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DOE STANDARD

TABLE-TOP NEEDS ANALYSIS

U.S. Department of Energy
Washington, D.C. 20585

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FOREWORD

The purpose of this Handbook is to establish guidelines for training personnel in developing training for operation, maintenance, and technical support personnel at Department of Energy (DOE) nuclear facilities.

Table-Top methods can be used for many purposes, but the focus of this Handbook is needs analysis. Department of Energy (DOE) Orders 5480.18B, *Nuclear Facility Training Accreditation Program,* and 5480.20A, *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities,* stress the importance of basing training programs on a systematic approach. An integral part of any systematically-developed training program includes determining the most cost-effective training and non-training solutions for challenges that may impact the content of training programs (e.g., new DOE Order requirements; new policies/procedures; human performance problems; management and information systems; new equipment, facility modifications, or tools; requests for training). Table-Top Needs Analysis (TTNA) is one systematic method that can be used by DOE contractor organizations to achieve a cost-effective and high quality training program.

While TTNA is <u>not</u> the only method of needs analysis, when conducted properly, TTNA can be cost effective, efficient, and self-validating. TTNA helps to effectively ensure that training program content creates competent employees, resolves existing and potential performance problems, and ensures that the environment in which employees work does not inhibit their ability to perform their work competently.

DOE contractors should not feel obligated to adopt all parts of this Handbook. Instead, information from this Handbook can be used to conduct needs analysis as the information and methods apply. Operating contractors are encouraged to use good practices selectively in developing or improving programs to meet the specific needs of their facility.

Constructive comments (recommendations, additions, deletions) and any pertinent data that may improve this document should be sent to:

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by letter or by using the self-addressed Document Improvement Proposal (DOE F 1300.3) appearing at the end of this document.

Lesson plans, overheads, poster information, and the participant manual that relate to TTNA can be obtained by contacting EH-31.

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1. SCOPE

1.1 Scope. This Handbook guides the conduct of table-top needs analysis. An overview of needs analysis is provided and is followed by a detailed explanation of the table-top needs analysis method. The appendixes include facilitator and coordinator materials to provide further information and examples of table-top needs analysis.

Additional materials such as lesson plans, overheads, poster information, and the participant manual can be obtained separately by contacting EH-31.

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2. APPLICABLE DOCUMENTS

2.1 Government Documents.

2.1.1 DOE Standards, Handbooks, Technical Standards Lists (TSLs), and Specifications. The following DOE standards, handbooks, TSLs, and specifications form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the *DOE Standards Index* (DOESI) cited in the contracting document.

DOE-HDBK-1074-95, *Alternative Systematic Approaches to Training*.

DOE-STD-1077-94, *Training Accreditation Program Standard: Requirements and Guidelines*.

DOE-HDBK-1078-94, *Training Program Handbook: A Systematic Approach to Training*.

Unless otherwise indicated, copies of DOE standards, handbooks, and TSLs are available from the Office of Scientific and Technical Information (OSTI), P.O. Box 62, Oak Ridge, Tennessee 37831.

2.1.2 Other Government Documents, Drawings, and Publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the contracting document.

DOE Order 5480.18B, *Nuclear Facility Training Accreditation Program*.

DOE Order 5480.19, *Conduct of Operations Requirements for DOE Facilities.*

DOE Order 5480.20A, *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities*.

DOE/ID-10327, *Instructional Analysis and Design Course*, DOE Training Accreditation Program, August 1991.

Department of the Air Force, *Information for Designers of Instructional Systems*, "Guide to Needs Analysis," AF HANDBOOK 36-2235, Volume 6, November 1993.

Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Naval Publications and Forms Center, (Attn: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.

2.2 Non-Government Publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents adopted by DOE are those listed in the DOESI cited in the contracting document. Issues of documents that are not listed in the DOESI are the issues of the non-government standards cited in the contracting document.

Rossette, Allison *Training Needs Analysis*, Educational Technology Publications, Englewood Cliffs, NJ, 1987.

Mager, Robert and Pipe, Peter, "*Human Performance Analysis Flowchart and Worksheet,*" Mager Associates, Inc., 1979.

Zenger-Miller, *Team Leadership*, "*Helping Your Team Reach Consensus,*" 1992.

Haynes, Marion E., *Effective Meeting Skills*, Crisp Publications: Los Altos, California, 1988.

Non-government standards and other publications are usually available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.

3. GENERAL GUIDANCE

3.1 Why Conduct Needs Analysis? With today's shrinking DOE budget and the emphasis and requirements placed on training programs, needs analysis is essential. The rationale for conducting this important activity is to provide an effective and efficient validation of a request either to develop training or to examine possible solutions to a performance problem. Much of today's training has been developed based on a facility's *perceived* training need rather than an *analytically determined* training need. Therefore, the training developed does not always address the training issue, yet training programs are developed at a tremendous cost to DOE. A needs analysis can often not only limit the amount of unnecessary training developed, but also provide possible solutions to performance problems other than training.

3.2 What Is the Purpose of TTNA? What Are the Products? The purpose for conducting needs analysis is to examine possible training and non-training solutions for problems in an existing or a new training program. When undesirable performance occurs, training is often blamed for that performance. Results of an investigation almost always reveal that training is not adequate. In response to this, training organizations immediately develop training to correct the undesirable performance, yet in many instances, after training has been developed and implemented, the undesirable performance is still present. By using needs analysis to systematically examine what people or programs are expected to do and gathering data to reveal what they are actually doing, we receive a clear picture of the real problem. When the problem is accurately defined, the analysis activity then generates a report detailing the problem, the causes, and the recommended training and non-training solutions.

3.3 Who Should Be Involved? The people who should be involved in the TTNA process are those subject matter experts (SMEs), supervisors, job incumbents, engineers, and instructional technologists who are familiar with the specific job position and the problem in question. Depending on the job, SMEs from similar facilities might also participate.

TTNA is usually conducted to clarify a training request or review existing training programs. The most common types of requests include:

- Verify a training/qualification program with the requirements of an Order.

- Develop an initial and/or continuing training program for a job position that already exists.
- Conduct a training program evaluation.
- Resolve a specific human performance problem.
- Develop a specific training session (see Appendix B for detailed information on each type of training request).

3.4 When Is the TTNA Seminar Appropriate for Your Needs? When you are responsible for developing or revising a job-specific training program using a systematic approach to training and no training program currently exists for the job position, or there is an existing training program for the job position, but it is not based on a valid job analysis.

The table-top process, when used properly, will prove to be a more efficient, cost-effective method for planning and conducting the needs analysis process.

3.5 What Is Needs Analysis? Needs analysis is a systematic process of seven steps through which a request is clarified, a determination of the real problem is made, the cause(s) of the problem is/are identified, and the most effective solution (training or non-training) is determined.

3.6 What Is Table-Top Needs Analysis? TTNA is a team approach to solving program or performance related problems which can also be used in the analysis and design of a training topic or program. While the traditional needs analysis process required several trainers (to plan the process, conduct experimental reviews, conduct surveys, interviews, and field observations), TTNA can be conducted in one setting with the right mix of personel gathered around a table. This approach employs a seven-step process involving facility-specific individuals working together. This team should consist of 2-5 incumbents, 1-2 immediate supervisors, 1-2 other subject matter experts as appropriate, and 1-3 instructional technologists.

The team's charter is to share their expertise and experience to build a benchmarking model. The team identifies what the program or performance gaps are by comparing what should be done with what is being done. Once the team has identified these gaps, they are asked why those gaps exist. While this information is still fresh in their minds, the team also generates a list of causes for each program or performance gap. Before they move on, they list recommended solutions to bridge that gap. This process is continued until all gaps have been addressed. Techniques important to this seven-step process include: document review, brainstorming, nominal group techniques, consensus decision-making, mind-mapping, fish-boning, Pareto, and flow-charting.

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4. DETAILED GUIDANCE

4.1 Overview of Needs Analysis. Needs analysis is a process where a request for training is clarified, a determination of the **real** problem is made, the cause of the problem is identified, and the most effective solution (training or non-training) is determined. Each is briefly discussed below.

4.1.1 Basic Needs Analysis Steps. The basic needs analysis steps are:

- Clarify the request to determine the problem.
- Develop an analysis plan.
- Collect data on expecteds/actuals.
- Analyze data to determine gaps.
- Determine the cause(s) of gaps.
- Determine the solution(s) for each gap.
- Prepare and conduct briefings on the results.

4.1.2 A Request for Training Is Clarified. The following are example requests for training:

- We need a 2-hour training session on Ladder Safety.
- We need a new training/qualification program for our Health Physics Technicians because this new DOE Order says so.
- We need to better-train the maintenance mechanics because they aren't repairing pumps correctly.
- We need to fix our training programs because the Defense Nuclear Facility Safety Board (DNFSB), Tiger Team, or some other review group criticized our program again.
- We need a refresher course on Total Quality Management because it isn't being implemented properly by our employees.

4.1.3 A Determination of the *Real* Problem Is Made. The following are example problems stemming from training requests shown above.

- There have recently been numerous ladder-related accidents.

- How much of the *existing* Health Physics training/qualification program meets the requirements of the new Order and what changes are required? (Rather than throwing away the existing program and starting over.)
- The maintenance mechanics are repairing the pumps correctly, they just don't do it as well as Ms. Perfect does it.
- When answering DNFSB questions, the managers did not adequately explain or show sufficient support for the training/qualification programs.
- Employees are not submitting as many productivity savings reports as management had anticipated.

4.1.4 The Cause of the Problem Is Identified. There are many causes that may be encountered while conducting needs analysis. Cause types include:

- Absence of skill or knowledge.
- Absence of incentive or improper incentive.
- Absence of environmental support.
- Absence of motivation.
- Personnel problems of the individual employees (including lack of performance-based ability).

4.1.5 The Most Effective Solution(s) Is Determined. The solution for a given problem can result in a training event or no training at all.

Training solutions include instructor-led training, print-based training (self-study), computer-based training, interactive videos, personal coaching (mentoring), on-the-job training, distance delivery, and desktop delivery.

Non-training solutions that enrich the work environment include improved documentation, databases, technical manuals, and job aids. Non-training solutions that adjust the organizational system include:

- Personnel selection.
- Job redesign.
- Process re-engineering.
- New tools and forms.
- Technology.

- Work-station design.
- New policies/procedures.
- Altered appraisal systems.
- Altered recognition programs (incentives, rewards).
- Supervisor/management development.
- Coaching, mentoring.
- Employee Assistance Programs.

