Vantage Human Resource Services, Inc.
1050 17th Street NW
Suite 600
Washington, DC 20036

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MEMORANDUM TO: Brian Doan, Contracting Officer's Representative for NRC-HQ-12-F-38-0002, Communications Training Services

FROM: Vantage Contractor Team

SUBJECT: Enhancing NRC Public Meetings

This memorandum consists of 3 major sections following the Executive Summary:

- Section 1 – Introduction
- Section 2 – Successful Models of Public Engagement
- Section 3 – Training Considerations

Executive Summary

This memorandum presents information about successful models of public engagement based on a review and analysis of research papers, government and private sector organizational programs reflecting best practices, and selected anecdotes. It also addresses training considerations for NRC staff to enhance public meetings. The various sources referenced throughout describe ways to engage the public in a meaningful way that leads to mutual understanding of the issues and increased satisfaction that public input contributed to the decision making process.

For example, the three published papers highlighted in this memorandum provide model approaches in which organizations (including government agencies) may approach public participation. Viewed collectively, the papers document the importance of a clearly defined purpose for public participation, well defined processes for involving the public, a commitment to engage members of the public because they have a right to be involved, the necessity of going beyond minimum outreach requirements to achieve meaningful dialogue, and other factors. Though each paper offered varied techniques for achieving meaningful public participation, they collectively provide significant insight into ways in which to ensure public engagement in projects that potentially involve health, safety, the environment, energy, or quality of life.

Additionally, these papers were based on a variety of research techniques including scoping workshops, literature reviews, targeted research, questionnaires to solicit information, input by qualified experts, and a critical review of the recommendations, guidelines, and tools arising from both research and experience. The recommendations, guidelines, and tools may be useful to NRC as it considers ways to enhance public meetings.

The organizational models of public engagement provided a number of recurring themes and trends, as well as some unique approaches. A thoughtful commitment to public engagement is the most compelling theme across these highlighted organizations. A significant number of the organizations developed a handbook or plan (public involvement handbook, community involvement handbook, community relations plan) to guide and inform the public engagement process. Though the techniques varied, nearly all highlighted organizations offered members of the public multiple opportunities to be involved throughout the course of the respective projects. Most of the agencies provided the opportunity for public comment on draft plans, often both oral and written. Additionally, several organizations committed to responding to public comments.

To ensure continuous communication with the public, these organizations collectively employed a range of community involvement activities and outreach tools such as advisory groups, multi-stakeholder forums, fact sheets, workshops, newsletters, websites, social media such as Twitter, blogs, and Facebook, training courses, and others. Some used speakers' bureaus, citizen boards, focus groups, and grants for technical advisors and/or training to reach the public and get feedback. In other cases, agencies arranged for community visits, poster sessions, and targeted media, as well as toll-free information hotlines. One agency translated key information into languages used in the surrounding community while another used "Google Translator" to reach ethnic minorities. In a unique approach, one agency set up areas for viewing a construction project so that the public could easily see what was planned, be engaged in selecting the contractor, and take part in a "name that bridge" contest. The private sector models include a trade organization that utilizes a member certification program that evaluates the effectiveness of public outreach for member organizations as well as a very large family-owned business that engages the public through a comprehensive voluntary outreach program.

Viewed collectively, the 13 organizations reviewed offer a "generalized" model of successful public engagement. The model includes:

- A strong commitment to public engagement/public involvement that goes beyond merely informing the public;
- Identification and analysis of the many and varied stakeholders that may be impacted by the project;
- An established process or processes for public engagement/public involvement that is developed collaboratively and widely distributed among all stakeholders;
- Employment of a wide range of outreach tools and public involvement activities;
- Opportunities for the public to provide direct input;
- A process or method to demonstrate to the public how their input is considered and/or influences decision making;
- Transparent communication about decisions; and
- A values-based commitment to learn and adapt.

