

**CHARTER OF THE  
DEPARTMENT OF ENERGY  
NONDESTRUCTIVE ASSAY TECHNICAL SUPPORT GROUP**

**I. BACKGROUND**

On October 24, 2007, the Department of Energy (DOE) accepted Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2007-1, *Safety-Related in-Situ Nondestructive Assay of Radioactive Materials*. In DOE's Implementation Plan for the Recommendation, DOE stated:

*To assist in the Implementation Plan an NDA Technical Support Group of subject matter experts (SMEs) will be established. This support group will consist of Federal employees from Headquarters and Field Elements and DOE management and operating contractors who have expertise in NDA holdup measurement. The support group will assist the Department in the specific areas of concern highlighted in Recommendation 2007-1.*

The Technical Support Group (TSG) was formed in response to DNFSB Recommendation 2007-1 and is comprised of personnel from DOE staff and contractors as described above. TSG Work Instructions are attached as Appendix A. The TSG Membership Policy is attached as Appendix B.

**II. MISSION**

The primary function of the TSG is to provide operational and technical expertise to the Department of Energy through the Chief of Nuclear Safety (CNS). The TSG provides advice and technical support to meet the needs of the DOE complex in in-situ nondestructive assay, supporting all the unique programmatic needs of EM and NNSA sites. Specific TSG functions include the following:

- Assistance, as requested, to support DOE's efforts in accomplishing the Implementation Plan for DNFSB Recommendation 2007-1;
- Programmatic input regarding the development and implementation of an effective NDA holdup measurement program;
- SMEs to assist in conducting periodic assessments to ensure that NDA holdup measurement programs are using appropriate technology, consensus standards and processes;
- A mechanism to identify and address major NDA holdup measurement issues that have crosscutting impacts across the DOE complex or within a site;
- A forum for sharing lessons-learned, ideas and proven processes or programs to both DOE and contractor management; and
- A forum for ensuring that advances in DOE and consensus standards are made when appropriate.

To facilitate continuous improvement in NDA holdup measurement practices and technology, the Department will identify a process for clearly communicating lessons-learned, new technology, and innovative techniques that are related to NDA holdup measurement. This communication will include both Federal and contractor personnel who perform or use NDA holdup measurements, and may utilize existing systems within DOE or a separate website dedicated to NDA holdup measurement. The NDA Technical Support Group will assist with this effort.

### III. OPERATION OF THE TSG

#### A. Organization

The Chief of Nuclear Safety appoints an NDA program manager who resides within EM. The NDA program manager also appoints a deputy program manager who supports the manager.

The Chair of the TSG is appointed by the NDA program manager. The Chair serves a 2-year term. The Chair is responsible for coordinating the activities of the TSG with the In-Situ NDA program manager and for reporting TSG activities to the NDA program manager.

The Deputy-Chair of the TSG is nominated by the membership of the TSG and appointed by the NDA program manager. The Deputy-Chair serves a 2-year term after which he automatically assumes the position of Chair. The Deputy-Chair serves as the Chief Operating Officer of the TSG and is responsible for tracking deliverables and tasks including formal commitments agreed to within the Implementation Plan, developing TSG funding requests/proposals for the NDA program manager, documenting meeting results/notes/actions and performing the duties of the Chair when the Chair is absent.

The TSG Chair may appoint subcommittees from the TSG membership to review, report, or act on any matter of concern that comes before the TSG.

In addition, to supplement the expertise of the TSG members, the TSG Chair, with the approval of the NDA program manager, may request other qualified individuals to provide the TSG with technical expertise on an as-needed basis to support site needs.

#### B. Meetings

The Chair shall call TSG meetings as needed but no less than two times annually. The presence of the Chair or Deputy-Chair standing in for the Chair is mandatory at TSG meetings. In addition to the two formal TSG meetings conducted each year, the TSG meets regularly via teleconferences arranged by the TSG Chair and/or by subcommittees appointed by the TSG Chair.

#### C. Scope of Activities

The TSG provides technical support to the NDA program manager for the performance of activities supporting the completion of the Implementation Plan and execution of the In-Situ NDA program.

The TSG will in general, provide programmatic input regarding the development and implementation of effective NDA programs at DOE sites, provide SMEs to assist in conducting assessments, identify and address NDA holdup measurement issues of importance, share lessons-learned, ideas and proven processes or programs, and provide a forum for developing DOE and consensus standards for in-situ NDA measurement where appropriate.

**APPROVED:**

A handwritten signature in black ink, appearing to read "R. Lagdon, Jr.", written over a horizontal line.

Richard H. (Chip) Lagdon, Jr., Chief of Nuclear Safety

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Lauren T. Nirider, In-Situ NDA Program Manager

## APPENDIX A

### TSG WORK INSTRUCTIONS

This set of work instructions is provided by the NDA program manager to set performance expectations for the TSG. The NDA program manager may modify the TSG Work Instructions as necessary. Revisions to these work instructions shall be distributed promptly to the TSG through the Deputy-Chair.

#### TSG Meetings

An agenda for each TSG meeting shall be issued by the Deputy-Chair working with the Chair in advance of a scheduled meeting and distributed to the members of the TSG and the NDA program manager together with any materials needed for review of the agenda items.

The Deputy-Chair of the TSG shall ensure that the minutes of each meeting are formally recorded. Verbatim minutes of the meetings are not required, but the main points of the issues discussed shall be summarized and any decisions clearly documented.

At the conclusion of the meeting, the Deputy-Chair shall distribute the minutes to the membership for concurrence. A copy shall be forwarded to the In-Situ NDA program manager and deputy program manager.