4.1.6 Sources of Needs Analysis Information. Successfully performing needs analysis means looking at a lot of different information. The sources of information include people, documentation, regulatory requirements, and perhaps work products. People sources can be subject matter experts, job incumbents, immediate supervisors and managers at various levels, trainers, customers or users, and exemplary performers. Documentary and other sources could include:

- Audit or productivity figures.
- Accident reports.
- Grievance reports.
- Program evaluation reports.
- Absentee figures.
- Budget reports.
- Internal and external lessons learned.
- Occurrence reports.
- Personnel records.
- Instructor evaluations.
- Employee test results.
- Facility inspection, evaluation, accreditation reports.
- Facility performance reports.
- Regulatory requirements.
- Work products.

4.1.7 Techniques Used to Gather Needs Analysis Information. Several techniques (alone or in combination) can be used to obtain information from these sources. The techniques that the facilitator may use include document review, nominal group technique/consensus decision-making, mindmapping, interviews, observations, and surveys. Tools that the team may use include Mager's Human Performance Analysis Flowchart/worksheet, fishboning, and the Pareto Diagram. With the right mix of team members, interviews, observations of personnel and their environment, and surveys/questionnaires may not be necessary to obtain the necessary information.

4.2 Table-Top Needs Analysis. The primary tools used in a table-top needs analysis are document reviews and the table-top processes. Document reviews are conducted by individual team members who then share results with each other. Table-top processes call for a facilitator leading the team and using many different techniques. In this process, interviews are used only as a secondary tool. When the team cannot identify needed information via document review and table-top discussions or when the team decides that additional input will validate their information, then they will determine what interviews need to be conducted. They will then divide up and conduct concurrent interviews.

Using a table-top team approach has several benefits. It promotes buy-in of both the process and the results because organization personnel are part of the process. Needs analysis then becomes a process initiated by the work force. The job incumbents learn the needs analysis process and become aware of such issues as expecteds, actuals, gaps, causes, and solutions when they return to work. This has the potential of having workers identify where improvements can be made and whether non-training solutions are applicable. The needs analysis process can be conducted by the team in little time because of the team's mix of expertise. By having the team review documents and participate in a table-top discussion, most of the needs analysis information can be uncovered without using extensive interviewing, observation, or surveys that may impact facility operations and take a lot of time. The length of time for a TTNA will vary from 2-5 days, depending on the nature of the problem being examined.

4.3 The Facilitator. Serving as a pivotal role, the facilitator is responsible for teaching the lessons and for facilitating the team members through the TTNA steps.

A second facilitator also participates, and rotates between being lead-and co-facilitator, in whatever manner works best. Rotating these two equally-qualified facilitators allows a break for the "off," or documenting facilitator, and thus allows a higher energy level for the "on" facilitator. As the TTNA process takes place, the co-facilitator observes the process and decisions of the team and documents certain aspects of their work on the Briefing Form (Appendix F is an example).

Participants brief management on the last day, explaining the intent, process, and results found during their needs analysis. The facility should keep a record of the briefing and its supporting documentation so the results can be used in later processes when building training programs.

The facilitator must possess many skills to make this process a success. In the role of instructor, the facilitator needs strong instructional skills in order to teach the lessons. The facilitator also serves as a process expert who facilitates the sessions but does not provide technical input. Successful facilitation hinges on three factors: interpersonal skills, expertise in the systematic approach to training process, and the ability to perform special skills associated with facilitating table-top processes. At a minimum, the facilitator should be familiar with the needs analysis process, the difference between needs analysis, job analysis, and task analysis, and possess excellent facilitation skills. Flexibility and the ability to adjust to changing circumstances are crucial. Preferably, the facilitator is qualified to facilitate TTNA through training and experience.

Interpersonal Skills Needed by TTNA Facilitator

- FLEXIBILITY!!!
- the ability to establish and maintain enthusiasm
- patience
- the ability to display and maintain a positive image
- a high degree of sensitivity to both verbal and nonverbal communication
- excellent memory
- a sensitivity to others
- a sense of humor
- the ability to make decisions
- excellent listening skills
- the ability to display warmth and establish rapport quickly with team members
- the ability to motivate, encourage, and focus team members

4.4 The Coordinator. The coordinator's role is to make the necessary needs analysis process arrangements. For example, when making preparation arrangements, the coordinator should select TTNA team members, gather job-related information for use during the

Special Skills Needed by TTNA Facilitator

- expertise in needs analysis processes
- expertise in the table-top analysis method
- skill in nominal group techniques
- skill in questioning techniques
- skill in fishbone and mindmapping
- the ability to act as a process expert who leads and controls the process but allows team members to act as content experts
- skill in small-group dynamics
- skill in obtaining small-group consensus
- the ability to establish and maintain the team's pace, balance, and individual participation

process, and schedule the meeting room. When making process arrangements, the coordinator should gather any other job-specific information (e.g., gather additional documents, conduct interviews with job incumbents or with any other personnel as identified by the TTNA team members). Appendix A, TTNA Needs Analysis Survey, should be used when initially preparing for a needs analysis process. The coordinator may or may not also act as the facilitator of the TTNA process. When making post-process arrangements, the coordinator should ensure that the same TTNA team members will be available to assist in bringing the process to completion. The coordinator checklist, Appendix C, should be used when preparing for the TTNA process.

The coordinator should read this handbook so that he/she: (a) has an idea of what the TTNA process entails, (b) can discuss the significance of the TTNA process with the key managers to receive management's buy-in, and (c) can provide the facilitator with the necessary detailed information that describes the performance problem in question. Appendix E contains a planning sheet that can be used for gathering the correct information to give to the facilitator. The information provided to the facilitators about the performance problem will assist the facilitators in deciding whether the TTNA process is needed or some other process is required. Appendix D, Sample TTNA Letters, can be used for letter format throughout the TTNA process.

4.5 Preparing for the TTNA Process.

4.5.1 Identify Scope of the Needs Analysis. The facilitator must interface with the coordinator (if not the same person) to ensure this process will meet their needs.

The facilitator determines the nature of the problem to be examined during the process and the status of expecteds and actuals. This will assist in determining how long the process will take (i.e., from 2-5 days). Though this process may be useful in other circumstances, the most common reasons a facility might want this seminar are to:

- Compare a training/qualification program with requirements of an Order,
- Develop an initial and/or continuing training program for a job position that already exists,
- Conduct training program evaluation,
- Resolve a specific human performance problem, or
- Develop a specific training session.

For each of the above requests, a worksheet is provided in Appendix B to assist the facilitator in determining the full scope of the request. When interfacing with the coordinator, use the applicable Appendix B worksheet by:

- Asking the questions and clarifying the expected outcomes listed under Step 1, Clarify Request to Determine Problem,
- Asking which documents are available for review during the seminar (samples are listed under Step 2, Develop Analysis Plan), and
- Stating which of those documents should be examined PRIOR to the seminar.

Depending on the coordinator's answers, set a preliminary process date, location, and length. It is better to be pessimistic in terms of the length of the process (i.e., set it for 4 days if you think it might take 3). Once the process is scheduled, the coordinator should be given a list of which documents require review prior to the process.

4.5.2 <u>Study the Materials</u>. Once the TTNA process is scheduled, the facilitators prepare by studying this handbook.

The facilitators must spend adequate time preparing to instruct the participants of the TTNA process. It is crucial that the facilitators understand and apply the techniques that may be used. To instruct and facilitate the workshop effectively, both facilitators must be intimately familiar with the entire TTNA process and not just the sections each facilitator instructs.

After teaching the lessons, the facilitators will begin conducting the actual TTNA process. Depending on what problem is being assessed, different techniques will be used. Appendix B provides examples of how each TTNA step should be conducted for a given problem. Therefore, the facilitators should study the applicable Appendix B worksheet to formulate an idea of how to go about conducting TTNA for each particular situation. The facilitators determine which techniques will be used for each step and whether the steps can effectively be combined.

Note: EH-31 can be contacted to obtain lesson plans, the supporting overheads, and the particioant manual to supplement the material in this handbook. Refer to the address listed in the FOREWORD.

4.5.3 Review Available Information. Twenty to thirty days prior to the seminar, the coordinator sends planning information and information relating to the problem being assessed in the TTNA process (information requested from the coordinator when talking about the scope). The facilitators use the information in two ways. First, to become familiar with the problem and form an idea of the types of expecteds, causes, and solutions that might arise during the TTNA and second, to build problem-related examples into the training sessions.

Obtain from coordinator:

Needs Analysis Worksheet

TTNA Planning Sheet

Problem-related information.

4.5.4 Confirm Details with Coordinator. Five to ten days prior to the seminar, the facilitator confirms with the coordinator responsibility for gathering and taking all supplies to the seminar. The facilitator usually brings the supplies and instructional materials. The coordinator is usually responsible for having equipment and other supplies available in the meeting room.

The TTNA process begins with a series of short introductions:

- The coordinator introduces a manager from the operating organization that needs the analysis, and
- The coordinator introduces the facilitators.

The facilitators confirm the introductions with the coordinator and prepare a very brief biography of their qualifications and experience for the coordinator's use during the introductions.

4.6 TTNA Process Techniques. There are a variety of techniques that can be used while facilitating the TTNA process. Each of these techniques are acceptable to use for each of the steps of the process. The facilitator should become familiar with each of the techniques in order to apply them when necessary. The decision about which technique to use has to be made by the facilitator depending on the team cohesiveness, the desired end product, available references, etc.

4.6.1 Nominal Group Technique/Consensus Decision-Making. Nominal Group Technique (NGT) consists of each team member silently generating a written list of ideas and then stating one idea at a time in a round-robin type format. A round-robin involves each person taking a turn to state one suggestion from his/her list. The facilitator will then write that idea on a flipchart. The next person states a suggestion, with the facilitator adding the idea to the list, and so on, until all persons have made one suggestion. The first person then states a second suggestion from his/her list, etc. This process continues until all team members have had an opportunity to exhaust their list.

When recording ideas during the round-robin on a flipchart page, ideas should be alternated using two different-colored markers to make it easier for the team to see each idea. Each item on the flipchart should be numbered to make it easier when the team discusses certain items to gain consensus. During the round-robin, it is important to record their ideas without judgment or discussion even though revisions may occur.

Concensus Decision-Making (CDM) consists of consolidating the results of NGT and coming to agreement on those results. Consensus is a general agreement among several people. It occurs when all team members can accept and support the decision without compromising important needs or values. In consensus decision-making, complete unanimity is not the goal--it is rarely achieved. but each individual should be able to accept the group's decision on the basis of logic and feasibility. This NGT/CDM technique can be used alone or combined with document review.