The anecdote section, which includes excerpts of published papers, speeches, and expert interviews, collectively reinforces the value of effective public engagement by stressing the importance of:

- recognizing the many and varied stakeholder groups that may be involved;
- accurately identifying and managing issues;
- understanding the need to adapt outreach strategies to the situation;
- thinking about public engagement/public involvement as opportunities for meaningful dialogue and not necessarily a pathway to agreement;
- clearly defining processes up front that explain how the organization and the public will work together;
- going beyond minimum requirements and communicating often and consistently in good times and bad;
- allowing public input to shape the project professionally as well as influence those involved personally;
- committing to using a range of outreach tools and techniques; and
- demonstrating a values-based commitment to engagement.

A recurring theme from the referenced experts is that true public involvement is having an open process where all views are exchanged and considered. Expectations should be realistic and that even after the best public engagement efforts not everyone will be satisfied with the outcome. Public involvement doesn't necessarily mean unanimous agreement but it does offer the possibility for public involvement to change the direction of a plan. On the side of science, true public involvement should result in evolving attitudes and opinions among scientists based on deeper understanding of the publics' preferences and values.

The research papers, organizational models, and anecdotes stress the importance of meaningful engagement; illustrate the wide variety of public engagement methods and techniques employed across the country; and emphasize the persistent challenges to attaining effective public engagement. Against this background, recommendations are presented for appropriate training for NRC officials to enhance public engagement in NRC activities. The training is intended to better prepare staff to perform public meeting functions including making presentations, answering questions, appropriately responding to difficult questions in a highly emotional environment, engaging in one-on-one or small group discussion, being interviewed by a member of the media, or facilitating a discussion.

Section 1 - Introduction

Chairman Macfarlane's memorandum, subject: Enhancing NRC Public Meetings, dated March 5, 2014, tasked NRC staff to provide assistance for enhancing public meetings by focusing on three targeted areas for improvement: Meeting Documentation, Facilitation, and Training. This memorandum addresses the training component of the Chairman's tasking. Specific to training, the Chairman asked for "staff analysis of successful models of public engagement and your recommendations for strengthening effective meetings, including course offerings that support the best practices for staff assessment, development, and presentations."

1.1 Purpose

This memorandum addresses both successful models of public engagement and training considerations for NRC staff that may contribute to enhancing public engagement and improved public meetings. A secondary purpose of the memorandum is to convey the variety in public engagement methods and techniques across the country, the consistent challenges to attaining effective public engagement, and the recurring themes among programs deemed to be effective.

1.2 Approach

The information provided in this memorandum is intended to stimulate interactive dialogue and staff engagement on potential ways NRC might enhance public meetings.

Successful models of public engagement are presented in three categories:

1. Public engagement models from published papers/research;
2. Organizational models of public engagement that reflect best practices; and
3. Anecdotes from published papers, speeches and interviews with accomplished experts in public engagement, involvement, and communication (note, the interviews were conducted specifically for this project).

Training considerations are addressed in three categories:

1. Competencies and skills of effective communicators/presenters;
2. Assessment tools to assist NRC in selecting staff to engage the public and deliver presentations in an effective manner; and
3. Potential course offerings for NRC staff.

Making best use of the time allotted, the team of analysts relied upon individual experience with public engagement, internet searches, personal reference materials, personal networks of public engagement experts, and open-source reference material published by the selected organizations to compile the information in this memorandum.

As a special note to readers, the contractor team elected to use the terms: "public engagement," "public outreach," "public involvement," "public participation," and "public information" on a relatively interchangeable basis throughout the document. Though there are clear differences in the meaning of each term, organizations and practitioners use these terms in such a varied manner that it is virtually impossible to select one single term that fits all the parameters of this memorandum. Additionally, the lessons learned are applicable throughout the spectrum of public engagement.

Section 2 – Successful Models of Public Engagement

The models of public engagement were selected based on meeting one or more of the following criteria:

1. The analysts' collective experience working with the selected organizations on public engagement projects;
2. Published lessons learned, after action reports, case studies, and anecdotes;
3. Third-party analysis of organizational public engagement programs; and
4. Favorable feedback from the public.

2.1 Public Engagement Models from Published Papers / Research

The goal for this section is to provide information regarding public outreach that has a basis in science and research. There is a very large body of work regarding the effectiveness of public engagement efforts within the United States as well as the international community. The team performed a very high-level scan of the various papers, reports, and articles, and selected several that provide definitive analysis, guidance, and recommendations on effective public outreach.

