1.0 Purpose and Scope

This procedure prescribes the Sandia National Laboratories (SNL) Waste Isolation Pilot Plant (WIPP) process for reviewing documents. It establishes requirements for:

- conducting all types of reviews, including independent technical, quality assurance, and management reviews, and
- documenting the resolution of comments using the Document Review and Comment (DRC) form, Form NP 6-1-1.

The requirements in this procedure apply to the review process for:

1. Controlled documents which must be processed through WIPP Document Control, i.e., documents which prescribe processes, specify requirements, or establish designs important to the WIPP compliance application or recertification, nuclear safety, waste characterization or waste isolation, e.g. NPs, SPs, Analysis Plans, Test Plans, sketches/drawings.
2. Technical information documents which must be processed through the SNL Review and Approval (R&A) process, i.e., documents requiring SAND numbers: abstracts, conference papers, journal articles, presentation materials and reports.
3. Technical information documents which are processed by author, i.e., Analysis Packages and Scientific Notebooks.

Acronyms and definitions for terms used in this procedure may be found in the Glossary located at the Sandia National Laboratories (SNL) WIPP Online Documents web site.

2.0 Implementation Actions

2.1 Document Preparation

Prior to submitting the document for review, the author/Sandia contact shall ensure that it has been written according to the procedure which specifies the requirements for the document (e.g. NPs, SPs, SNs, APs, Test Plans). Journal articles, conference papers, presentation materials and SAND report requirements are contained in the SNL Guide to Preparing SAND Reports. The current version is available online with a direct link at (http://www.sandia.gov/news/publications/search.html).
Draft or incomplete work (analysis reports, calculations, scientific notebooks, presentations, memos, drawings etc.) that is requested by DOE/CBFO and needed by the Regulator (change requests) or for a qualification activity (e.g., peer review) that is to be delivered outside of the SNL WIPP team shall be appropriately annotated stating that the work is preliminary or draft and is not to be cited. SNL WIPP Management and QA concurrence (verbal) shall be obtained prior to delivery of draft or incomplete work.

2.2 Identifying the Reviewers

The author of the document, or the Sandia contact for contractor prepared documents, shall select individuals to review the document based on the required reviews specified in the governing procedure for the document type. For the purposes of this procedure, the author or Sandia contact who initiates the review process is the Review Requester. The Review Requester can delegate an author of the document to respond to comments of the reviewer. This delegation is implied and does not need to be documented.

The Review Requester shall ensure that those individuals selected to review a document are qualified to perform the specified type of review. The Review Requester shall ensure that at least one of the reviewers of any controlled document is in an organization or technical discipline affected by the document. The originator or Review Requester of the document shall not be a reviewer of the document.

Note: Technical reviews must be performed by someone who is independent. In order for an individual to qualify as an independent technical reviewer, the individual must not have performed, contributed to, or directed the work being reviewed, and the individual must not stand to either gain or be adversely affected by the results of the work, or the success of the reviewed document.

Changes/revisions to the document shall be reviewed and approved by the same organizations (e.g., functional areas) that performed the review/approval of the original document except as allowed by the following note.

Note: Editorial changes to the document require only QA review and approval, and approval by the author. “Editorial changes” are defined in the Glossary which includes the list of types of changes that are ‘editorial’ in nature.

2.3 Conducting the Review

The flow chart (Appendix B) defines the responsibilities of the Review Requester/Delegate and reviewers.

The Review Requester shall provide the reviewer an electronic or hard copy of the document to be reviewed, and may provide a DRC form with items 1-6 completed.

Review criteria can come from the procedures, plans, notebooks, etc. The minimum criteria for document review are included on Form NP 6-1-1 (DRC). The Review Requester may provide additional criteria as deemed appropriate to the DRC form (see item 5) or as a memo.

Minimum criteria for a technical reviewer:
- Are objectives clearly stated and fulfilled?
- Is the technical activity clearly described?
- Are equations/calculations accurate?
- Does logic lead to reasonable conclusions?
- Are the results drawn from the data supported by the data presented?
• Are data/tables/figures easily understood? Are legends complete?
• Are assumptions stated clearly and do they lead logically to the conclusions presented?

Minimum criteria for a QA reviewer:
• Are applicable QA requirements adequately cited/incorporated and met (content/reviews)?
• Has the Technical review been performed by someone who is “independent”?

Minimum criteria for a Management Reviewer:
• Is the report consistent with policy?
• Is there consensus with other program documents?
• Does the document meet applicable criteria?

When asked, the Review Requester/Delegate shall provide additional background information or data to the reviewer.

Reviewers shall review the document applying the criteria specified and return the DRC to Review Requester/Delegate. Reviewers are responsible for knowing and applying criteria from the appropriate procedures, plans, notebooks, etc.

2.4 Documenting the Review

There are two choices for documenting review comments using the DRC form:
• document comments on the DRC (electronically/in reproducible ink). This is the preferred method for documenting review comments.
• clearly mark comments on copies of pages of the document, and attach these marked-up pages to the DRC form. If this option is taken, the DRC will reference the marked-up pages that are attached. All comments marked on attached pages must be clear, legible, and in reproducible ink. There must be a comment response for each comment on the marked-up pages, and the two must be correlated (e.g. number all comments and refer to comment number when providing a comment response).

Reviewers who have no comments shall sign the DRC with “No comments” in the comment block.

Note: SNL SAND reports require completed DRCs from all technical, QA, and management reviewers. If the report has references, a Reference Review may be required.