Guidelines for NGT and CDM

- Apply relevant criteria.
- Add to your list.
- Help others formulate their statements.
- Present your ideas clearly and logically, but don't argue.
- Empower yourselves to make this work!

As the team is guided to consensus on what information to keep and what to delete, circle the item kept and, with the same color marker, cross through the items deleted because of the circled items. For the next item chosen to be kept, circle it with a different color marker and cross through the associated items with that same color marker. This makes it easy to see where each item was folded into the final choices. If there are not enough different marker colors, choose some other method to differentiate between different items. For example, draw clouds around the final choice (rather than a circle) and draw squiggly lines through the crossed out items (rather than a straight line).

To resolve any consensus deadlocks, first refer to the guidelines for effectively implementing NGT/CDM to see if the team can reach consensus. If not, ask the supervisor (prior to the seminar) who should be designated first among experts so that person can resolve any deadlock decisions. Another idea is to focus the team's discussion on areas of agreement and work individually on conflicts at a later time.

The co-facilitator may, if necessary and helpful, write the final chosen items on a separate flipchart page or each item on a separate 8-1/2" x 11" page and post them on the wall.

Note: This technique is the heart of the TTNA process and should always be used.

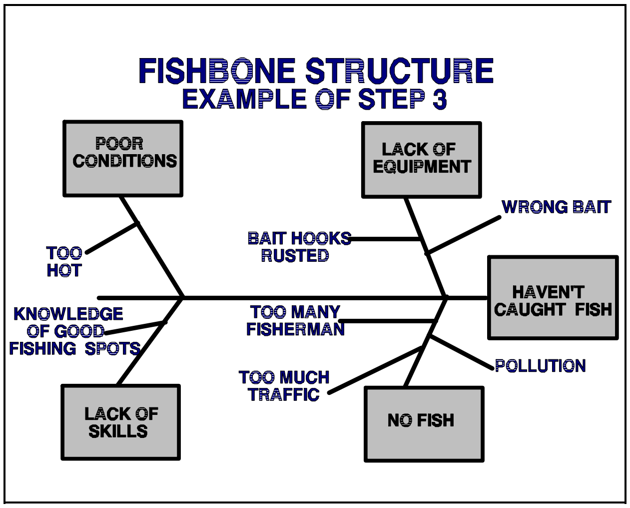
4.6.2 Document Review. The intent of a document review is to uncover needed information. Participants will identify which documents to review and what to look for in each document. Document review can be used alone or combined with facilitated discussion or Nominal Group Technique. Documents can provide excellent clues to what is considered to be "expected" performance (e.g., task lists, procedures). They can help determine "actual" performance, and/or trouble spots, and what might be causes of problems (Occurrence Reports reflect this information). Objective information can be collected with a minimum of effort and interruption of work flow since the documentation already exists at the work site.

The techniques that make document reviews efficient should be explained to the team. The first step of document review is thorough preparation. This entails developing a list of documents that can assist in determining expecteds, actuals, and causes, and a list of "questions to be answered" when reviewing each document. The lists become a plan that guides your activities as an analyst.

Documents are then divided among the team members so everyone can review a document at the same time. The team members should review their documents as quickly as possible to answer the questions. The facilitator ensures that the team knows what they are looking for as they review the documents (to keep the process efficient) and that they skim the documents rather than read them. Summarize the review notes into logical and concise conclusions and share those conclusions with other team members. The team should come together and everyone should share their findings and any additional questions. It is important to have clear conclusions identified.

A discussion should be facilitated afterward (or use NGT/CDM) so all team members learn the findings from each document review. Document review may not be necessary if the correct mix of people is present.

4.6.3 Fishbone. This technique is used to determine the causes of a problem and helps to zero in on several levels of causes. It is a three-step process that forms a diagram similar to the one that accompanies this section. This technique may be used with brainstorming to identify potential causes.



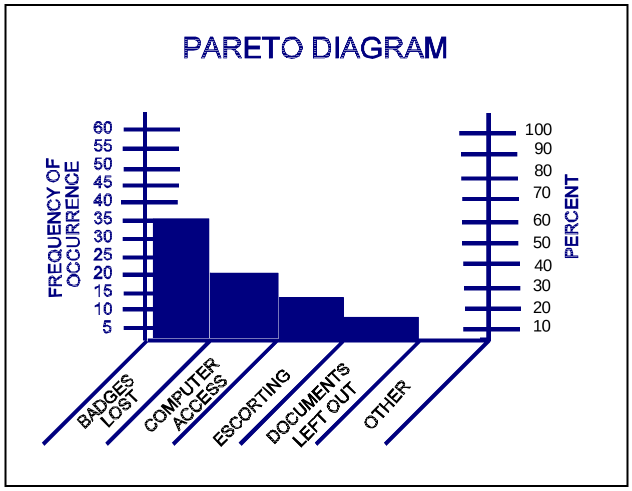
The team should brainstorm for possible causes and ask why each cause exists. The facilitator records in a fishbone format what the team members are brainstorming and/or discussing.

The first step is to identify the problem or "effect." This effect is placed in a box on the right and a long arrow is drawn pointing to the box. Step two involves deciding the major categories or subdivisions of causes. These major categories are placed parallel to and some distance from the main process arrow. The boxes are then connected by arrows slanting toward the main arrow. The third step is to brainstorm for causes. These causes are written on the chart, clustered around the major category or subdivision which they influence. They are connected by arrows pointing to the main process arrow. The causes should be divided and subdivided to show, as accurately as possible, how they interact.

4.6.4 Mindmapping. This technique is used to visually portray the problem. Brainstorming also works well with mindmapping. During mindmapping team members identify potential causes (or solutions).

The facilitator: 1) Writes the problem in the middle of a page and draws a circle around the word(s). 2) Asks "what are the causes or solutions of the problem?" 3) As ideas surface, writes the key words in the space around the circled problem. 4) Circles keys words and draws spokes from the key words to the problem, and 5) Extends other ideas out from the first level of causes (solutions). The facilitator should always write everything down. Unnecessary items can be eliminated later.

4.6.6 Pareto Diagram. If the use of NGT/CDM and document reviews results in recordable information such as the frequency of occurrences, the costs associated with an event, or production time lost due to an event, then using a Pareto diagram to chart this information can be effective.



Using a Pareto diagram to chart recordable information against a number of events is a useful technique for making decisions and presenting the information to those requesting the needs analysis. A Pareto diagram shows the largest cause of the problem and ranks the rest. Pareto Diagrams are a visual representation used to assist the analysis process by establishing priorities and to aid in communication to show how decisions are made on facts, not just opinions. The visual representation (comparison) graphically distinguishes the significant problems or causes from the less significant.

The team groups the problems, causes, and costs into categories and makes a column graph with each column representing a category (always ordered from the highest priority on the left to the lowest on the right). The team then decides on the biggest problem and rank the rest. They then determine the most important cause and rank the rest.

4.6.7 Interviews. Although document review and table-top discussions will be the primary tools used in this process, if using these techniques cannot uncover or resolve everything, interviewing should be used. Conducting an interview determines expected performance, actual performance, causes, and solutions. The interview can be a telephone interview, a 1 on 1 in-person interview or a 1 on 2 in-person interview.

The techniques for making the interviews efficient and effective should be explained to the team members. Team members should concurrently interview to save time. The steps for interviewing are:

Step 1: Prepare for the Interview. Understand what you are looking for and what you expect to gain by conducting the interview -- expecteds, actuals, causes, etc. To keep the interview on track, gain needed information from each source and ensure that the time spent conducting the interview is effective. The plan should include a list of carefully prepared questions that will be asked of each source. If one of the purposes for the interview is to examine causes, the plan should include environmental items that can be noticed when going to or conducting the interview (if the interview is conducted at the work site). Examples: of environmental items include location of procedures, whether people are actively following procedures, whether job aids are available in the work environment, what attitudes are being displayed via people's conversations, interactions, etc. Choose people who can provide the most information for multiple purposes (e.g. expecteds, actuals, and causes) to reduce the number of interviews required to gain needed information. To achieve the best results, the interview should be conducted in a location that is quiet and comfortable, with no distractions. If possible, the time, length, and location of the interview should meet the needs of the interviewee in terms of any constraints the interviewee might have (working hours, other).

Step 2: Begin the Interview. Regardless of whether the interview is being conducted in person or by telephone, start on time. The interviewee's first impression of the interview and interviewer is often a lasting impression. Therefore, the first moments are critical to the overall success of the interview. Explain who you are, why the interview is being conducted, and the intent of the interview. Ensure that the environmental conditions are appropriate to the interview. To help the interviewee relax, start the interview by making "small-talk" and getting to know the interviewee. This will enhance the interviewee's willingness to provide needed information. Asking difficult and controversial questions at the beginning of the interview can make the interviewee apprehensive and reluctant to provide needed information.

Step 3: Conduct the interview. Allow and encourage interviewees to do most of the talking during the main part of the interview. During this time the interviewer should guide the interview to keep it on track. Each question asked should seek information that is focused on the purpose of the interview. These questions will be your prepared questions and any follow-up questions you need for clarification. Active listening is very important during interviews. The interviewer should clearly understand what is being said and meant by the interviewee. The interviewer should not try to remember what is said during the interview. The interviewee's responses to questions should be documented.

Step 4: Conclude the interview. The manner in which the interview is concluded will change for each interview since it depends on what happens during the interview. However, there are several items to be considered when concluding an interview. They are 1) give the interviewee time to ask questions, 2) summarize what has been said during the interview, 3) explain how the information will be used in the needs analysis process, 4) inform the interviewee that additional data may be needed at a later date and ask if it's okay for you to return for a few follow-up questions, and 5) thank the interviewee for participating in the interview.

Step 5: Decode/summarize notes. It is important to summarize your interviewing notes into a logical and succinct conclusion and to identify new issues and additional questions.

Team discussions should be facilitated to prepare interview questions. The team should divide interview questions among team members, determining which team member will interview whom, and whether the interview would be best handled in person or over the phone. While interviews are being conducted, the facilitator should stay in the meeting room to keep it quiet for people to compile their notes. The coordinator schedules the interviews and creates a chart on the whiteboard in the working room showing who is interviewing whom, where, and at what time(s). When all team members are finished interviewing and compiling notes, a brief discussion should be facilitated for each interviewer to share the results with the rest of the team.