The list of published papers includes the following.

- *Public Participation in Environmental Assessment and Decision Making* (National Research Council, National Academy of Sciences)
- *International Association for Public Participation (IAP2) Public Participation Spectrum*
- *Organization for Economic Cooperation and Development, Planning Guide*

2.1.1 National Academy of Sciences, National Research Council, Study of Public Participation in Environmental Assessment and Decision Making

Purpose:
The National Research Council, the principal operating agency of the National Academy of Sciences, formed a panel on Public Participation in Environmental Assessment and Decision Making, to study whether, and under what conditions, public participation achieves desired outcomes.

Summary of the publication:
Sponsored by the U.S. Forest Service, the U.S. Food and Drug Administration, U.S. Department of Energy, and the U.S. Environmental Protection Agency, the panel held

three scoping workshops, conducted critical literature reviews, commissioned several research papers, and invited experts to review the draft final report. Among the workshop participants, document reviewers, and the panel itself, the entire project involved a who's who of researchers and practitioners in the field of public participation, particularly from – but not limited to – the environmental arena.

Published in 2008, the National Research Council study assessed the merits and failings of public participation, acknowledging that participatory processes have sometimes made matters worse, but also identifying practices that can simultaneously promote decisions of quality (inclusive of stakeholders, options, and methods), legitimacy (viewed by interested parties as fair), and capacity (demonstrating an improvement in the ability of participants to engage). The study concluded that "Although there are no simple 'best practices' that provide universal guidance in designing participation, there are principles and 'best processes' that can enhance the effectiveness of participation." The best tools or techniques are those that are adapted to the specific situation.

Key Points/Items of Interest:
The following recommendations from the report may be particularly relevant to NRC:

Recommendation: When government agencies engage in public participation, they should do so with:
1) Clarity of purpose;
2) A commitment to use the process to inform their actions;
3) Adequate funding and staff;
4) Appropriate timing in relation to decisions;
5) A focus on implementation; and
6) A commitment to self-assessment and learning from experience.

Recommendation: Agencies undertaking a public participation process should consider the purposes of the process and design it to address the challenges that arise from particular contexts. Process design should be guided by four principles:
1) Inclusiveness of participation;
2) Collaborative problem formulation and process design;
3) Transparency of the process; and
4) Good-faith communication.

Recommendation: Environmental assessments and decisions with substantial scientific content should be supported with collaborative, broadly based, integrated, and iterative analytic-deliberative processes, such as those described in *Understanding Risk* and subsequent National Research Council reports. In designing such processes, the responsible agencies can benefit from following five key principles for effectively melding scientific analysis and public participation:
1) Ensure transparency of decision-relevant information and analysis;
2) Pay explicit attention to both facts and values;
3) Promote explicitness about assumptions and uncertainties;
4) Include independent review of official analysis and/or engaging in a process of collaborative inquiry with interested and affected parties; and

5) Allow for iteration to reconsider past conclusions on the basis of new information.

Recommendation: Public participation practitioners, working with the responsible agency and the participants, should adopt a best-process regime consisting of four elements:
1) Diagnosis of the context to highlight key issues;
2) Collaborative choice of techniques to meet difficulties arising from the context;
3) Monitoring of the process to see how well it is working, and to create accountability: and
4) Iteration, including changes in tools and techniques as needed to overcome difficulties.

The National Research Council report stresses the importance of tailoring public participation to suit the situation. For example, extensive public engagement is needed if broad policy directions are being set with trade-offs among public values. If the policy issues are narrower and affect only a defined group, less inclusivity may be appropriate. For example, the process used to set an agenda for issues for planning does not need to be more comprehensive than one seeking a policy consensus or trade-offs among complex values.

References and Related Links:
Public Participation in Environmental Assessment and Decision Making, Thomas Dietz and Paul Stern, Editors, National Academy of Science, National Research Council, 2008. http://www.nap.edu/catalog.php?record_id=12434

2.1.2 International Association of Public Participation (IAP2), Public Participation Spectrum

Mission, Purpose, or Goal:
The International Association of Public Participation (IAP2) is a professional association for practitioners and researchers in the area of public participation.

