provide guidance to applicants and licensees on how to meet (satisfy) the regulations. The one Reg Guide that is presently used in the HLW program is Reg Guide 4.17. It covers the format and content of DOE's site characterization plan. In addition, a second Reg Guide covering the format and content of the DOE license application will be issued.

The second type of guidance is the staff review plan, called the License Application Review Plan (LARP). The LARP will contain the review procedures and acceptance criteria that the staff will use to evaluate the DOE license application and to determine DOE compliance with 10 CFR Part 60. Basically, the HLWM staff will develop the LARP which will guide the staff in performing its safety review of the DOE application to construct and operate the repository. It will follow the same outline as the Format and Content Reg Guide. What this means is that for each section of the Format and Content Reg Guide, in most cases, there will be a corresponding section in the LARP. Although the LARP guidance is for the staff to use in its review, DOE can and should use it to develop the license application.

The third type of staff guidance is the TP. The Office of Nuclear Material Safety and Safeguards (NMSS) issues TPs, which contain guidance for DOE. They are issued to achieve one of three purposes. These are:

(1) to provide criteria that, when met, would allow the staff to conclude that DOE complies with the applicable regulations;

(2) to describe a methodology or approach that is acceptable to the NRC staff and that, if used, would result in meeting the regulations; and

(3) to present the staff position on the applicability of other parts of the regulations to the repository program.

Because TPs are directly related to the regulations and DOE does not have to meet the regulatory requirements until it becomes an applicant, the major focus of TPs should be on the potential repository licensing issues. This is not to

say that TPs should leave site characterization issues unaddressed. However, if TPs do address such issues, they should address those site characterization activities that could affect DOE's ability to comply with 10 CFR Part 60.

Since TPs are guidance documents, they are equivalent in terms of status to Reg Guides. The major difference between a TP and Reg Guide is the fact that TPs are issued by NMSS, whereas Reg Guides are issued by RES. As with Reg Guides, the applicant, in this case DOE, does not have to comply with the staff positions presented. Alternatives to the positions taken, or methodologies contained in the TPs, can be acceptable. However, DOE must demonstrate to the staff how the use of these alternatives results in compliance with the regulations.

TPs have a major advantage over Reg Guides. Although a TP undergoes the same detailed and legal review as a Reg Guide, the administrative steps involved in issuing a TP are less than those for a Reg Guide. This reduction in administrative overhead makes it easier to revise a TP as new information becomes available. This is important, since many of the technical investigations associated with the HLW repository represent new or unique technologies. Therefore, the ability of the staff to revise its position quickly as new discoveries are made is an important consideration. By eliminating some of the administrative steps involved in issuing formal guidance, the staff has the flexibility it needs to revise guidance documents swiftly.

Now that you know what a TP will do and how it is different from a Reg Guide, you need to know the criteria that, when satisfied, identify the need to develop a TP. Overall, there are five criteria that are used. This does not necessarily mean that satisfying any of these criteria will result in a TP being issued. For example, a particular technical discipline could have an issue that meets one of the criteria given below. However, after the initial scoping phase has been completed, it might be determined that a change to the regulations is needed. Hence, a TP would not be issued, in this case. However, the information developed during the TP scope would be used to provide the technical basis for establishing the two-year rulemaking schedule. Similarly, after the initial scoping, one may find that the subject matter does not represent guidance. Rather, it merely gives the staff position on a non-controversial subject. If this is the case, the information would be better provided in a letter to DOE.

Those criteria that should be used to assess the need to develop a TP are:

(1) sections or parts of the regulations where DOE has requested that the staff provide guidance;

(2) areas where it has become apparent to the staff that DOE does not view the regulations in the same way the staff does;

(3) parts of the regulations or subject matter that are particularly complex or controversial;

(4) areas that could be potentially troublesome during the hearing process; and

(5) areas where previous experience indicates guidance is needed, e.g., the Q-list.*

Once the staff has determined that one and/or more of the above criteria are met, it should then proceed to develop an TP, using the guidance and processes identified in Section 4., "Development Process."

By using this guidance, the staff will be able to develop standard TPs that are consistent with the intent of the regulations and the mission of the Division and Agency.

3. RESPONSIBILITIES

This section identifies those individuals who will be involved in the TP process and delineates their responsibilities. The specific details of how these responsibilities are undertaken are given in Section 4. of this Work Plan.

3.1 Director, NMSS

The Director, NMSS will be responsible for approving the final version of the TP and signing the Federal Register Notice for the final TP.

3.2 Director, HLWM

- Responsible for approving the determination that a TP is needed. Approval will be after the scoping phase of the TP is complete. This responsibility can be delegated to the Deputy Director.

- Concurs on Federal Register notice covering the availability of TP for public comment. This authority can be delegated to the Deputy Director or a branch chief.

3.3 Deputy Director, HLWM

- Acts for the Director, HLWM in his absence or if authority is delegated.

- Is the senior executive fully responsible for the overall management of the TP program. Authority for this function can be delegated to the branch chief level.

3.4 Chief, Project Management and Quality Assurance (HLPM)

- Provides recommendation to Division Director on need to continue development of TP during scoping phase or need to develop a rulemaking based on input from Section Leader, Special Analysis Section, HLPM.

- For TPs originated in HLPM, makes initial management decision to proceed with scope of development.

- Transmits and signs Federal Register Notices.

- Assumes duties identified in Section 3.6 for TPs originated in HLPM.

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* The Q-List is a document that contains those systems, structures, and components that are important to safety or waste isolation and therefore are covered by the DOE quality assurance program.

3.5 Chief, Engineering and CNWRA Branch (HLEN)

- For TPs originated in the Engineering and CNWRA Branch, makes the initial management decision to proceed with scope development.

- Assumes duties identified in Section 3.6 for TPs originated in HLEN.