The co-facilitator may also unobtrusively accompany a team member to observe an interview and provide constructive feedback to the interviewer (after the interview) on the effectiveness of that person's interviewing skills.

4.7 Conducting the TTNA Process.

4.7.1 Orient the Team. The facilitator introduces the TTNA process to the team members. The intent of introducing this process to SMEs prior to beginning the actual TTNA process is two-fold. First, it familiarizes the team members with the terms and big-picture of the TTNA process. Second, it covers some team-dynamic ground rules that will make the process more effective and efficient. The orientation should be performed prior to conducting the actual TTNA.

4.7.2 Step 1: Clarify Request to Determine Problem. This step discovers the team members' perception of the problem/request. The facilitator leads the team to consensus on the problem, determining if the problem is worth resolving, and identifying expected outcomes resulting from the TTNA process. The facilitator leads the group to consensus using one or more of the "optional" methods by asking questions such as:

- Explain the problem being resolved in this analysis.
- What does the team see as the problem?
- How many people are impacted by this problem? How many people contribute to this problem?
- Who wants this problem solved or this new technology introduced? Why?
- What are the expected outcomes of this analysis? What questions do we want to have answered?
- How will we know (what indicators will tell us) that the problem has been resolved?
- Who must we keep abreast of our findings? Who else might want to know?
- Who must NOT know, at least at first?

The facilitator also ensures that the problem statement is clear and focused. Questions should be used to determine if the problem is worth being resolved. The facilitator should write the problem statement and expected outcomes on a piece of 8-1/2" x 11" paper and post it in a location easily visible to all team members. Expected outcomes should then be listed on a flipchart page.

The co-facilitator will type the problem statement into the Briefing Form (refer to Appendix F to see a blank Briefing Form and an example of a completed Briefing Form).

4.7.3 Step 2: Develop an Analysis Plan. This step is conducted as an organizational step so that the TTNA process will flow smoothly and be as effective as possible. During this step, TTNA team members determine what information must be collected (expected, actuals, gaps, causes, solutions). For each information type, they will list the sources of that information (which people, documents, and work products). To conduct this step the facilitator asks questions such as:

- Is there anyone in addition to the team members who would be an effective source of information for this analysis? Will they be accessible? Will we be able to go back to them again and again as we need additional information?

- What records might provide useful information? Will they be accessible? Will we be able to go back to them again and again as we need additional information?

The facilitator could create a chart similar to those identified in Appendix B depending on the different TTNA requests.

When the chart is complete, the facilitator asks questions such as "will this information help us find answers to our original problem and expected outcomes?"

Types of Information	Specific Sources of Information	Analysis Techniques
Expecteds		
Actuals		
Gaps		
Causes		
Solutions		

The coordinator should gather any documents not gathered previous to the process. The coordinator then contacts any individuals that the TTNA team may want to interview and schedules approximate interview times.

4.7.4 Step 3: Collect Necessary Data. In this step the facilitator ensures that everyone has a clear idea of what expecteds are and what actuals are. This step is often done in conjunction with Step 4, Analyzing Data to Determine Gaps (i.e., the end-product of discussing expecteds and actuals is a list of gaps). The TTNA team members participate in processes to determine and/or discuss what expecteds and actuals are. In most cases the participants will already know (mentally) what the expecteds and actuals are, so there is no need to make a list of expecteds and a list of actuals; rather, they can simply discuss what the gaps are between expecteds and actuals. At other times, the expecteds may already be listed in a document, so participants need merely talk about their knowledge of actuals as compared to the listed expecteds in order to create a list of gaps. In rare cases, if the TTNA team members are not all completely familiar with the problem being examined, they may need to discuss and list "the expecteds" and "the actuals." All of the various process techniques can be used to conduct this step.

The facilitator then determines whether the team needs to spend time listing expecteds and actuals on separate flipcharts or whether they can just discuss them to create a list of gaps. If necessary, create a list of expecteds on one flipchart page (using a single colored marker) and a list of actuals on another flipchart page (using a different colored marker). The facilitator assigns interview responsibilities if applicable.

4.7.5 Step 4: Analyze Data to Determine Gaps. All the data that was gathered in the previous steps is analyzed to determine what the gaps really are. This step is often done in conjunction with Step 3, as described above.

Team members participate in processes to list the gaps and, if helpful, group common gaps. This is commonly done using the process techniques used in Step 3.

The facilitator should list each gap on a separate sheet of 8-1/2" x 11" paper (using another color marker) and ensure the team is listing gaps and not causes or solutions. All gaps identified should be relevant to the problem. If helpful, input may be provided by the facilitator to the team into grouping common gaps.

The co-facilitator should input the list of gaps in the Briefing Form.

The coordinator should inform the customer of findings so there are no surprises to the customer during the briefing.

4.7.6 Step 5: Determine Cause(s) of Gaps. This is done to determine what prevents the expected performance/results from being achieved.

The TTNA team members will participate in the appropriate process techniques to determine cause(s) of each gap.

The facilitator should list the causes (using one color marker) for each gap on a yellow Post-it note and place them below the gap. The facilitator should ensure that the team lists causes and not solutions. The causes should reflect back on the gap and the original problem. The facilitator should assign interview responsibilities if applicable.

The co-facilitator should input the list of causes associated with each gap in the Briefing Form.

4.7.7 Step 6: Determine Solution(s) for Each Gap. This step examines the gaps and causes to decide the most appropriate way to eliminate the gap to achieve the expected performance/results.

TTNA team members should participate in the applicable process techniques to determine the most appropriate training and/or non-training solution(s) based on the causes for each gap.

The facilitator should list the solutions (using one color marker) for each gap on a self-adhesive note and place it below the gap next to the applicable cause(s). The solutions should reflect back on the gap and the original problem.

The co-facilitator inputs the list of solutions associated with each gap in the Briefing Form and should provide a copy of the Briefing for each participant to review during Step 7.

4.7.8 Step 7: Prepare and Conduct a Briefing of the Results. This step reports the suggested solution(s) for resolving the identified problem to management.

The TTNA team members determine who to invite to the briefing. They will review the briefing prepared by the co-facilitator using the checklist provided in Appendix F and determine what changes are necessary to the briefing content. The facilitator will determine the content of any instructional aids that may be used. The team will select a team member to be the presenter. The team will then prepare the room for the briefing. One team member will present the briefing while the others attend and answer any questions. The facilitator should also lead a group discussion to review/revise the briefing.

The facilitator should ensure that the team reaches consensus on the briefing content and that the briefing content focuses on the original problem. The co-facilitator should make all necessary changes to the briefing. There should be enough copies printed for everyone involved in the briefing. The facilitator and co-facilitator should attend the briefing but should not participate unless questions are asked of the TTNA process that the team members cannot answer.

The coordinator should schedule the briefing (people, time, location), create any instructional aids in time for the briefing, and attend the briefing.

4.7.9 Summary. During the summary the facilitator should explain to the team members how the TTNA results will be used at their facility and in subsequent TTNA processes. All team members should be thanked for their contributions.

LIST OF APPENDIXES

Appendix A, Needs Analysis Survey: This appendix is used in the initial planning stages when setting up to conduct the TTNA process.

Appendix B, Sample TTNA Plan and Process for Different TTNA Requests: This appendix is designed to provide a sample of various types of requests and some TTNA plan and process ideas that could be used. The intent of this appendix is to provide you with ideas and a template you could use to aid you in the facilitation of the TTNA process. Some sections are left incomplete. This will allow you to think through the process you are about to facilitate and to generate your own ideas based on the individual request. With so many variables, it would be impossible to have each section completed.

Appendix C, Coordinator Checklist: This appendix is a checklist used by the coordinator throughout the planning stages and during the conduct of the TTNA process. It provides a reference for all the necessary actions required of the coordinator.

Appendix D, Sample TTNA Letters: This appendix provides sample letters used for invitations to the people participating in the TTNA process.

Appendix E, TTNA Planning Sheet: This appendix provides a planning sheet for the coordinator to use prior to conducting the TTNA process.

Appendix F, Briefing Form: This appendix provides a briefing form (both blank and an example) that will be used to record findings during the course of the TTNA process.

APPENDIX A
NEEDS ANALYSIS SURVEY

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APPENDIX A: NEEDS ANALYSIS SURVEY

Please answer the following questions as they apply to the job position or program you will assess during the Table-Top Needs Analysis seminar.

1. What type of facility will the needs analysis be performed at?

   Circle all that apply: (Non-reactor nuclear facility, Category B reactor facility, or Category A reactor facility; low-hazard, moderate-hazard, or high-hazard?)

   Name of Facility: ____________________ Hazard Level: ____________________

2. Will the facility be changing in terms of operational, shutdown, or standby conditions within the next six months? Yes ___ No ____

   Will the facility's "mission" be changing within the next six months? Yes ___ No ____

3. Does the facility have a DOE-approved Training Implementation Matrix as per 5480.20A?

   Yes ___ No ___ Being Written ___ Being Reviewed by DOE ___

4. What is the title of the job position or program?

5. Briefly describe the performance problem or concern in question?

6. Do these people handle significant quantities of fissile materials? (Refer to the definition of significant quantities.)

   Yes ___ No ____

7. How many people are employed in this job position or program?

8. Do the people in this job position perform similar tasks?

   ___ For the most part ___ No, they all do something uniquely different

9. What do you intend to accomplish with this TTNA seminar?

10. How many people at your facility (usually training staff) would like to learn how to conduct Table-Top Needs Analysis?

11. Who will serve as the Coordinator for this Table-Top Needs Analysis Seminar? (Please provide name, complete mailing address and phone number).

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APPENDIX B
SAMPLE TTNA PLAN AND PROCESS FOR DIFFERENT TTNA REQUESTS

FACILITATOR NOTE: This appendix is designed to provide a sample of various types of requests and some TTNA plan and process ideas that could be used. The intent of this appendix is to provide you with ideas and a template you could use to aid you in the facilitation of the TTNA process. Some sections are left incomplete. This will allow you to think through the process you are about to facilitate and to generate your own ideas based on the individual request. With so many variables, it would be impossible to have each section completed.