Description:
IAP2 developed guidelines and tools for practitioners and researchers in the area of public participation. This effort not only provided goals for communicating with the public but also a chart describing a spectrum of approaches designed to target increasing levels of public engagement. In addition, IAP2 suggested that the following core values should be applied to the practice of public participation:

1) The belief that those who are affected by a decision have a right to be involved in the decision-making process;
2) The promise that the public's contribution will influence the decision;
3) Promotion of sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers;
4) Seeking out and facilitating the involvement of those potentially affected by or interested in a decision;
5) Input from participants in designing how they participate;

6) Providing participants with the information needed to participate meaningfully; and
7) Communications to participants about how their input affected the decision.

Key Points/Items of Interest Regarding IAP2 Outreach:
IAP2 developed a copyrighted spectrum that indicates the types of tools that could be employed across the range of potential public participation goals. IAP2 includes instruction about the spectrum in its courses. A variety of organizations and jurisdictions have adopted it for educational and practical uses, including:

- The Department of Environment and Primary Industries in the state government of Victoria, Australia (http://www.dse.vic.gov.au/effective-engagement/developing-an-engagement-plan/a-model-for-engagement)
- National Coalition for the Dialogue & Deliberation (http://ncdd.org/)
- Pennsylvania State University, Department of Geography (https://www.e-education.psu.edu/geog469/node/266)
- Scottish Government (http://www.scotland.gov.uk/Publications/2006/10/13092848/23)

The IAP2 spectrum, reproduced below, is a succinct description of public participation goals ranging from informing to empowering the public and suggesting appropriate communication strategies for each of these goals.

IAP2 PUBLIC PARTICIPATION SPECTRUM

INCREASING LEVEL OF PUBLIC IMPACT

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
Public Participation Goal:	**Public Participation Goal:**	**Public Participation Goal:**	**Public Participation Goal:**	**Public Participation Goal:**
To provide the public with balanced and objective information to assist them in understanding the problems, alternatives and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision, including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Promise to the Public:	**Promise to the Public:**	**Promise to the Public:**	**Promise to the Public:**	**Promise to the Public:**
We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
Example Tools:	**Example Tools:**	**Example Tools:**	**Example Tools:**	**Example Tools:**
• fact sheets • web sites • open houses.	• public comment • focus groups • surveys • public meetings.	• workshops • deliberate polling.	• citizen advisory committees • consensus-building • participatory decision-making.	• citizen juries • ballots • delegated decisions.

References and Related Links:
www.iap2.org

2.1.3 Organization for Economic Cooperation and Development (OECD), Planning Guide for Public Engagement and Outreach in Nanotechnology

Mission, Purpose, or Goal:
Recognizing that nanotechnology is an emerging field that must engage the public for acceptance of this technology in new product, the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of 30 member countries, established a working party on Nanotechnology to study public engagement and create guidelines for improving public outreach. OECD recognized that nanotechnology presents significant concerns to both policy makers and the public about health, safety, the environment and even ethics.

Description:
The OECD working party conducted a series of public meetings, nationally administered questionnaires, and analyses which led to the identification of eight key points to assist those who plan communication and outreach activities in nanotechnology or other fields which, by virtue of their newness and perceived risk require thoughtful planning for effective outreach. The *Planning Guide for Public Engagement and Outreach in Nanotechnology* not only presents the planning guide, but also the methodology by which it was developed, a critical review of the eight points, and case studies with feedback from countries that have used the Guide.

Key Points/Items of Interest:
1. Rationale for a strategic outreach plan for nanotechnology includes raising public awareness, providing information about both policy and research findings to the public, gathering input, exchanging information and even attracting people into science.
2. The public engagement process should be deliberative, inclusive, substantive, and consequential, moving toward real dialogue with deliberate public engagement.
3. The guide for policy makers provides eight points for action in planning engagement:
    a. Identify the context;
    b. Be clear about the objective;
    c. Identify the participants;
    d. Plan the process;
    e. Select the activity;
    f. Identify the organizers;
    g. Know the goals/success; and
    h. Learn and adapt.
4. A rich set of tables using these eight points is presented to guide those preparing for a public engagement process. Each table provides a variety of thoughtful, clarifying questions intended to elicit information about the eight points. These thought-provoking tables could be readily adapted for NRC use.
5. Key features of successful public engagement include the use of scientifically correct information, balancing positive and negative information, making the information both relevant and understandable to the audience, establishing trust and interacting honestly, and listening to the audience by asking for their feedback.
6. The OECD report also provides a questionnaire for soliciting public engagement which could be adapted for use by NRC. The questionnaire is divided into sections on communication and public engagement in the area of nanotechnology.