3.6 Chief, Geoscience and Systems Performance (HLGS)

- Provides recommendation to Division Director on need to continue development of TP during scoping phase.

- Makes initial management determination to proceed with scope development once the potential for a TP has been identified by members of HLGS.

- After the scoping phase, provides a formal memorandum to the Division Director requesting approval to begin the development of a TP.

- Is responsible for completion of TPs on approved schedule.

- Is responsible for ensuring that TPs are complete and provide the necessary information or guidance before transmittal outside the branch.

- Transmits internal draft TP to the appropriate reviewing organizations.

- Transmits public comment draft TP to Chief, HLPM, for noticing in Federal Register.

- Manages and coordinates overall technical effort within the branch, including use and scheduling of appropriate technical reviewers.

- Participates, as needed, in the negotiation of schedule changes with the technical section leaders and project manager.

- Transmits final TP to Chief, HLPM, for preparation for Office Director signature.

- Ensures compliance with the guidance in this document and consistency among the different TPs.

3.7 Section Leader, Special Analysis Section, (HLPM)

- Ensures that proposed TP is consistent with overall goals and objectives of the HLWM program.

- Is responsible for ensuring that the TP is consistent with agency policy and positions. This review is preformed at all stages of TP development, scope, initial draft, public-comment draft, and final TP.

- Provides input to the Chief, HLPM on approval or denial of TP upon completion of scope. In addition, determines if proposed TP should be issued as a rulemaking, instead.

3.8 Technical Section Leader

- Ensures that the TP is developed using the guidance contained in this document.

- Manages and directs the technical reviewer, as needed, to ensure completion of the TP within the approved schedule.

- Ensures that the TP is technically sound and of good quality and that the positions, conclusions, recommendations, etc., given in the TP are adequately justified.

- Approves changes to the TP or schedule which are negotiated between the responsible technical reviewer and the project manager.

- Ensures that proper organizations outside of HLWM are included during the TP review and comment process.

- Identifies potential areas of 10 CFR 60 where a TP may be needed. The areas identified may result from interactions with DOE, its contractors, or members of the NRC staff.

- Is responsible for identifying the need for a TP to the appropriate branch chief who will initially decide on whether to develop a scope.

3.9 Project Manager (PM), HLPM

- Evaluates TPs and provides recommendations to the Chief, HLPM.

- During the development phase of TPs, is involved on an as-needed basis with the resolution of problems that may arise during the development process.

- Reviews and approves the proposed schedule and changes to schedule for completion of the TP, as identified in the scope.

- Provides quarterly status reports on the status of ongoing TP work to all participants identified in HLWM approved TP scopes. Identifies present status of TPs, schedule changes, and slips, plus highlights major milestone accomplishments.

- Coordinates schedules and activities for all TPs and identifies conflicts. Routinely resolves schedule conflicts, but on occasion reports problems and recommends resolution to the Chief, HLPM.

- Periodically reviews issued TPs to determine if updates are necessary.

- Obtains Program, Planning, and Status Assessment System (PPSAS) numbers for individual TPs.

- Once the need for a meeting is proposed by the Technical Reviewer and agreed to by the PM, arranges and notices public meetings between the staff and interested parties, including the public, DOE, or the Advisory Committee on Nuclear Waste (ACNW).

- Prepares Item of Interest once public-comment draft or final TP is issued.

- Prepares letters of contact with outside organizations.

3.10 Licensing Assistant, HLPM

- Prepares and issues Federal Register Notices for TPs.

- Obtains NUREG numbers, completes Form 335, "Bibliographic Data Sheet," and 426, "Publication Release for Unclassified NRC Staff Reports."

- Ensures that interested parties receive draft TPs in time to have sufficient time to comment.

3.11 Author (Technical Reviewer)

- Initiates TP scope development based on determination of the branch chief that the need for a TP exists.

- Prepares scope, for the proposed TP, which contains the necessary information described in Section 4.2, "Scope Development."

- Conducts regulatory research of previously issued TPs or other NRC guidance to determine if the staff already has an appropriate position. This research should be on an Agency-wide basis and not limited to just NMSS.

- Once the TP is approved for development, prepares the document and issues it from the branch chief, to the appropriate organizations.

- Incorporates internal NRC comments and prepares the TP for issuance to the public for comment.

- Incorporates appropriate public comments into the TP.

- Prepares comment resolution document which addresses all public comments.

- Negotiates and justifies changes to the approved schedule with PM.

- Proposes and recommends to PM the need for meetings during all phases of the TP development. The meetings may be either internal or external to the NRC.

3.12 Office of General Counsel (OGC) Attorney

- Reviews the TP scope and provides a recommendation to the Division Director on need for the TP, as this need bears on NRC's legal responsibilities.

- Provides comments on the proposed TP during all phases of development to ensure that the TP is consistent with NRC legal requirements.

- Concurs on Federal Register Notices issued during the TP process.

3.13 Organizational Representative(s) outside of HLWM

- Reviews and provides comments on TPs, using the criteria given in Appendix A of this procedure, and previously established staff positions. Ensures deviations from these are adequately justified.

3.14 Technical Editor

- Edits the TP to ensure proper grammar, diction, and consistency with agency publication requirements for NUREGs.

4. DEVELOPMENT PROCESS

4.1 Introduction

Contained in this chapter are the detailed steps that should be used in developing a TP. Overall, the development is divided into four steps. First and foremost is the scope of the TP. In this phase, the staff establishes the need for a TP and provides its proposed schedule for completion. Once it is determined that a TP is needed, the next step will be to prepare a first draft that will be reviewed by the appropriate organizations in the NRC. The third step deals with preparing a draft of the TP that will be issued for public comment. After the public comments have been addressed, the staff will prepare and issue the final TP, as well as the disposition of public comment. Based on the schedule provided in Appendix B of this guide, the process should take approximately 73 weeks; however, the actual time will depend on the complexity of the subject matter.