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SAMPLE 1
REQUEST TO COMPARE A TRAINING/QUALIFICATION PROGRAM WITH THE REQUIREMENTS OF AN ORDER

Suggested Seminar Sequence: TTNA prior to Job Analysis

Estimated Seminar Length: 2 days

STEP 1: CLARIFY REQUEST TO DETERMINE PROBLEM

Facilitator Asks:

- What is the name of the facility or site where this analysis will be conducted? What hazard category is it (high hazard, low hazard)? Is it a reactor or non-reactor facility?
- For which Order(s) are you bringing the training program into compliance? Was there an Order previous to this one that included similar training requirements? Were your programs in compliance with it?
- What problem do you think the Order is trying to resolve? How is that problem manifested here?
- Once we have implemented the Order, what indicators will prove that the problem has been resolved?
- During this seminar, are we dealing with this problem site-wide, facility-wide or program-wide?
- What attitudes are prevalent in your environment about this Order? Does management support its implementation? Are employees aware of the Order's existence? How do employees feel about being required to be involved in training?
- What was used as the basis of the existing training/qualification program? A task list?
- Was a systematic approach to training used to build the existing training/qualification program? Is the existing training/qualification program up-to-date?

Expected Outcomes from this TTNA Seminar:

- List of where existing program meets and does not meet Order requirements.
- Suggestions for most cost-effective way to bring program into compliance.
- Determination of which employees are included in which program and/or impacted by the Order.

SAMPLE 1
REQUEST TO COMPARE A TRAINING/QUALIFICATION PROGRAM WITH THE REQUIREMENTS OF AN ORDER

STEP 2: DEVELOP ANALYSIS PLAN

Types of Information	Specific Sources of Information	Analysis Techniques
Expected	Order requirements	During the document review process, the TTNA team will compare expecteds and actuals to list gaps by: - Identifying order requirements - Assessing existing material against the requirements - Listing what will need to be done to meet the requirements This can be most effectively accomplished using NGT/CDM
Actual	Trainers Training Management Line Management Training Program Description (or equivalent) Training Management Manual (or equivalent) Implementation plans from previous, similar orders Task list Qualification cards/standards Training materials Personnel selection, hiring, and appraisal requirements and processes Trainee records (what entry-level requirements employee possesses, training/evaluation individuals have taken, scores, etc.) Instructor evaluations Training evaluations Audit or appraisal findings from internal reviews, Tiger Teams, DNFSB, other external reviews, etc. Procedures that describe how industry and facility lessons learned, ORs, etc., are incorporated into training program content	
Gaps	Trainers Line Management Training Management SMEs	
Causes	Trainers Line Management Training Management SMEs	Facilitated discussion will be used to discuss causes (if applicable)
Solutions	Trainers Line Management Training Management SMEs	Facilitated discussion will be used to discuss solutions

SAMPLE 1
REQUEST TO COMPARE A TRAINING/QUALIFICATION PROGRAM WITH THE REQUIREMENTS OF AN ORDER

STEP 3: COLLECT DATA ON EXPECTEDS/ACTUAL

Process:

1. Use NGT/CDM to determine job positions (and number of employees in each) impacted by the Order and group them (if helpful or necessary) into programs.

2. If helpful, use facilitated discussion and document review combined to divide Order requirements into "site-wide," "facility-wide," and/or "program-wide."

3. If necessary, revise problem statement to reflect which program(s) and requirements will be assessed in this TTNA.

Requirements	Met? Yes or No?	Implementation Plan
1.		
2.		

STEP 4: ANALYZE DATA TO DETERMINE GAPS

Process:

1. Combine Order review with facilitated discussion to list (by comparing expecteds with actuals):
   - which requirements are met (write on a flip chart page).
   - which requirements are not met (these gaps written on a different flipchart page).

2. If helpful, group common gaps.

3. Co-Facilitator types chart:
   Gap   Cause(s)   Solution(s)

STEP 5: DETERMINE CAUSE(S) OF EACH GAP

Process:

1. For each gap, Facilitator asks: "Is it applicable to determine why this requirement hasn't already been met? (e.g., are there management practices/policies that are a barrier? lack of training staff? inappropriate hiring practices? etc.)?"

2. If so, use a facilitated discussion and fishbone, if applicable, to determine cause(s).

3. Co-Facilitator documents results.

SAMPLE 1
REQUEST TO COMPARE A TRAINING/QUALIFICATION PROGRAM WITH THE REQUIREMENTS OF AN ORDER

STEP 6: DETERMINE SOLUTION(S) FOR EACH GAP

Process:

1. Facilitated discussion of most cost-effective solution, including integral steps.

2. Co-Facilitator documents solutions in chart.

3. If time, determine schedule and budget requirements to implement solutions.

STEP 7: PREPARE AND CONDUCT BRIEFING ON RESULTS

SAMPLE 2
REQUEST TO DEVELOP AN INITIAL AND/OR CONTINUING TRAINING PROGRAM FOR A JOB POSITION THAT ALREADY EXISTS

Suggested Seminar Sequence: Job Analysis, Needs Analysis, Training Program Design

Estimated Seminar Length: 5 days

STEP 1: CLARIFY REQUEST TO DETERMINE PROBLEM

Facilitator Asks:

- Why are you building this training program? To comply with an Order? Which Order?
- What attitudes are prevalent in your environment about training? Does management support building this training program? How do employees feel about being required to be involved in training?
- Do you intend to use a systematic approach to training to build and maintain the training program?
- For which job position will this training program be built?
- Is there an existing training program? What was used as its basis? A task list? Has the task list been maintained current?
- Is the existing training program well-received by trainees and management?
- Do you want the program to build everyone to an expected level of performance or to an ultimate level?
- Have you noticed any performance problems common in this job position?
- What indicators will there be to show that the training/qualification program has made a difference?
- What reports, etc., might performance of these people impact (ORs, contamination records, down-time records, etc.)?

Expected Outcomes from this TTNA Process:

- If applicable, changes to tasks designated as train, no train, or overtrain (some train and/or overtrain tasks may become no train and/or train tasks once solutions are examined for existing performance problems, thereby reducing the amount of training needed).
- Determine performance standards for tasks.

SAMPLE 2
REQUEST TO DEVELOP AN INITIAL AND/OR CONTINUING TRAINING PROGRAM FOR A JOB POSITION THAT ALREADY EXISTS

STEP 2: DEVELOP ANALYSIS PLAN

<table>
<tr><th>Types of Information</th><th>Specific Sources of Information</th><th>Analysis Techniques</th></tr>
<tr><td>Expected</td><td>Task list
Order requirements (if applicable)
SMEs
Engineers
Managers</td><td rowspan="2">Referring to these documents, facilitated discussion will be used to list with which task(s) employees are currently having difficulty.</td></tr>
<tr><td>Actual</td><td>Job incumbents
SMEs
Managers
Production reports related to this job
Training program description, including lesson and exam titles
Training Management Manual or equivalent
Qualification cards/standards
Training materials
Trainee records (what entry-level requirements employee possesses, training/evaluations individuals have taken, scores, etc.)
Instructor evaluations
Training evaluations
Audit or appraisal findings from internal reviews, Tiger Teams, DNFSB, other external reviews, etc.
Procedures that describe how you incorporate industry and facility lessons learned, ORs, etc., into training program content</td></tr>
<tr><td>Gaps</td><td>SMEs
Managers
Job incumbents</td><td>Facilitated discussion</td></tr>
<tr><td>Causes</td><td>SMEs
Managers
Job incumbents
Trainers</td><td>Facilitated discussion with interviewing if necessary</td></tr>
<tr><td>Solutions</td><td>SMEs
Managers
Job incumbents
Trainers</td><td>Facilitated discussion with interviewing if necessary</td></tr>
</table>

SAMPLE 2
REQUEST TO DEVELOP AN INITIAL AND/OR CONTINUING TRAINING PROGRAM FOR A JOB POSITION THAT ALREADY EXISTS

STEP 3: COLLECT DATA ON EXPECTEDS/ACTUAL

Process:

1. Using the task list (train, no train, and overtrain tasks) and documents discussed in Step 1, use facilitated discussion to list tasks for which job incumbents are experiencing difficulty.

2. Identify how many people are experiencing the difficulties and whether they are new, long-term employees in this job position.

STEP 4: ANALYZE DATA TO DETERMINE GAPS

1. For each task for which difficulties are being experienced, Facilitator asks:
   - What, specifically, is different between what people do who perform the task correctly vs. people who perform it incorrectly?

2. List gaps, using group discussion activities detailed in attachments 2-6.

3. Ensure conversation focusses on original problem and perhaps clarify the problem statement.

4. If helpful, group common gaps.

5. Co-Facilitator types chart:

Gap	Cause(s)	Solution(s)

STEP 5: DETERMINE CAUSE(S) OF EACH GAP

Option 1. For each gap determine:
- if it's worth resolving
- cause(s)
- solution(s).

(They may need to interview/observe)

Option 2. Use Fishbone technique
- Ask: Why does this gap exist?

Option 3. Use Mindmapping technique
- Ask: Why does this gap exist?

SAMPLE 2
REQUEST TO DEVELOP AN INITIAL AND/OR CONTINUING TRAINING PROGRAM FOR A JOB POSITION THAT ALREADY EXISTS

STEP 6: DETERMINE SOLUTION(S) FOR EACH GAP

Option 1. Complete in conjunction with Step 5.

Option 2. Facilitated discussion of most effective solution(s).

1. Re-examine designation as train, no train, or overtrain.
2. Co-Facilitator update task list and add solutions to chart.

STEP 7: PREPARE AND CONDUCT BRIEFING ON RESULTS

Include how much less training will take place due to non-training solutions discovered via this TTNA process.

SAMPLE 3
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

Suggested Seminar Sequence: N/A (assumes initial and continuing-training programs exist)

Estimated Seminar Length: 4 days

STEP 1: CLARIFY REQUEST TO DETERMINE PROBLEM

Facilitator Asks:

- What indicators are there that reflect effectiveness of training program?
- Have changes occurred to plant, procedures, job scope within past (year)?
- Have any ORs, facility/industry lessons learned, new requirements, etc. within past (year), been applicable to this job position/training program? How do you go about monitoring these things?
- Within past (year), have you sought responses from former trainees and their supervisors on quality of training and application of training on the job?
- When was the last time the task list was revised?
- Have you noticed any performance problems common in this job position?
- What attitudes are prevalent in your environment about the existing training program? How do people feel about being involved in continuing training?
- Who requested the analysis?
- Why was the analysis requested?

Expected Outcomes from this TTNA Seminar:

- List of changes needed to initial training.
- List of changes needed to continuing training.
- List of content needed for 1-time training to bring qualified job incumbents up-to-speed on changes.
- List of suggested non-training solutions.