References and Key Links:
"Planning Guide for Public Engagement and Outreach in Nanotechnology", OECD, 2012. See http://www.oecd.org/sti/biotech/49961768.pdf

2.1.4 Recurring Themes/Trends

The three published papers provide clear direction regarding how organizations (including government agencies) may approach public participation including:

- a clearly defined purpose
- well defined processes; and
- a commitment to engage members of the public because they have a right to be involved.

Though each paper offered varied techniques, they provide significant insight into ways in which to scope a public engagement project, particularly a large one with many different stakeholders. Two of the papers emphasize the importance of seeking out and facilitating involvement of those potentially affected by tailoring the participation to suit the situation based on public input. All three papers proposed guidelines and tools based on a set of core values arising from both research and experience. It is also important to note that these papers were all derived from rigorous efforts to define the array of issues facing the agency or agencies with responsibility for addressing a particular problem. To that end, the various efforts involved literature reviews, targeted research, questionnaires, expert input, critical analysis, and peer review of the respective proposals to address public participation/public engagement.

2.2 Organizational Models Reflecting Best Practices

The team analyzed several organizational programs for public engagement and outreach. The review included Federal, State, and Local Government agencies, a private sector trade association, and a private sector company. The goal for this section is to provide a cross section of outreach programs that reflect effective public engagement and outreach and a collective variety of public outreach methodologies. The list, by no means exhaustive, includes the following:

- Environmental Protection Agency Superfund Cleanup Program;
- Department of Energy, Waste Isolation Pilot Plant Hazardous Waste Facility Permit Community Relations Plan; Hanford Site Public Involvement Plan; and Oak Ridge Clean-up Plan;
- U.S. Army Chemical Materials Agency Public Outreach and Information;
- Department of Homeland Security National Bio and Agro-Defense Facility Environmental Impact Statement;
- Centers for Disease Control and Prevention Crisis and Emergency Risk Communication Program;
- Defense Environmental Restoration Program Community Relations/Community Involvement;
- Tri-County Regional Planning Commission (Michigan) Public Involvement Program;
- San Francisco Bay Area Rapid Transit District Outreach;
- Maine Department of Transportation, Public Involvement and the Sagadahoc Bridge;
- Rumpke Consolidated Companies Community Outreach; and
- American Chemistry Council Responsible Care Program.

2.2.1 U.S. EPA, Superfund Community Involvement Program

Mission, Purpose, or Goal: The mission of the Superfund Community Involvement Program is to advocate and strengthen early and meaningful community participation during Superfund cleanups.

Description:
"The U. S. Environmental Protection Agency (EPA) applies the term community involvement to its commitment to early and meaningful community participation during Superfund cleanup. The foundation of Superfund's community involvement program is the belief that members of the public affected by a Superfund site have a right to know what the Agency is doing in their community and to have a say in the decision-making process." (*Superfund Community Involvement Handbook*).

A key feature of EPA's community involvement program is the use of dedicated Community Involvement Coordinators who have the responsibility for working with stakeholders to enhance collaborative decision making and ensure compliance with public involvement mandates.

The Superfund Cleanup program is regulated by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). CERCLA is generally conducted in the phases listed below.

- Site Discovery
- Preliminary Assessment
- Site Inspection
- Remedial Investigation (including Risk Assessment)
- Feasibility Study
- Proposed Plan
- Public Comment
- Record of Decision (ROD)
- Remedial Design
- Remedial Action
- ROD Review
- Cleanup action or monitoring action as identified in the ROD

During the Propose Plan (PP) phase, CERCLA, Section 9617, Public Participation requires the agency responsible for the PP to take the following actions:
1. Publish a notice and brief analysis of the proposed plan and make it available to the public.
2. Provide a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting at or near the facility at issue regarding the proposed plan and regarding any proposed findings under section 9621(d)(4) of this title (relating to cleanup standards).
3. Produce a transcript of the meeting and make it available to the public.