4.2 Scope Development

During the development of a TP, the most important step in the process may be the scoping of the Position. This is because the TP scope not only contains the basis for the need for a Position, but also provides the strategy for developing it. If the scope is done properly, the regulatory basis for the TP will be identified; the subject matter of the TP will be succinctly discussed; an outline of the contents of the Position and its completion schedule will be provided; and if needed, meetings will be scheduled. By having a complete scope, the subsequent Position will be based on a solid foundation.

In preparing a scope, the TP author should ensure that the following topics are addressed:

(1) a regulatory evaluation which indicates what portion of 10 CFR Part 60 is being addressed and why a TP is needed based on items (2), (3), and (4) below;

(2) a discussion, in some detail, on what type of guidance the TP will provide (this will allow HLWM Management to determine if a TP is warranted or if a rulemaking is necessary);

(3) justification as to why the staff, rather than DOE, is undertaking this effort;

(4) a description of how the TP fits into the overall regulatory development and license review process, including input from the Center for Nuclear Waste Regulatory Analysis and a discussion on why the information should not be in another form, such as a letter to DOE or review plan, as well as a discussion of other staff guidance that has been previously issued in this area;

(5) the projected schedule for completion of the TP and justification for any deviations from the generic milestone schedule given in Appendix B of this procedure;

(6) an annotated outline that shows the major topic areas and conforms to the standard outline in Appendix C of this procedure; and

(7) identification of the need for preliminary meetings before issuance of a draft for public comment within and outside of the NRC.

As can be seen from the above list, fulfilling the requirements for the scope document entails conducting some background research on both the regulations, their bases, and other information available on the subject, including public information such as journal articles or professional papers and other publications that have been issued by the staff. However, before the staff begins this process, it must first decide if a TP may be needed.

The basis for determining the preliminary need for a TP initially rests with the responsible technical reviewer and section leader, although input may come from other people involved in the process. Initially, the technical reviewer and section leader will identify the need for a TP based on information gained as part of the staff's work. The criteria used to initially determine the need for a TP are given in Section 2. Once it has been decided by the technical reviewer and section leader to develop a TP, they should discuss the need with the appropriate branch chief. The chief should then consult with HLPM to evaluate what resource and schedule impacts will occur if scope development is begun. If the chief believes that the TP is warranted and there is assurance that the resource and schedule impacts are minimal, the technical reviewer should begin development of a scope. In addition, the technical reviewer, or author, should contact the PM who will obtain a PPSAS number. When the PPSAS number is received, the author can then begin to develop the scope. As was stated in the "Scope" section, satisfying one or any number of the criteria would be the first indication of the need for a TP, but not necessarily the final determination. The final determination will be made once the full scope has been completed. However, the criteria from Section 2., along with the applicable Part or Section of 10 CFR Part 60, provide the information that should be used to develop the regulatory evaluation section of the scope.

When preparing the regulatory evaluation, the author should provide a discussion of what criteria from Section 2.0 have been met. This discussion must be more than just noting the criteria. It must provide ample information to allow people other than the author and section leader to agree that the criteria are met. Also contained in the analysis should be an identification of the performance objective of 10 CFR Part 60 that is being covered and any other parts or sections of 10 CFR that need to be addressed. Once again, there should be sufficient information presented to allow an independent determination. At a minimum, a description of what new information, besides that contained in the regulations, that the TP will give should be discussed in this part of the scope.

Next, the scope should provide the details on what type of guidance the TP will contain. A description of the guidance should be, in most cases, a succinct summary of the TP. It should generally discuss what type of guidance will be given and, where possible, provide supporting details. Once this is complete, the scope should provide justification for the staff, rather than DOE, undertaking this work. Basically, this justification will help determine if the

staff is doing the work of DOE. As an example, if the staff were providing guidance to DOE on what type of design would be acceptable, this would be an appropriate subject for a TP. On the other hand, if the staff were telling DOE how to do the design, this would not be an appropriate subject for a TP. This is because it is up to DOE, not the staff, to conduct design work.

Now that the scope has presented the need for guidance, it should describe how this guidance fits into the review process. What the scope needs to do here is discuss why a formal Position is needed. Because there are several other types of guidance, such as review plans, or rulemakings, the scope needs to address why these types of instruments should not be used. In addition, the scope should provide a description of other staff guidance that has been previously issued. In order to fulfill this, the responsible technical reviewer should conduct an information search in this area. At a minimum, the search should involve contacting RES and if appropriate, the Office of Nuclear Reactor Regulation (NRR) and some NMSS Divisions besides HLWM.

Up to this point, the scope has provided the information needs given in Items (1), (2), (3), and (4) on page 7. When this information is reviewed as a whole, a person should be able to conclude that a TP is warranted.

Besides having adequately justified the TP, consideration needs to be given to developing the Position. That is, the information that is identified in items (5), (6), and (7) on pages 7 and 8. First, the scope should identify the proposed schedule for completion. Contained in Appendix B is a generic schedule that gives each step in the development process, as well as the projected schedule. This schedule gives the time, in weeks, between each milestone and the total elapsed time, also in weeks. It should be used as a model for developing a position-specific schedule which contains actual completion dates. In addition, the scope should provide rationale for the projected TP start date, including a discussion of how the TP fits into the overall HLW program and why the start date supports the program needs. If large deviations from the generic schedule are needed because of the complexity of an issue, the scope should provide the proposed schedule, along with justification for this difference. Finally, the schedule discussion should provide a resource estimate for each fiscal year where work on the TP will be performed.

Appendix C to this work plan contains the standard annotated outline showing the major topic areas for use with all TPs. This outline should be provided in annotated form as part of the scope.