SAMPLE 3
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

STEP 2: DEVELOP ANALYSIS PLAN

Types of Information	Specific Sources of Information	Analysis Techniques
Expected	New requirements in Orders, etc. Procedures Task list Performance standards Changes in job scope Best practices	Review documents and compare with training materials using NGT/CDM to list gaps that could: - Improve Quality of training program - Improve human performance - Reduce the number of occurrence reports
Actual	Occurrence Reports related to job position Production reports related to job position Facility lessons learned Industry lessons learned Smile sheets Established performance indicators Training program description for both initial and continuing training Training Management Manual or equivalent Training materials Qualification cards/standards Trainee records (what entry-level requirements trainee possesses, training/evaluations individuals have taken, scores, etc.) Instructor evaluations Training evaluations Audit or appraisal findings from internal reviews, Tiger Teams, DNFSB, other external reviews, etc. Former trainees Supervisors Trainers	
Gaps	Job incumbents Supervisors Trainers	
Causes	Job incumbents Supervisors Trainers	Facilitated discussion, interviews, mindmapping or Pareto.
Solutions	Job incumbents Supervisors Trainers	

SAMPLE 3
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

STEP 3: COLLECT DATA ON EXPECTEDS/ACTUAL

Process:

1. Review documents (for both expecteds and actual) to determine applicability to job position/training program and whether tasks need to be added/deleted from task list.

2. Compare information with existing training material to see if included.

3. Facilitated discussion to discuss effectiveness of existing training program.

4. Interview former trainees and their supervisors, if necessary.

STEP 4: ANALYZE DATA TO DETERMINE GAPS

Process:

1. List gaps during discussion of Step 3 (ensuring a re-focus on problem).

2. Use Fishbone or NGT, if necessary, to identify true gaps.

3. If helpful, group common gaps.

4. Co-Facilitator types chart:

Gap	Cause(s)	Solution(s)

STEP 5: DETERMINE CAUSE(S) OF EACH GAP

For each gap, Facilitator asks: "Is it applicable to determine why this gap exists?"

Option 1. Use facilitated discussion to determine
- if it's worth resolving
- cause(s)
- solution(s).

Option 2. Use Fishbone or Mind-Mapping
- Ask: Why does this gap exist?

SAMPLE 3
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

1. Make sure team lists causes and not solutions.

2. Co-Facilitator adds causes to chart.

STEP 6: DETERMINE SOLUTION(S) FOR EACH GAP

Option 1. Discuss in conjunction with Step 5 above.

Option 2. Facilitated discussion of most effective solution.

1. Co-Facilitator documents solutions in chart, adding a columns that reflects:

Non-Training Solutions	Change Lesson Plan #	Develop Lesson Plan

STEP 7: PREPARE AND CONDUCT BRIEFING

SAMPLE 4
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

Suggested Seminar Sequence: N/A

Estimated Seminar Length: 1-2 days

STEP 1: CLARIFY REQUEST TO DETERMINE PROBLEM

Facilitator Asks:
- Describe the performance problem.
- How many employees are experiencing the performance problem? How many employees are employed in the job position?
- Did the employee(s) receive formal training? Was a systematic approach to training used to build and maintain the training program? How long ago did the employee receive the training? Has the employee been involved in any continuing training?
- Estimate how much it costs because of this performance problem.
- What attitudes are prevalent in your environment about the employees' performance? Does management support the conduct of this analysis? How does the employee feel about his/her performance?

Options:
- Use Nominal Group Technique/Concensus Decision Making to identify problem statement.

SAMPLE 4
REQUEST TO CONDUCT TRAINING PROGRAM EVALUATION

STEP 2: DEVELOP ANALYSIS PLAN

Types of Information	Specific Sources of Information	Analysis Techniques
Expected	Task list Procedures, Qualification Standards, or manufacturer specifications that describe expected performance	
Actual	Production reports related to this job position and to the employee(s) Initial and Continuing training program description, including lesson and exam titles Qualification cards Trainee records (what entry-level requirements employee possesses, training/evaluations individuals have taken, scores, etc.) Instructor evaluations Training evaluations Performance appraisals for employees in the job position	
Gaps		
Causes		
Solutions		

STEP 3: COLLECT DATA ON EXPECTEDS/ACTUAL

Process:

1. Ask: Does everyone have a clear idea of what expected performance is? (Solicit examples to be sure.)

2. If group is unclear as to expecteds, use NGT or facilitated discussion to list expecteds.

SAMPLE 5
REQUEST IS TO DEVELOP SPECIFIC TRAINING SESSION

Suggested Seminar Sequence: TTNA then Team Approach to Training Development
Estimated Seminar Length: 2-3 days

STEP 1: CLARIFY REQUEST TO DETERMINE PROBLEM

Options:

- Use Fishbone or NGT to get at true problem being resolved.

Expected Outcomes from this TTNA Seminar:

STEP 2: DEVELOP Analysis PLAN

Types of Information	Specific Sources of Information	Analysis Techniques
Expected		
Actual		
Gaps		
Causes		
Solutions		

STEP 3: COLLECT DATA ON EXPECTEDS/ACTUAL

Process:

1. Ask: Does everyone have a clear idea of what expected performance is? (Solicit examples to be sure.)

2. If group is unclear as to expecteds, use NGT or CDM to list expecteds.

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APPENDIX C
COORDINATOR CHECKLIST

FACILITATOR NOTE: The timeframes or lead-times in this checklist are for guidance only. Actual timeframes will vary from facility to facility.

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<table>
<tr><th colspan="2">60-90 Days Prior to Seminar</th></tr>
<tr><th>Compl. Date</th><th>Step to Perform</th></tr>
<tr><td>____</td><td>
1. SECURE MANAGEMENT APPROVAL

• Since the TTNA process involves facility personnel, it is important for you to explain the purpose of the seminar to all concerned management levels and obtain their approval and support throughout the conduct of the TTNA seminar.

• Your discussions with management should include:

- Purpose of Seminar. Discuss the process that will follow before and during the seminar and the kind of support you will require to address your problem or concern during your discussion with management.

- Seminar Length. Explain that the seminar will last anywhere from 2 to 5 days depending upon the type of request and the extent and depth of the analysis that will follow.

- Who Needs to be Involved. Explain that the seminar must involve the people described in the next step, <u>who must participate for the entire length of the seminar</u>. To ensure that the TTNA process yield a successful outcome/results you must with the concerned management input involve only those individuals who will participate and make a valuable contribution (not someone to fill a position for the team). Before you talk to the concerned management read the team member qualifications listed in the next step. Stress to your management the significance of involving expert individuals in this TTNA seminar.
</td></tr>
<tr><td>____</td><td>
- Establish Dates for 2-5 day TTNA Seminar. When seeking management approval ask if they have suggestions for dates that would best accommodate potential TTNA team members (consider shift schedules, scheduled outages etc.)

- Ask management to send letters to potential team members. Refer to Appendix D, for a sample letter management can use to invite potential team members.
</td></tr>
</table>

60-90 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**2. IDENTIFY POTENTIAL TTNA PARTICIPANTS** • The TTNA seminar involves a team of individuals who will interact effectively with each other to derive a common goal or purpose which is to resolve a performance problem/concern. Typically the TTNA team members must include: - 2-5 subject matter experts (SMEs). These are job incumbents in the position being assessed who are considered role models for safe, efficient, and competent performance. - 1-2 immediate supervisors - 1-2 other SMEs as appropriate - 1-3 trainers from the requesting facility who will be facilitating future TTNA seminars for that facility. • In addition you may invite observers to learn the TTNA process. - 1-5 observers from the facility training department who want to learn how to conduct this process for other job positions or programs as applicable. • The team members use their technical expertise to identify list of areas that need training. The same team members should participate throughout the entire TTNA seminar.

60-90 Days Prior to Seminar	
Compl. Date	**Step to Perform**
	SME Qualifications 1. Full-time workers in the job for which training needs will be assessed. 2. Perceived as the role model for proper job performance. 3. Highly skilled and knowledgeable regarding the job. 4. Aware of new procedures, equipment, and lessons learned. 5. Engineering personnel responsible for design & safety analysis of facilities activities. 6. Expert from another facility who may be familiar with the system/process. **Training Personnel Qualifications** 1. Responsible for developing training program. (lesson plans, etc.). 2. Must possess expertise in conducting table-top needs analysis and expertise in table-top facilitation. Available throughout the TTNA seminar process (may take up to 1-3 days after seminar). 3. Able to facilitate without directing team members in content decisions. **Supervisor Qualifications** 1. Directly supervise the job incumbents who perform the job for which training needs will be assessed. 2. Recent practitioner-level experience in the job. 3. Have good working relationship with job incumbents on the team.
____	**3. ESTABLISH DATES FOR THE SEMINAR AND FOLLOW-ON EFFORT**

60-90 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**4. SELECT FACILITATORS** The facilitator's serve as process experts who may or may not possess technical expertise regarding the performance problem being assessed to assist in making content decisions. The TTNA facilitator must possess in-depth knowledge about the systematic approach to training. When selecting the facilitators, choose those who possess the interpersonal and facilitation skills listed below. **Interpersonal Skills Needed by Facilitator** - FLEXIBILITY - A sensitivity for others - The ability to establish and maintain enthusiasm - Excellent listening skills - The ability to display and maintain a positive image - The ability to direct team members toward a goal - Patience - The ability to show empathy - A sense of humor - The ability to make decisions(regarding seminar processes) - The ability to display warmth and establish rapport quickly with team members - The ability to motivate, encourage, and focus team members **Special Skills Required of a TTNA Facilitator** - Expertise in performance-based training - Experience using the TTNA training process built into this seminar - Skill in questioning techniques - A process expert who leads and controls the process but allows team members to act as content experts making content judgements - Skill using nominal group technique - Skill in obtaining small-group consensus - The ability to establish and maintain the team's pace, and participation

60-90 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**5. GATHER INFORMATION FOR REVIEW BY FACILITATOR(S)** • You will need to gather information regarding the type of training request and description of the performance problem and send this to the facilitator at least 20-30 days prior to the seminar. Having this information will greatly assist the facilitators to support the team in progressing through each TTNA seminar step. **Send to the Facilitator:** - The description of performance problem being analyzed. - A brief job description (e.g., job posting). - The completed TTNA Planning Sheet (refer to Appendix E). - The existing task list for the job position or a similar job. - A list of all procedures associated with the job or performance problem in question. - A description of what training and evaluations are already taking place (for example, fundamentals classes, followed by on-the-job training, followed by job performance measures, etc.). - Documents that will be supportive to performance problem; for example, performance evaluations. Also any other documents for example, DOE Orders, regulatory requirements, Guides, lessons learned, etc.