#### TSG Reports

The results of any evaluation, review, technical-assist visit or similar activity by the TSG shall be transmitted to the NDA program manager in a formal report. These reports shall represent the consensus position of the TSG members.

All formal written correspondence on behalf of, or representing the TSG individually or collectively, must be reviewed and approved by the NDA program manager prior to distribution.

In the event of serious disagreement with the content of any report, TSG members either individually or with other members, may submit a minority report to the NDA program manager. The NDA program manager will take action as needed to resolve the issues raised and will inform the authors of the resolution.

## TSG Communications

TSG members, as part of their duties with the TSG may answer any informal inquiry from any Departmental element or the Defense Nuclear Facilities Safety Board or its Staff. The NDA program manager and deputy program manager should be kept informed of all such communication.

All invitations to external agencies (i.e.; DNFSB, DNFSB Staff, NRC, etc.) to attend TSG meetings or activities shall be made by the NDA program manager or deputy program manager only.

Issues internal to the TSG must be kept within the TSG until an official consensus position has been reached and the NDA program manager or deputy program manager grants approval to release or discuss the information with non-TSG members.

Discussion topics that the TSG believes should be vetted with the DNFSB or its staff must be provided to the NDA program manager or deputy program manager who will make the arrangements through appropriate channels. TSG members are not authorized to unilaterally engage external agencies on TSG matters in their capacity as TSG members.

## Consequences of Noncompliance

Noncompliance with the requirements of this Appendix may result in dismissal from the TSG.

## **APPENDIX B**

### **TSG MEMBERSHIP POLICY**

#### Composition of the TSG

The membership of the TSG shall be limited to 8-members. Members may receive funding support from the Chief of Nuclear Safety as appropriate to their specific tasks and roles on the TSG. The TSG may form unofficial subcommittees, working groups or mentoring relationships comprised of non-TSG members as needed. However, these ad-hoc participants are not voting members of the TSG nor are they funded directly by the Chief of Nuclear Safety. All TSG members are appointed and serve with the approval of the NDA program manager and deputy program manager.

#### TSG Member Qualifications

The following are minimum qualification requirements for membership in the TSG.

1. At least 10 years experience as an in-situ NDA practitioner.
2. Hold an advanced degree in a technical discipline, a Ph.D. is preferred. Additional professional experience may substitute for an advanced degree.
3. Demonstrated leadership and expertise in nondestructive assay. This is typically achieved through a combination of factors including; participation in national standards committees or working groups, technical publications, management experience, etc.
4. Hold appropriate security clearances.
5. Once appointed to the TSG, membership is maintained by participation in TSG meetings and activities. The NDA program manager and deputy program manager annually assess the participation level of individual members and recommend retention or dismissal.

#### Selection of TSG Initial Members

Initial members of the TSG are selected by a panel consisting of the NDA program manager, deputy NDA program manager and the TSG Chair.

#### Selection of New Members (unanticipated vacancy)

When an unanticipated vacancy occurs in the TSG, a new member is nominated and appointed via the following process.

1. The NDA program manager forms a nominating committee comprised of at least three members. The Chair functions as an ex-officio member of the nominating committee.

2. The nominating committee selects at least two candidates who meet or exceed the minimum qualification requirements listed above, and presents the eligible candidates to the TSG.
3. The TSG votes on the candidates presented by the nominating committee and a simple majority of votes will result in appointment. Final approval resides with the NDA program manager and deputy program manager.
4. In the event of a tie vote, the NDA program manager shall cast the deciding vote.
5. The NDA program manager reviews the nominating packages and appoints the new member.

#### Succession Planning (unanticipated vacancy)

Succession planning shall be conducted when deemed necessary. The following process should be used by the TSG when a member anticipates leaving the TSG. This process will facilitate a more seamless transition.

1. The TSG Chair shall provide to the NDA program manager the name of the leaving member and the approximate date of resignation.
2. A succession candidate shall be identified for each anticipated vacancy using the protocol for selection of new members.
3. A successor should be appointed one-year prior to the resigning member leaving the TSG.
4. During the overlap period, the Chief of Nuclear Safety shall provide support for the TSG member and for his successor as necessary. Normally, the successor should be appointed to the TSG within one year of their official appointment as a TSG successor.
5. The successor should attend as many TSG meetings and activities as possible during the transition period. A successor candidate may vote on issues before the TSG.
6. The successor is appointed as an official member of the TSG by the NDA program manager on a date agreed to by the TSG Chair. Outgoing members shall become Emeritus Members of the TSG.
7. Emeritus Members are encouraged to continue to participate in TSG activities but will not receive financial support from the Chief of Nuclear Safety. Funding may be provided to Emeritus Members for specific technical activities at the discretion of the NDA program manager.

## **APPENDIX C**

### **TSG MEMBERSHIP**

**Frank W. Lamb**, TSG Chair  
Unwin, Corporation

**David S. Bracken, Ph.D.**, TSG Deputy Chair  
Los Alamos National Laboratory

**Brian Keele**  
Hanford, Plutonium Finishing Plant

**Glenn L. Pfennigwerth**  
Y-12 National Security Complex

**David H. Beddingfield, Ph.D.**  
Los Alamos National Laboratory

**David L. Dolin**  
Savannah River Site

**Steven E. Smith**  
Oak Ridge National Laboratory

**Tom Nirider**, DOE NDA Program Manager  
DOE/RL

**Robert C. Nelson**, DOE NDA Deputy Program Manager  
EM/HQ

**Cynthia Gunn**  
Y-12 National Security Complex