Finally, the scope should identify any meetings that need to be held during the process. These include meetings internal to HLWM or the agency, and public meetings during all phases of development. If the subject is particularly complex or controversial, there may have to be meetings held during the early part of development. On the other hand, if there is a desire to solicit comments from particular parties such as professional societies, the TP author may want to have the PM send a letter to that interested party, notifying it of the staff's intent to issue a TP and its desire to receive that party's comments.

The reason for this is that some parties require more time to evaluate issues due to the committee process used. To have a letter sent to a particular party, the appropriate branch chief should provide this request to the PM in a memorandum. Once the PM receives this request, a letter from the Chief, HLPM will be prepared and sent. It should be noted that any TP-related contact with organizations outside of the agency must be processed through HLPM.

Although it is recommended that meetings be held as frequently as the author and project manager believe are necessary, the only mandatory meetings are the public meeting that must be held as part of the comment resolution process and a meeting with the ACNW, to review the final version of the TP. More information on both of these is given in Section 4.5 "Final Position."

When the scope is completed, the approval for developing a TP must be given by the Director or Deputy Director of HLWM. This approval will be determined for each TP on a case-by-case basis. The method of obtaining this approval is for the chief of the originating branch to transmit the final scope by memorandum to the Director. Concurrence for this transmittal memorandum should include the author and any other participants who helped prepare the scope of the TP, the appropriate section leaders, and the appropriate branch chief. Copies of the scope should be sent to the other parties, excluding the Office Director, identified in Section 3., "Responsibilities." At a minimum, copies must be provided to the HLWM branch chiefs, PM, OGC Attorney, and any NRC representative outside of HLWM. These parties will then have 10 work days from the date of the memorandum to provide a recommendation on whether the TP is warranted or whether an alternate form of resolution such as rulemaking is necessary.

If no comments or all positive comments are received and the Director believes that the TP is needed, it should then be approved. If negative recommendations are received, the Director should consider these comments and, if he agrees, refuse to approve the TP. However, the final decision rests with the Director of HLWM. Even with negative recommendations, if the Director believes the TP is justified, it can be approved. Recommendations are not mandatory and can be informal or formally documented. Approval is given by the Director signing the block at the bottom of the transmittal memorandum and returning it to the originating branch. The block at the bottom of the memorandum can be a single line for signature that has the word "Approved" above it. Disapproval can be noted by writing "Disapproved" in the block.

If approval for the TP is granted, the true development begins. The steps involved in that process are given in Sections 4.3 through 4.5. If the need for guidance is evident but not in the form of a TP, the options and procedures that should be followed are given in Section 5.1 of this work plan.

4.3 Internal Draft

As previously mentioned, the reasons for issuing TPs are to address an acceptable approach for meeting the regulations and/or to describe how various parts of the regulation apply to the HLW program. The purpose of the internal draft phase is to obtain comments on the proposed TP to ensure consistency among the various NRC organizations. The starting point for developing a TP should be a review of the regulations, to determine what type of guidance is needed. The size and content of a TP should be directly proportional to the complexity of the regulation, as well as to the type of guidance the staff needs to give. When preparing a TP, the author should be as concise as possible in providing the required and needed information. This will help keep the size of TPs reasonable.

Appendix C presents the format that should be used for all TPs. As can be seen from this Appendix, Section 1. of the TP, "Introduction," should provide the background and reason for issuing the TP. In this section, the TP should describe the applicable parts of the regulations that are being addressed and state the purpose, e.g., identifying criteria that, if met, would demonstrate compliance with the NRC regulations or presenting one acceptable approach for calculating groundwater travel time (GWTT). The introduction should also state

that the TP provides an acceptable approach for meeting the regulations. If DOE implements this approach, the staff would find it acceptable; however, other alternatives can be used to demonstrate compliance with the regulations. If DOE decides to use an alternative approach to the one contained in the TP, it is then incumbent upon DOE to demonstrate the validity of the proposed approach. The specific words describing the alternate approach are given in Appendix C of this work plan.

In Section 2., "Regulatory Background," the staff should provide its basis for issuing the TP. This section should not only discuss the applicable regulations and general reasoning behind the TP, but should also describe other relevant staff guidance; justify deviations from or adherence to previous NRC positions; and discuss applicable industry standards. If the TP is a revision of a Position that has already been issued, Section 2. should also present the history of the revisions and the need for it.

Next, Section 3., "Technical Position," presents the staff position on the regulations. Included in the section should be a clear and concise statement of the staff position or positions. This may be either general and broad-scoped, or very detailed. For example, in presenting its position on a particular approach, the staff may provide a general description of the methods that should be used, as well as what calculations need to be performed. Conversely, the staff may find that it needs to prescribe the use of a particular equation, as well as list several satisfactory values of variables that need to be used. Prescriptive TPs should be the exception more than the rule, e.g., where DOE is proceeding with an unacceptable approach. This is because overly prescriptive TPs do not provide DOE with guidance, but instead tell DOE what the staff believes it should do; also, often they do not allow room for the consideration of alternatives.

Section 4., "Discussion," should provide the supporting rationale for the positions given in Section 3. of the TP. Basically, Section 4. of the TP should contain the technical basis for the positions. References for the TP are included in Section 5. and the bibliography is given in Section 6.

In addition to those parts of the TP that are included in the body, there are several appendices that must be part of the TP. Appendix A of the TP will contain the glossary of acronyms and technical terms that are used in the TP. Appendix B of the TP contains the public comments and staff disposition of these comments. This appendix is not completed until the TP becomes final. A more detailed discussion of Appendix B is given in Section 4.5, "Final Position."

In addition to the standard requirements for a TP, the staff may, on occasion, want to elaborate on a particular subject, even though that elaboration is not part of the overall guidance. If this is the case, the staff should provide this type of discussion in appendices to the TP, starting with Appendix C. Examples of elaborations may include staff dissertations or published papers. This option should be used sparingly.