30-60 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**1. CONTACT ALL PROSPECTIVE TEAM MEMBERS AND OBSERVERS** • When talking to the prospective team members (by phone or in person) explain: - The purpose of TTNA seminar. Explain the depth of the potential analysis process that will occur based upon your performance problem/concern. - Why they are chosen as potential team members. Explain that management chose people to participate on the team because of their expert knowledge of the job and ability to work effectively with others. - Their roles as team members. Their role as a team members is to use their technical expertise by working with the team to identify/develop a list that indicates a performance problem and the expecteds, actuals, gaps, causes and solutions (training and/or non-training) for a well defined training request. - Date of Seminar. Write in the date of the seminar here: ___/___/___ - Attendance requirements. If interested in participating, ensure that team members commit to be in attendance throughout the entire length of the seminar.
	NOTE: Once again, choose only those individuals who will contribute to the seminar. Individuals who are disinterested or seem uncommitted may be detrimental to the seminar's success.

30-60 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**2. SELECT AND SCHEDULE A SEMINAR MEETING ROOM** • There are certain features required of the room in which the seminar will be conducted. - A small table for supplies should be located at one end of the wall. - An overhead projector and screen, and 2 flipchart stands with 4 pads of flipchart paper. • Decide whether you will schedule the seminar onsite or offsite. There are pros and cons to conducting the seminar at the facility versus away from the facility. - Onsite delivery is convenient since team members will need to refer to procedures, regulatory requirements, and other job-related information/documents during the seminar. - However, offsite delivery helps reduce work-related distractions. When you have invited people from outside the facility to attend the TTNA Seminar, it will reduce the amount of paperwork needed for security clearances. • The bottomline is that you select a location for the seminar room that meets the criteria listed above, will allow group interaction, and is free from distraction. Remember, the room must be noise free, well-lighted, and ventilated.

20-30 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**1. SEND INFORMATION FOR REVIEW BY FACILITATOR(S)** • Fill out and send Appendix E, TTNA Planning Sheet.
____	**2. CONFIRM ARRANGEMENTS WITH ALL PARTICIPANTS BY LETTER** • Letter must include seminar date, time, and location (with map as necessary). Send copies of these letters to the appropriate supervisors or managers (See Appendix D, Sample Confirmation Letter).

5-10 Days Prior to Seminar	
Compl. Date	**Step to Perform**
____	**1. CALL EACH PARTICIPANT** • Call each participant to confirm their involvement and answer remaining questions.
____	**2. GATHER SEMINAR SUPPLIES**
____	**3. CONFIRM DETAILS WITH FACILITATOR(S)** - How early the room will be available for set-up. - Directions to get to meeting room (provide map as necessary). - What security requirements must be observed.

Day Before Seminar	
Compl. Date	**Step to Perform**
____	**1. PREPARE THE MEETING ROOM** • Make a final check of the room, supplies, equipment, and all other arrangements. Also bring several copies of the documents that will assist participants in identifying the expecteds, actuals, gaps, causes, and solutions (training and non-training). • Talk to the facilitators about their brief biography to use during seminar introduction. • Inform the welcoming official (a manager from the operating organization needing the performance issue resolved) to spend few moments to welcome the team, and to say something that will motivate the team members.

During the Seminar	
Compl. Date	**Step to Perform**
____	**1. COURSE INTRODUCTIONS** • The seminar begins with a series of introductions: - You will introduce the welcoming official, who will then thank the team members for showing interest in participating, and acknowledge the importance of their contribution in this TTNA seminar. - You will introduce the facilitators of the TTNA seminar to the rest of the team members. Acknowledge their skills, also explain the Facilitators' qualification and experience according to the biography. Note: Introductions should take no more than one minute each.

During the Seminar	
Compl. Date	**Step to Perform**
Training Portion of TTNA Seminar	
____	**2. OBTAIN OTHER DOCUMENTS IDENTIFIED DURING 1-DAY TRAIN-THE-FACILITATOR SESSION** • You will assess to see whether or not you have invited the right mix of people. If you realize that you need to contact some individuals who will provide valuable input to the TTNA seminar that the team of facilitators have identified, then you will need to invite those individuals.
Workshop Portion of the Seminar	
____	**3. ATTEND THE FIRST TWO LESSONS DURING THE ACTUAL CONDUCT OF THE SEMINAR** • You will attend the following lessons: - Introduction for Team Members - TTNA Overview
____	**4. EXPLAIN THE PROBLEM BEING RESOLVED IN THIS ANALYSIS, OR REASON FOR THE ANALYSIS** • During step 1 of the TTNA process (clarify request to determine problem) you will explain the problem being resolved in this analysis to the rest of the team members (when asked by the facilitators to do so).

____	**5. OBTAIN SPECIFIC DOCUMENTS AND CONTACT PERSONNEL FOR INTERVIEWS** • During step 2 of the TTNA process (Develop Analysis Plan) if and when necessary you will: - Collect any specific document(s) as identified by the team members. - Contact any individuals whom the TTNA team may want to interview, and - Schedule approximate interview times.
____	**6. CONDUCT INTERVIEWS** • You will carry out interview responsibilities during the following steps of the TTNA process (as applicable): - Step 3: Collect data on expecteds/actuals. - Step 5: Determine cause(s) of Gaps, if any. - Step 6: Determine solution(s) for each Gap, as appropriate.
____	**7. COMMUNICATE FINDINGS TO KEY INDIVIDUALS** • During step 4 of TTNA process (Analyze Data to Determine Gaps) you will inform the customers or all the key individuals as identified by the team members' findings of expecteds (if applicable) actuals (if applicable) and gaps of performance problem. This is necessary so that there are no surprises to customer during the upcoming briefings.

____	**8. SCHEDULE BRIEFINGS** • During step 7 of the TTNA process (Prepare and Conduct Briefing on Results) you will: - Ensure that the key individuals are invited and will be present during the briefings. - Schedule the time of briefings, - Schedule the place of briefings i.e. where the briefings will be conducted. - Ensure instructional aids (e.g. overhead transparency, pre-prepared flip chart etc.) are created in time for briefing. And finally, - Attend the briefing.

After Seminar	
Compl. Date	**Step to Perform**
____	**1. OBTAIN DOCUMENTATION FROM FACILITATOR** Give the information listed below to the appropriate training staff to serve as auditable documentation for reviewers of how the TTNA process was conducted, who was involved, and what product resulted to assist in completing any remaining seminar steps and for resolving your specific problem or concern. **Obtain from the Facilitator:** 1. The roster of people who participated. 2. The cover letter explaining how the documented list of expecteds, actuals, gaps, causes, and solutions were developed. 3. The typed list of expecteds, actuals, gaps, causes, and training/non-training solutions on disk and hard copy that is signed by the team members. 4. Disk copy of TTNA seminar materials.

After Seminar	
Compl. Date	**Step to Perform**
____	**2. COMPLETE ANY TTNA STEPS NOT FINISHED DURING SEMINAR** • It is important for you to have attended the entire seminar so you will clearly understand what work (if any) remains after the seminar. At the minimum, the facilitator will show the team how to complete each TTNA step. However, some training requests within DOE are so complex that the Facilitator may not have time to thoroughly complete each TTNA step. The following are example situations for which you might need to complete some of the TTNA steps after the process: - The Facilitator will have started the team in the process of identifying solutions (training and non-training) to the causes of the performance problem, but due to time constraints may not be able to go through the process for every cause. - If the right mix of people (SMEs and supervisors) is not involved throughout the entire process, the findings contained in the briefing form may not be considered valid. Under these circumstances, you would need to conduct a validation process to get appropriate signatures on the briefings form. (Note: Normally there is no need for a separate validation process when appropriate people, as explained in this Handbook, are involved)
____	**3. SEND THANK-YOU LETTERS** • Within 10 working days after the process, send thank-you letters/electronic mail to all participants, including the facilitators.

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APPENDIX D
SAMPLE TTNA LETTERS

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SAMPLE INVITATION LETTER FROM MANAGEMENT

Date:

To:

From: *[Name of Operating Organization Manager]*

Subject: PARTICIPATION IN TABLE-TOP NEEDS ANALYSIS

As a person with a reputation for technical expertise, a positive work attitude, and good interpersonal skills, you have been selected to participate with [number of people to be invited] people as a team for a Table-Top Needs Analysis (TTNA) soon to take place for *[name of job position/program being assessed]*.

This 2-5 day process is an important step toward building a top-notch training program and ensuring the accuracy of our operating procedures. The table-top approach used in this process has proven to be an efficient, cost-effective, and pleasant way to resolve the performance issue in question. The list of problematic areas that your team develops will then serve as the foundation for determining its causes and effective solutions (training or non-training) for its effective implementation that will eliminate our problem or concern.

I support your uninterrupted involvement in this 2-5 days process and also after the TTNA (as necessary, to bring the process to completion) and ask that you ensure its success by contributing your positive energy and subject matter expertise.

If you are able to participate, please contact the Coordinator, *[name and phone number of coordinator]*. If you have any questions about the purpose or end product of this process, please contact *[name of Coordinator]* or myself. Thank you for your cooperation.

<u>Distribution:</u>

cc: *[name of Coordinator]*

SAMPLE PARTICIPANT INVITATION LETTER

Date:

To: *[Name of Potential TTNA Participant]*

From: *[Name of Coordinator]*

Subject: PARTICIPATION IN TABLE-TOP NEEDS ANALYSIS

[Name of Operating Organization Manager] and I invite you to participate in the Table-Top Needs Analysis (TTNA) *[dates of process] in [meeting room location]*. *[Name of Operating Organization Manager]* chose you to participate in this process because of your expert knowledge of the job and your ability to work effectively with others. You will be part of a team--made up of subject matter experts, supervisors, engineers, instructional technologists -- that meets in a workshop with a Facilitator to resolve a performance issue/concern in the *[name of job position/program being assessed]* job/program and to determine effective training and non-training solutions.

This analysis will ensure that causes of performance problem are identified, and effective solutions is proposed to resolve/eliminate the problem in question.

[Name of Operating Organization Manager] has approved time for you to participate uninterrupted, the entire 2-5 days, and 3 1/2 days after-the-process, as applicable.