One process does not mandate the use of a DRC as there are forms. The NP 4-1 Procurement process approvals are captured on the NP 4-1-1 and NP 4-1-2 forms for Procurement Review and Receipt Inspection.

2.5 Comment Resolution

The author/Sandia contact has ultimate responsibility for the content of the document.

The Review Requester/Delegate shall evaluate comments made by the reviewer(s), and shall document acceptance/rejection of the comments on the DRC form, and include a brief statement of how the comment was addressed. The Review Requester/Delegate shall return the form to the reviewer(s).

The Reviewer shall evaluate the comment response made by the Review Requester/Delegate and shall document acceptance/rejection of the comment response on the DRC form. When comment resolution is complete, the Reviewer(s) shall sign the DRC form in the approval field and return the DRC to the Review Requester/Delegate.
The Reviewer is responsible for ensuring their comments are resolved to their satisfaction. If comments cannot be resolved, resolution shall be determined by following the process outlined in NP 1-1, section 2.2.4. Response approval signature by the Reviewer implies that all the criteria has been verified by the Reviewer and that all comments have been resolved to the satisfaction of the Reviewer.

All comments shall be resolved before the document is approved.

Note: For scientific notebooks, research activities may continue during comment resolution, unless review comments impact the quality of work being performed.

When all reviews and comment resolution are complete, the document and DRCs will be submitted to the WIPP Records Center within a reasonable time frame of completion (45 days).

3.0 Records

The following records, generated through implementation of this procedure, shall be prepared and submitted to the WIPP Records Center in accordance with NP 17-1 (Records).

<table>
<thead>
<tr>
<th>QA Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>- DRC forms (if generated)</td>
</tr>
<tr>
<td>- Review drafts/attachments (as applicable when review comments are contained in draft document)</td>
</tr>
<tr>
<td>- Final document</td>
</tr>
</tbody>
</table>

4.0 Appendices

Appendix A: Form NP 6-1-1, Document Review and Comment (DRC)
Appendix B: NP 6-1 Process Flow Chart
Entries must be complete, legible, and in reproducible ink or completed electronically.

Reviewers who have no comments must record “No Comments” in the comment block.

1. Document Title: (Include Document #, if applicable)

2. Revision #: (if applicable)

3. Document Description: (e.g. abstract, procedure, SAND report)

4. Type of Review & Criteria. Shall be verified by the Reviewer:
   - Technical (Technical adequacy, accuracy, completeness)
     - Are objectives clearly stated and fulfilled?
     - Is the technical activity clearly described?
     - Are equations/calculations accurate?
     - Does logic lead to reasonable conclusions?
     - Are the results drawn from data supported by data presented?
     - Data/tables/figures: Are they easily understood? Are legends complete?
     - Are the conclusions and assumptions adequately supported?
   - QA (Compliance and completeness)
     - Are applicable QA requirements adequately cited/ incorporated and met (content, reviews)?
     - Has the technical review been performed by someone who is “independent”? (see NP 6-1, Section 2.2)
   - Management (Completeness and correctness)
     - Is report consistent with policy?
     - Is there consensus with other program documents?
     - Does the document meet applicable criteria?
   - Other type of review (please specify or leave blank if not applicable)

5. Additional criteria: (if applicable)

6. Review Requester/Delegate: 
   
   Printed Name
   
   Date of Request: 

7. Approval Signatures:
   
   Reviewer’s Printed Name
   
   Reviewer’s Signature
   
   Date
   
   Review Requester’s/Delegate’s Printed Name
   
   Review Requester’s/Delegate’s Signature
   
   Date
### Document Review and Comment (DRC)

**Form Number:**
NP 6-1-1

**Page ____ of ____**

<table>
<thead>
<tr>
<th>Type of Review:</th>
<th>☐ Technical</th>
<th>☐ QA</th>
<th>☐ Management</th>
<th>☐ Other</th>
</tr>
</thead>
</table>

| Document Title: | | | | |
|-----------------| | | | |
| Rev. #: | | | | |

<table>
<thead>
<tr>
<th>Reviewer’s Comments (Enter “LAST COMMENT” in row below last entry)</th>
<th>Review Requester/Delegate’s Response</th>
<th>Reviewer’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment#</td>
<td>*</td>
<td>Location</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Mark Y (Yes) for comments requiring a response from the Review Requester/Delegate.
Mark N (No) for comments not requiring a response from the Review Requester/Delegate.
Appendix B
NP 6-1 Process Flow Chart

<table>
<thead>
<tr>
<th>Review Requester/Delegate</th>
<th>Reviewers (Technical, QA, Management &amp; Others)</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare review document</td>
<td>Perform review; document on DRC</td>
<td></td>
</tr>
<tr>
<td>Select Reviewers; distribute document &amp; Form NP 6-1-1 (DRC)</td>
<td>Comments?</td>
<td>No</td>
</tr>
<tr>
<td>Respond to comments; document resolution on DRC</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Resolve comment disagreements</td>
<td>Return review document &amp; DRC to review requester/delegate</td>
<td></td>
</tr>
<tr>
<td>Incorporate comments; revise document</td>
<td>Review revised document</td>
<td></td>
</tr>
<tr>
<td>Distribute revised document &amp; DRC for approval signature</td>
<td>Approval with revisions?</td>
<td>No</td>
</tr>
<tr>
<td>Prepare and forward for appropriate distribution</td>
<td>Resolve disagreements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sign approval on DRC; return to review requester/delegate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return document &amp; DRC to reviewer</td>
<td></td>
</tr>
</tbody>
</table>
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