Once the TP has been prepared in draft, it should be typed double-spaced. This is because, in its present form, the TP needs to be reviewed and edited by a technical editor. The use of a technical editor will ensure that the TP is consistent with the publication format of the NRC. It is the responsibility of the TP author to take the TP directly to the editor.

When the technical editor has completed the process, the TP will be in the standard agency format and will now be ready to be reviewed by the appropriate organizations within NRC. This is accomplished by the branch chief transmitting the TP to the responsible organizations. As with the TP scope, the transmittal memorandum should have the concurrences of the author, other participants, their section leaders, the technical editor, and the appropriate branch chief. At a minimum, the following organizations must be included in the review of the initial draft and, if appropriate, provide comments:

- The remaining HLWM branches.
- OGC
- RES
- Division of Fuel Cycle, Medical, Academic and Commercial Use Safety.

Other offices or divisions should be consulted as appropriate. For example, if the staff is issuing a TP on the application of a part of 10 CFR Part 50 to the HLW program, comments from NRR should be solicited. By doing this, the author would allow NRR to identify potential problems or inconsistencies between the TP and other agency positions.

Once the TP has been transmitted by originating branch, the commenting organizations will be responsible for responding by the date identified in the TP scope. The criteria that should be used by the person reviewing an internal draft are given in Appendix A of this work plan. These criteria are not intended to be used to determine the need for a TP. Rather, they are to be used in ensuring the adequacy of a TP. If no date is established, comments will be due within one month of the date of the transmitting memorandum.

4.4 Public Comment Draft

After the staff has received comments from the other NRC organizations, it should incorporate or resolve the comments. Resolution of internal staff comments should be documented and maintained by the author for future reference.

Similar to the internal draft phase, the public comment draft is intended to solicit comments from interested parties to allow public participation in the development process. When all of the appropriate comments have been incorporated, the TP is ready for notification of availability in the Federal Register. This is accomplished by transmitting the TP to HLPM and requesting publication. Transmittal is from the branch chief with concurrence by those individuals identified in Section 4.3 of this work plan. As with the internal draft, the public comment draft must be edited by a technical editor, and the editor must be on concurrence for the transmittal memorandum.

HLPM will then take the steps necessary to have the TP placed in the Federal Register. This involves preparing a memorandum to the Rules and Procedures Branch in the Office of Administration and Resources Management, requesting a Federal Register Notice regarding the availability of the TP for comment. The Federal Register Notice should be in the same format as the one given in Appendix D. The original and five copies should be provided to the Rules and Procedures Branch. The Federal Register Notice and transmittal memorandum will be prepared by the HLPM licensing assistant. Concurrences on the memorandum will include the licensing assistant, the PM, OGC and the Division Director or his designee. The Chief, HLPM will sign both the transmittal memorandum and the Federal Register Notice.

In addition to noticing the availability of the TP to the public, HLWM will also provide copies to the ACNW. These copies will be provided from the Director, HLWM. The transmitting memorandum will be prepared by the PM and concurrence will include the Chief, HLPM.

Unless otherwise justified, the TP comment period will be 60 days from the day of publication in the Federal Register. Public comments should be transmitted to the PM, who will document receipt of the comments and provide the comments to the technical reviewer. After the 60-day comment period, the staff will consider the comments and make a final determination on their disposition. Once this is complete, the technical reviewer will now be responsible for preparing the final version of the TP. This process is described in Section 4.5 below.

4.5 Final Position

Unlike the comment resolution procedure for the internal draft, the staff must formally document the disposition of each of the public comments it receives. If the staff reviews the comment and decides that it warrants incorporation, then the TP should be revised. On the other hand, if the staff does not incorporate a comment into the TP, it must still be addressed. In both cases the staff must report the final disposition.

The final staff disposition of public comments should be contained in Appendix B to the TP. In Appendix B, the staff must address all the public comments. The suggested format for presenting comments is given below.

Comment: Repeat the comment verbatim, or if not possible, directly quote key points.

Originator: Identify the commenting organization.

Disposition: State whether the comment has been incorporated in whole or part into the TP.

Basis: Present the staff basis for reaching the disposition. References to other comments in the report are acceptable.

Similar comments can all be placed under the same "Comment" and one response provided. Once all the comments are disposed of, and the TP is revised as necessary, it is now ready for publication. Consistent with previous versions of the TP, the final document must be processed by a technical editor. However, before the final TP is issued, the staff should provide copies to the ACNW and those parties who received the original internal draft for any additional review and comment. This will again be accomplished by transmitting the TP via a memorandum from the Director of HLWM to the chairman of the ACNW. The memorandum preparation and concurrence will be the same as that given in Section 4.4. The memorandum should state that the staff would like to have the ACNW comments and that the staff is prepared to meet with the ACNW to discuss its comments after it has disposed of the public comments on the TP.

After the ACNW has provided its comments and they have been addressed by the author, the TP is ready to be issued. To do this, the licensing assistant will obtain a NUREG number, plus complete Form 335, "Bibliographic Data Sheet," and Form 426, "Publication Release for Unclassified NRC Staff Reports." Copies of these forms are in Appendix E of this work plan. These preparations will be

made early in the the final document phase of the TP development, so that the forms and number will be available when the document is received from the technical editor. Coinciding with this will be the preparation of a Federal Register Notice by the HLPM licensing assistant, that will notice issuance of the final TP. Because a TP represents the position of the HLWM staff, the Federal Register Notice dealing with the final TP will be signed by the Director, NMSS.