If you are able to participate, please call me at *[phone number]* by *[deadline for responding]* You must commit to be in attendance throughout the entire 2-5 day process, from *[start/finish time each day, e.g., 8:00 a.m. to 5:00 p.m.]* each day. I will send you a confirmation letter 2-3 weeks before the process. Thank you for your participation. If you have any questions, please call me.

cc: *[Operating Organization Manager]*
[Name of Participant's Supervisor]

SAMPLE OBSERVER INVITATION LETTER

Date:

To: *[Name of Potential TTNA Observer]*

From: *[Name of Coordinator]*

Subject: TABLE-TOP NEEDS ANALYSIS

A Table-Top Needs Analysis (TTNA) will be held *[dates of process]* in *[meeting room location]*. The objective of this process is to resolve performance problem/concern for *[name of job position/program being assessed]* Other purpose is to teach future trainers how to conduct TTNA for other type of performance problem/concern. The table-top approach when facilitated properly, has proven to be a pleasant, cost-effective, efficient method of needs analysis.

If you are interested in learning the TTNA process, you are invited to participate in a 1 day train-the-facilitator session, and observe the actual conduct of TTNA during the workshop portion of the process. As the participant of a 1 day train-the-facilitator session, you will take part in the training portion of the process to learn about the process in lieu to its applicability to the performance problem/concern. As an observer, you will observe the TTNA process. As an observer, you will NOT contribute to the technical content of the job position/program being assessed, though the Facilitator may ask you to co-facilitate portions of the process to give you practice conducting the process. You will receive all training materials with the lesson plans to follow along as you observe and to use when conducting future TTNA's.

The process will begin at *[start time, e.g. 8:00 a.m.]* on *[date of Day 2]* and you will want to participate that entire day. On *[dates of Days 3, 4, 5]* you are welcome to observe the entire time. This is left to your discretion to determine how much time you observe those days.

If you are interested in participating as an observer, please call me at *[phone number]* by *[deadline for responding]*. I will send a confirmation letter 2-3 weeks before the process. If you have any questions, please call me at *[Coordinator's phone number]*.

SAMPLE WELCOMING OFFICIAL LETTER

Date:

To: *[Name of Welcoming Official]*

From: *[Name of Coordinator]*

Subject: WELCOMING OFFICIAL FOR TABLE-TOP NEEDS ANALYSIS

[Manager of Operating Organization] and I invite you to make the opening remarks at the Table-Top Needs Analysis (TTNA) to be held *[dates of process]* in *[meeting room location]* to resolve the performance problem in the *[job position/program]* job. Your responsibility would be to briefly (2-5 minutes) welcome the team of subject matter experts, job incumbents, and supervisors at *[start time and date, e.g., 8:00 a.m. on March 17]*. You might want to include thanking them for their participation and recognizing the importance of their contribution during this process.

Toward the end of the process, we ask you to attend the TTNA briefings to understand the results and express your support for the people who are participating and for the process itself. We also encourage you to drop in periodically throughout the process to see how it is progressing and to underscore the value of the process. Your positive attitude is crucial to the success of the process and the validity of its resulting task list. The output/products of this TTNA will form the foundation for other analyses to follow.

If you are able to participate as the welcoming official, please call me at *[phone number]* by *[deadline for responding]*. I will send a confirmation letters 2-3 weeks before the process. Thank you for your support.

cc: *[Operating Organization Manager]*

SAMPLE CONFIRMATION LETTER

Date:

To: *[Name of Participant]*

From: *[Name of Coordinator]*

Subject: PARTICIPATION IN TABLE-TOP NEEDS ANALYSIS

This letter confirms your participation in the Table-Top Needs Analysis (TTNA) to be held *[dates of process]* in *[meeting room location]*. The process will begin at *[start time]* each day and conclude at approximately *[end time]* each afternoon. It is important that you are on time and participate in all portions of the process because late or part-time participants who miss some of the training or group discussion may seriously disrupt the proceedings. Remember, though, that the process will be a pleasant experience. If you would like to share snacks or your favorite music with the other participants, please feel free to bring them with you. If you have any questions, please call me at *[phone number]*. I look forward to seeing you in the process!

cc: *[the person's supervisor, as appropriate]*

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APPENDIX E
TTNA PLANNING SHEET

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SEND THIS COMPLETED SHEET TO FACILITATOR 20-30 DAYS PRIOR TO TTNA

TTNA PLANNING SHEET (For the Coordinator to complete)

BACKGROUND INFORMATION

1. Who initiated the request for the 2-5 day TTNA? Write list of names and phone numbers as applicable?	3. How many job incumbents are currently employed in this job position/program?

2. For which type of request and for which job position/program as applicable will a performance problem be resolved during the 2-5 day process?

4. With whom must you seek approval to organize and conduct this 2-5 day TTNA?

	Name(s)	**Phone**	**Date Approved**
Your management			
Training management			
Line management who must release expert workers			
Safety organization management			
Other			

TTNA PLANNING SHEET (For the Coordinator to complete)

AVAILABLE JOB INFORMATION	
5. Obtain a brief description of the type of request for which the performance issue needs to be resolved (also mention and provide brief description of job position/program as applicable).	Date Sent to Facilitator:
6. Send a list of the DOE Orders or other regulatory requirements requiring you to conduct needs analysis.	Date Sent to Facilitator:
7. Send a representative sample of procedures (if any) and other documents that describe the tasks performed in the job position.	Date Sent to Facilitator:
8. Send examples any Implementation/Evaluation/Instructor Qual Procedures, along with example TTNA.	Date Sent to Facilitator:
9. Is there an existing task list at your facility for this job position/program for which the performance issue/concern is being resolved? Yes / No	

TTNA DATA				
Dates of Process:		Meeting Room:		
Names of Attendees	Phone	Date of Initial Contact	Date Sent Confirmation Letter	Date Sent Thank You Letter
Facilitator:				
Facilitator:				
SME:				
SME:				
SME:				
SME:				
SME:				

TTNA PLANNING SHEET (For the Coordinator to complete)				
Supervisor:				
New Employee:				
Trainer:				
Trainer:				
Trainer:				
Trainer:				
Trainer:				
Procedure Writer:				
Procedure Writer:				
Observer:				
Observer:				
Observer:				

TTNA PLANNING SHEET (For the Coordinator to complete)

	Other Notes:

APPENDIX F
BRIEFING FORM

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BRIEFING FORM

Briefing Date: ________________ **Time**: _________ **Location**: ______________

Purpose of Briefing:

Attendees:

Brief Summary of Why this Needs Analysis was Conducted:

Brief Summary of How Data was Gathered:

Findings

Gaps	Cause(s)/Barrier(s)	Recommended Solutions

Implications of Findings:

Analysts:

SAMPLE COMPLETED BRIEFING FORM

Briefing Date: June 11, 1994 **Time**: 8:30 am **Location**: EROB Conf. Rm. F

Purpose of Briefing:

To inform management of the results of the Table-Top Needs Analysis (TTNA) process that took place June 1-2, 1994; to solicit their support for implementing the recommendations; to determine if the briefing should be presented to the entire staff.

Attendees:

Joe Smith
Sue Brown
Yore Smart
Imin Charge

Brief Summary of Why this Needs Analysis was Conducted:

This needs analysis was conducted to analyze an observed performance problem: an insufficient number of unit members who possess excellent facilitation skills.

Brief Summary of How Data was Gathered:

Select members participated in this process because they provided a mix of expertise necessary to analyze and resolve this problem. Thus most data gathered during this process resulted from table-top discussions with team members. Members also reviewed documents (International Board of Standards for Training, Performance and Instruction; DACUM; etc.) to validate their ideas as to "what are competent facilitators" and used the information as a baseline to compare our unit's overall actual performance. The deficiencies were grouped into categories and each category was analyzed to determine the cause of the discrepancies and the most appropriate solution(s) to resolve the deficiencies.

SAMPLE COMPLETED BRIEFING FORM

FINDINGS

Gaps	Cause(s)/Barrier(s)	Recommended Solutions
1. inflexibility	1. unit competencies have not been analyzed	1. analyze unit competencies
2. lack of desire to learn new skills	2. performance appraisal process does not reward employees	2. have Individual Development Plans for each employee.
3. lack technical PBT knowledge	3. feel they do not receive adequate time to learn the theory or most recent training techniques	3. create a PBT/SAT evaluation instrument

Implications of Findings:

Facilitation skills are needed not only to conduct courses or seminars, but also to perform well on assist visits, to give presentations, to meeting with customers, etc. Sending people with less-than-adequate facilitation skills to represent our unit may damage our reputation. If this negative impact could be quantified in dollars, the amount could be significant. The cost involved in implementing the recommended solutions would be minute compared to the cost of mis-representation.

Analysts:

Anna List
Angie Neer
George Bright

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CONCLUDING MATERIAL

Review Activity:		**Preparing Activity:**
DOE	Field Offices	DOE-EH-31
DP	AL	
EH	CH	
EM	ID	**Project Number:**
ER	NV	6910-0044
FE	OH	
GC	OR	
HR	RL	
IG	OAK	
NE	RF	
NN	SR	
RW		
	National Laboratories	
	INEL	
	LLNL	
	ORNL	
	SRS	

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DOE F 1300.3 (01-94)	U.S. Department of Energy **DOCUMENT IMPROVEMENT PROPOSAL** *(Instructions on Reverse)*	**OMB Control No. 1910-0900** **OMB Burden Disclosure Statement on Reverse**

1. Document Number	2. Document Title
3a. Name of Submitting Organization	4. Type of Organization *(Mark one)* ☐ Vendor ☐ User ☐ Manufacturer ☐ Other (Specify:_________________________)
3b. Address *(Street, City, Zip Code)*	

5. Problem Areas (Attach extra sheets as needed.)

a. Paragraph Number and Wording

b. Recommended Wording

c. Reason/Rationale for Recommendation

6. Remarks

7a. Name of Submitter *(Last, First, MI)*	7b. Work Telephone Number (Include Area Code)
7c. Mailing Address *(Street, City, State, Zip Code)*	8. Date of Submission

INSTRUCTIONS: In a continuing effort to improve the U.S. Department of Energy (DOE) Technical Standards, this form is provided for use in submitting comments and suggestions for improvements. All users of DOE Technical Standards are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (DO NOT STAPLE) mailed to the address indicated or faxed to (423) 574-0382.

1. The submitter of this form must complete blocks 1 through 8.

2. The Technical Standards Program Office (TSPO) will forward this form to the Preparing Activity. The Preparing Activity will reply to the submitter within 30 calendar days of receipt from the TSPO.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contractors. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1910-0900), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0900), Washington, DC 20503.

U.S. Department of Energy Technical Standards Program Office
c/o Performance Assurance Project Office
P.O. Box 2009, Bldg. 9201-3
Oak Ridge, Tennessee 37831-8065