Key Points /Items of Interest:

1. EPA typically assigns a Remedial Project Manager (RPM) to each Superfund site, and routinely provides the RPM's contact information to the public.
2. EPA sponsors and encourages Local Government Advisory Committees (LGAC) to provide advice and recommendations that assist the EPA in developing a stronger partnership with local governments through building State and local capacity to deliver environmental services and programs.
3. EPA developed the *Superfund Community Involvement Handbook* to enhance public outreach.
4. EPA partners with other agencies and principally responsible parties to develop a technical Project Delivery Team to address technical issues during cleanup operations.
5. When working with other Federal Agencies, EPA often works through a Federal Facilities Agreement to guide and coordinate the remediation process.
6. According to the Superfund Community Involvement Handbook, Chapter 5, *Implementing Community Involvement in Remedial Actions*, Section 5, *RI/FS Begins – Recommended Outreach during RI/FS* community involvement activities that have proven useful during this phase include:
   - Community Visioning;
   - Fact Sheets;
   - Focus Groups;
   - Informal Activities such as community visits;
   - On-Site Activities, such as site tours;
   - Presentations to local officials, civic groups, and school groups;
   - Public Availabilities/Poster Sessions;
   - Site-updates;
   - Telephone hotlines; and
   - Workshops.

References and Related Links:

- *U.S. Code Title 42*, Chapter 103, CERCLA, Subchapter I--Hazardous Substances Releases, Liability, Compensation; (Section 9617 – Public Participation), as Amended by SARA, www.gpoaccess.gov
- *EPA Superfund Community Involvement Handbook*

2.2.2 U.S. Department of Energy

2.2.2.1 U.S. Department of Energy, Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit Community Relations Plan

Mission, Purpose, or Goal:
The WIPP plan states that: "The purpose of the WIPP Hazardous Waste Facility Permit Community Relations Plan (the Plan) is to provide Permit-related information to communities and interested members of the public and to alert the public to opportunities for participation in the permit process. Permit-related activities include

waste disposal operations, facility closure, post-closure and Permit-driven corrective actions. The U.S. Department of Energy (DOE) operates the WIPP facility in a transparent manner. The DOE has conducted WIPP Project outreach programs in New Mexico for more than two decades to establish open working relationships with communities, tribal governments and residents statewide. The Permittees view this Plan as an opportunity to expand public participation and dialogue in the WIPP facility Permit process."

Description:
WIPP has been viewed as a model public involvement program. WIPP benefited from many lessons learned from the high level waste repository process. Relevant to public involvement, WIPP also benefited from a relatively willing host community and partnering western states eager to have their defense waste stored elsewhere. These factors created a more favorable situation than Yucca Mountain enjoyed. It remains to be seen to what extent the February 2014 underground fire at WIPP will affect a generally positive community relationship.

Key Points /Items of Interest:
1. Regulatory Authority, Oversight, and State/Local Control – Because of Congressional actions and subsequent negotiated agreements, EPA was designated as the regulatory authority to certify that WIPP met disposal standards and that under RCRA for mixed waste, the state would regulate waste and manage operating permits. This ultimately meant that facility operations oversight was in the hands of the state, with the site management responsibility moved from Albuquerque to the local Carlsbad Office. These actions all contributed to a better sense that local interests were protected.
2. Documented, Institutionalized, and Communicated Community Relations Plan – WIPP has a community relations plan that commits to transparent communications, identifies community relations objectives, communication and involvement processes, and approaches for resolving differences.
3. Site Familiarity/Local Support – In addition to the economic benefits to the local area, WIPP has an established site tour program and extensive public information and outreach activities for educators and the public across the state. This approach is often used by government and industry to increase local knowledge about site operations and decrease misperceptions.
4. Independent Technical Oversight. Initially, DOE funded an independent technical review group managed by the state to oversee facility design. That group was disbanded after WIPP received state permits and EPA certification. The Carlsbad Environmental Monitoring and Research Center (CEMRC), a division of the College of Engineering at New Mexico State University, now provides independent, technical oversight. Funded by DOE the CEMRC independently performs a wide range of environmental radiochemistry work. Two CEMRC programs support public involvement:
   a) A website that communicates collected data. There is no known collaboration with DOE prior to posting information on this site.
   b) A long-term research program entitled "Lie Down and be Counted," that involves citizen research volunteers from southeastern New Mexico and supports