When the staff is prepared to issue the TP, the appropriate branch chief with concurrences of the author and section leader will transmit the final TP to HLPM. After it is received in HLPM, the licensing assistant will put together a publication package that contains:

(1) a memorandum from the Director or Deputy Director, HLWM, to the Director, NMSS, transmitting the package;

(2) the Federal Register Notice that will signed by the Director, NMSS;

(3) a copy of Form 426 signed by the Director or Deputy Director, HLWM; and

(4) the TP document that is ready for publication (including all appendices and Form 335).

This package will be assembled by the licensing assistant, and concurrences on the transmittal memorandum will include: (1) the PM; (2) the licensing assistant; (3) the Chief, HLPM; (4) OGC; (5) the Deputy Director, HLWM; and (6) the Director, HLWM who will also sign the package. If the Director, NMSS agrees with the Position and signs the Notice, the package will be returned to the licensing assistant. Once the TP is approved for final issuance by the Director, NMSS, the PM should prepare an item of interest for the Executive Director of Operations (EDO) so that the EDO is aware of the issuance. The licensing assistant will then complete the publication and notification process and inform the PM, TP author, and HLWM branch chiefs of that the final TP has been issued. This completes the TP development process.

5. OTHER CONSIDERATIONS

5.1 Alternative Forms of Guidance

As stated in Section 4.1 of this work plan, during the scoping phase, it may be determined that although the staff needs to take a position on a particular matter, the subject may not warrant the issuance of a formal TP. There may be several reasons for this. One example is that the guidance is more review-oriented and, therefore, belongs in the LARP. A second example is that DOE has merely made an information request on part of the regulation.

If a staff position needs to be issued but not in the form of a TP, there are several options available, depending on the situation. For example, if the staff wants to make a particular concern known to DOE, this can be done by transmitting a letter to the Department. The method for initiating a letter to DOE is quite simple. Essentially a memorandum should be sent to the responsible PM, describing the staff position and requesting that a letter be sent to DOE. Once the memorandum is received, the PM will prepare a letter and make the staff position known.

The second area where the staff may need to take a position, but a TP is not warranted, is that of review guidance. During the TP scope development, it may be determined by one of the organizations involved in the process that the guidance contained in the proposed TP is more review-oriented. If this is the case, the guidance needs to be placed in the LARP and not in a TP. Once it is determined that review guidance is necessary, the technical reviewer should contact the PM responsible for developing the HLWM LARP.

A third area where the staff may find that a subject warrants additional staff effort is the need for rulemakings. In this situation, the staff should consult the Section Leader, Special Analysis Section on the need and method for initiating a rulemaking.

5.2 Qualification of Previous Technical Positions

Because the development of several TPs has been completed or has begun, the method for implementing this work plan is as follows. For those TPs that are still being prepared, the responsible technical reviewer or lead should develop the information identified in Section 4.2, "Scope Development," of the work plan. In addition to preparing a scope for ongoing TPs, the technical lead should also ensure that the TP is incorporated in the appropriate step identified in Section 4., "Development Process." For example, if a TP has been prepared for internal staff review but has not yet been issued for public comment, the technical lead should ensure that the TP development follows those steps given in Section 4.3, "Internal Draft." If a TP has been issued for public comment, the lead should begin to follow the steps given in Section 4.4, "Public Comment Draft." TPs that already have been started do not require Division Director approval.

For TPs that are already issued, the author should evaluate the TP against each step in the work plan, to ensure that key steps such as OGC concurrence, ACNW review, Federal Register notices, and responses to public comments have been taken. For TPs that are already issued as NUREGs, NMSS Office Director approval is not necessary. However, any TP that is not published as a NUREG must be reissued. When the TP is reissued, the ACNW review must be included and the final product must be a NUREG. There are, of course, several steps, such as the use of a technical editor, that cannot be implemented on a completed TP.

5.3 Recommended Training

Although not required, there are several training courses that would be helpful to any author of a TP. These included:

(1) "The Regulatory Process"

(2) "NRC and Its Environment"

(3) Any course on technical writing

(4) Any course on presentations

(5) Any course on communication skills

APPENDIX A

TECHNICAL POSITION REVIEW CRITERIA

APPENDIX A

TECHNICAL POSITION REVIEW CRITERIA

In reviewing the internal draft of a Technical Position (TP), the responsible staff members should review the TP from the perspective of the U. S. Department of Energy (DOE) and other potential interested parties to be sure that intent is clear. Questions that should be considered include:

- Does the TP have clarity?

  1. Is it readable?
  2. Is the logic clear?
  3. Is the relationship to the regulations clear?
  4. What is the main message?

- Will DOE be able to understand what we are expecting from it?

- Are the staff's positions consolidated in one place in the TP as opposed to being spread out over many different sections so that what we are asking can easily be determined.

- Is the organization of the TP adequate for meeting the standard for TPs and in keeping with its purpose?

  1. Background and Purpose
  2. Technical Position
  3. Rationale

- Is the TP explicitly organized in this way or if not, does it effectively communicate these items?

- Are the staff's positions reasonable, practicable, supportable, comprehensive, sufficient?

- If the staff's position sets forth a detailed description of a compliance demonstration method, does it have adequate justification?

- Is the use of should, could, and must appropriate and accurate?

- Are links with related issues and requirements clearly identified?

- Is the style of the TP acceptable?

  <u>Tone</u> Is the choice of language objective?

  <u>Clarity</u> Is the TP succinct and clear?

Coherence	Are the main points clear and logically connected? Do they hang together?
Emphasis	Are the main points identifiable? Do the structure and format aid clarity (i.e., is it easy to read)?
Unity	Is the discussion focused?

APPENDIX B

Standard Milestones and Schedules

for the Development of Technical Positions

APPENDIX B

STANDARD MILESTONES AND SCHEDULES FOR THE DEVELOPMENT OF TECHNICAL POSITIONS (TPs)

Milestone	Schedule: Elapsed Time(wk)	Schedule: Accumulated Time(wk)	Schedule: Date
Initiate need for TP	0	0	(1)
Obtain Program, Planning, and Status Assessment System (PPSAS) number	1	1	
Scope complete	8	9	
Determination on need for TP	1	10	
Notify special parties of the staff intent to issue a TP	3	13	
Preliminary meeting, if necessary	3	16	
Internal draft	16	32	
Internal NRC comments	4	36	
Public-comment draft	8	44	
Federal Register Notice/ transmittal to Advisory Committee on Nuclear Waste	3	47	
Public comment period closed	8	55	
Evaluation of Comments and Revision of TP	6	61	
Public meeting on disposition of comments	2	63	
ACNW review	2	65	
Complete Final TP	4	69	
Issue Final TP	4	73	

(1) To be completed by individual author of each TP.

APPENDIX C

Standard Annotated Outline

for Technical Positions

APPENDIX C

STANDARD ANNOTATED OUTLINE FOR TECHNICAL POSITIONS

1. INTRODUCTION

This section should include statements of the purpose, scope, structure of the TP, and alternatives in that order.

- Purpose: As an introduction, simply state that the purpose of this Technical Position (TP) is to provide guidance to the U. S. Department of Energy (DOE) on ...(subject matter of TP). A statement on the relevance of the subject to the High-Level Waste (HLW) program at this particular time may be added.

- Scope: Amplify the purpose by discussing how broad, and conversely, how limited the treatment of the subject will be.

- Structure of TP: Briefly and specifically state what will be covered in the following sections of the document.

- Alternatives: State the following in part of the introduction.

  "Technical Positions are issued to describe and make available to the public criteria for methods acceptable to the NRC staff [for] implementing specific parts of the Commission's regulations, or to provide guidance to the Department of Energy. Technical Positions are not substitutes for regulations, and compliance with them is not required. Methods and solutions different from those set put in the position will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission."

  (To be included in the final TP)

  "This position was issued after consideration of comments received from the public. Comments and suggestions for improvements in these positions are encouraged at all times, and positions will be revised, as appropriate, to accommodate comments and to reflect new information or experience."

2. REGULATORY BACKGROUND

- Focus on specific references to applicable NRC regulations.

- Connect the position to the regulations by stating the questions about the regulations that the TP will address. Also discuss the applicable performance objectives.

- If necessary, for a particular subject, include industry standards.

- If necessary to set context, refer to legislative acts; e.g., "Under the Nuclear Waste Policy Act (NWPA), the U. S. Nuclear Regulatory Commission (NRC) implements the U. S. Environmental Protection Agency (EPA) standard...."

- Pertinent information from Part 60 and supplementary information should also be addressed.

- Pertinent legal and historical background may be added, if it helps clarify the Position.

- Discuss other applicable NRC guidance and TPs.

3. TECHNICAL POSITIONS

Provide a brief, clear and concise statement of the staff's position(s), without any discussion. Should the TP consist of more than one technical point, each should be stated separately and numbered, to the extent the subject matter allows. Each TP should be completely stated, so it is reasonably self-standing, with minimum need for referencing other documents or other parts of the TP.

In some cases dealing with a complex position (e.g., an acceptable methodology), to avoid unnecessary repetition, it may be advisable to combine discussion with position statements, as long as the staff position is clear and the discussion is clearly labeled as such.

4. DISCUSSION

This is the principal part of the TP, because the discussion provides amplification of the positions stated.

- The discussion should explain the stated positions and discuss fundamental reasons and technical justification for the positions taken. These should be presented in a traceable fashion, so that the logic behind the position can be easily followed.

- If there are two or three terms essential for understanding the positions presented in this document, provide definitions first. Definitions should be consistent with definitions provided in existing NRC high-level waste management (HLWM) program documents.

- In general, discussions for positions should be presented in the same order and numbered the same way as the positions are presented in Section 3. In some instances, however, the supporting logical argument is best presented for a group of position points.

5. REFERENCES

   - List the cited documents only.

6. BIBLIOGRAPHY

   - List documents that are not explicitly cited, particularly for descriptive or critical notes relating to the subject.

APPENDICES:

A.	Glossary	-	If acronyms and technical terms that may be difficult to understand have been used, definitions should be provided here. All definitions should be consistent with existing NRC HLWM program documents.
B.	Comment Resolution	-	Provides the staff disposition of the public comments received.
C.	Other appendices	-	This subsection may contain calculations, figures, and schematics that would support discussions, as well as expanded discussions on the subject.

APPENDIX D

Sample Federal Register Notice

APPENDIX D

SAMPLE FEDERAL REGISTER NOTICE

MEMORANDUM FOR: Branch Chief
Regulatory Publications Branch
Division of Freedon of Information
and Publications Services
Office of Administration and Resources Management

FROM: Branch Chief
Project Management and Quality
Assurance Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: FEDERAL REGISTER NOTICE REGARDING AVAILABILITY OF TECHNICAL POSITION.

Enclosed is a Federal Register Notice that announces the availability of the Draft Technical Position on "Title of Technical Position." The original and five (5) copies are provided in accordance with SECY procedures. The contact for this effort is (Name of Project Manager). All comments should be forwarded to him(her).

Branch Chief
Project Management and Quality
Assurance Branch
Division of High-Level Waste
Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: Federal Register Notice

7590-01

NUCLEAR REGULATORY COMMISSION

AVAILABILITY OF DRAFT GENERIC TECHNICAL POSITION ON

"TITLE OF TECHNICAL POSITION"

AGENCY: U. S. Nuclear Regulatory Commission (NRC)

ACTION: Notice of Availability

SUMMARY: NRC is announcing the availability of the Draft Technical Position on "Title of Technical Position."

DATE: The comment period expires (insert the date 60 days after publication).

ADDRESSEES: Send comments to Chief, Regulatory Publications Branch, Division of Freedom of Information and Publications Services, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555. Copies of this document may be obtained free of charge upon written request to the (Name of HLPM lead secretary), Project Management and Quality Assurance Branch, Division of High-Level Waste Management, U. S. Nuclear Regulatory Commission, Mail Stop 4-H-3, Washington, D. C. 20555, or by telephone at (give lead secretary's telephone number).

FOR FURTHER INFORMATION CONTACT: Give name of PM.

SUPPLEMENTARY INFORMATION: Provide some background information on the subject, a short discussion of the Technical Position, and the type of comments the staff desires.

Dated at Rockville, Maryland this ___ day of _____, 1988.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Branch Chief
Project Management and Quality
Assurance Branch
Division of High-Level Waste
Management
Office of Nuclear Materials Safety
and Safeguards

APPENDIX E

Forms 335 and 426

NRC FORM 426
(7-86)
NRCM 3201

U.S. NUCLEAR REGULATORY COMMISSION

PUBLICATIONS RELEASE FOR UNCLASSIFIED NRC STAFF REPORTS

(Please Type or Print)

1. REPORT NUMBER — *Obtain in advance from Division of Technical Information and Document Control*

2. DISTRIBUTION CATEGORY NUMBER *(If any)* — *Insert appropriate number from the NRC Distribution Category List (see NUREG-0550)*

3. TITLE AND SUBTITLE *(State in full as shown on document)*

4. AUTHORS *(If more than three, name first author followed by "and others".)*

5. OFFICE/DIVISION | BRANCH/UNIT | MAIL STOP | 6. DATE MANUSCRIPT COMPLETED

7. RESPONSIBLE NRC STAFF MEMBER | 8. TELEPHONE NUMBER

9. TYPE OF DOCUMENT *(Check appropriate box)*

- a. REGULATORY REPORT *(e.g., Environmental Impact Statement, Safety Evaluation Report, etc.)*
- b. TECHNICAL REPORT
- c. CONFERENCE PAPER, JOURNAL ARTICLE OR SPEECH
  - (1) TITLE
  - (2) DATE(S) AND LOCATION
  - (3) SPONSOR AND/OR PUBLISHER
- d. OTHER *(Indicate type of item, e.g., thesis, speech, journal article, guide, etc.)*

10. REFERENCE AVAILABILITY STATEMENT
ALL MATERIAL REFERENCED IN THIS REPORT IS AVAILABLE TO THE PUBLIC, EITHER THROUGH A PUBLIC LIBRARY, THE GPO SALES PROGRAM, NATIONAL TECHNICAL INFORMATION SERVICE, OR THE NRC PUBLIC DOCUMENT ROOM. WHERE THIS IS NOT TRUE, THE SPECIFIC AVAILABILITY OF A REFERENCED DOCUMENT IS INCLUDED WITH THE REFERENCE LISTING.

a. SIGNATURE *(Author)* | b. DATE

11. SPECIAL DISTRIBUTION *(Specify special instructions such as "Make available only as specially approved by program office," or "Send to attached addresses." Submit addressed mailing labels for special distribution. Continue instructions on reverse or separate sheet if necessary.)*

12. PATENT CLEARANCE *(If applicable)*

Forward completed, signed NRC Form 426 together with the related documents for review
TO: Appropriate Patent Counsel

- a. PATENT CLEARANCE NOT REQUIRED
- b. PATENT CLEARANCE GRANTED
- c. PATENT CLEARANCE DENIED

d. PATENT COUNSEL'S SIGNATURE | DATE

13. SUBMITTED BY

a. NAME OF RESPONSIBLE ASSISTANT DIVISION DIRECTOR OR ABOVE

b. OFFICE/DIVISION

c. SIGNATURE *(NRC Assistant Division Director or Above)* | DATE

NRC FORM 335
(2-84)
NRCM 1102,
3201, 3202

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

SEE INSTRUCTIONS ON THE REVERSE

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2. TITLE AND SUBTITLE

3. LEAVE BLANK

4. DATE REPORT COMPLETED

MONTH	YEAR

5. AUTHOR(S)

6. DATE REPORT ISSUED

MONTH	YEAR

7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS *(Include Zip Code)*

8. PROJECT/TASK/WORK UNIT NUMBER

9. FIN OR GRANT NUMBER

10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS *(Include Zip Code)*

11a. TYPE OF REPORT

b. PERIOD COVERED *(Inclusive dates)*

12. SUPPLEMENTARY NOTES

13. ABSTRACT *(200 words or less)*

14. DOCUMENT ANALYSIS – a. KEYWORDS/DESCRIPTORS

b. IDENTIFIERS/OPEN-ENDED TERMS

15. AVAILABILITY STATEMENT

16. SECURITY CLASSIFICATION

(This page)

(This report)

17. NUMBER OF PAGES

18. PRICE

APPENDIX F

ACRONYMS AND INITIALISMS

ACNW	Advisory Committee on Nuclear Waste
CNWRA	Center for Nuclear Waste Regulatory Analysis
DOE	U. S. Department of Energy
EDO	Executive Director for Operations
GWTT	Groundwater Travel Time
HLEN	Engineering and CNWRA Branch
HLGS	Geosciences and Systems Performance Branch
HLPM	Project Management and Quality Assurance Branch
HLW	High-Level Waste
HLWM	Division of High-Level Waste Management
LARP	License Application Review Plan
NRC	U. S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NMSS	Office of Nuclear Material Safety and Safeguards
NWPA	Nuclear Waste Policy Act
OGC	Office of General Counsel
PPSAS	Program, Planning, and Status Assessment System
PM	Project Manager
RES	Office of Nuclear Regulatory Research
SAR	Safety Analysis Report
TP	Technical Positions