education for the public about naturally occurring radioactivity and CEMRC 's environmental studies. The objective of the research is to characterize and monitor for internally deposited radionuclides in the general population living around WIPP.

5. Interest Group Engagement – In addition to general public outreach, New Mexico environmental interest groups actively provided permitting comments while recertification for the RCRA permit involves interest group/NGOs.

References/Related Links:
Innovative Stakeholder Involvement Processes in Department of Energy Programs A Selective Accounting, Judith Holm, April 2011.
http://www.wipp.energy.gov/wippcommunityrelations/plan.html

2.2.2.2 U.S. Department of Energy, Hanford Site Public Involvement Plan

Mission, Purpose, or Goal:
The Hanford Public Involvement Plan describes public participation processes at Hanford. It identifies ways the public can participate in Hanford cleanup decision-making processes. It also fulfills applicable state and federal laws (National Contingency Plan, 300.430(c)) for development of a community relations plan. Cleanup management is conducted through a Tri-Party Agreement (TPA) that involves DOE, the Washington State Department of Ecology, and EPA. The TPA agencies work together to make decisions about cleanup at the Hanford Site. In many cases, Hanford public involvement goes beyond what is required by law, because the TPA agencies encourage, and support public participation and believe it is essential to cleanup success. The TPA agencies understand that for decisions to have overall acceptance from stakeholders, other organizations and the public, it is important they be provided the opportunity to voice their values and concerns early in the process. Public involvement and information activities are conducted collaboratively and independently by the TPA agencies.

Description:
Located in eastern Washington State, Hanford is a 586 square mile site in Southeastern Washington originally created as part of the Manhattan Project. This defense mission continued throughout the Cold War. The weapons material production mission ended in the late 1980s, and Hanford's mission shifted from nuclear material production to environmental cleanup of the site. Hanford is now an extensive and complicated environmental cleanup site with hundreds of square miles of contaminated soil and groundwater, and millions of gallons of highly radioactive waste stored in underground tanks. The cleanup effort will take many years to complete.

Since the early 1990s, DOE has engaged EPA, the state, and the local community both in the planning and execution of the cleanup. In addition, Hanford and the other major production sites, such as Savannah River and Oak Ridge, have been part of a larger dialogue with the full range of state and tribal governments and national NGOs and interest groups. The storage tanks containing highly radioactive waste and their integrity to keep contaminants out of the Columbia River continue to receive negative attention nationally, regionally, and locally. DOE is the Federal Agency responsible for cleaning up the site while EPA and Ecology provide regulatory oversight for Hanford Site cleanup. The public also plays a vital role in Hanford cleanup decision making.

Key Points /Items of Interest:
1. Public Involvement in Significant Changes to the TPA – A significant TPA change requires a 45-day public comment period. Before approving the change, the TPA agencies summarize, consider and respond to all public comments.
2. Budget Meeting – At a minimum, one public meeting a year is dedicated to involve the public and stakeholders in budget formulation. Budget impacts on cleanup plans can be significant and can change schedules.
3. Speakers Bureau Programs – Offer organizations and schools an opportunity to learn about Hanford's history, cleanup progress and challenges. Speakers are from DOE, EPA, Ecology, and/or the contractors are available to speak to an organization.
4. Hanford Site Public Tours – DOE operates a public tours program with an overview from the plutonium-production era continuing through today's cleanup efforts.
5. Public Involvement Evaluation Process – Provides for public input on improving the process of public involvement activities and events.
6. Public Participation Grants – EPA and the state of Washington offer funding to citizen groups to hire technical advisors and/or support involvement and education that promotes better involvement.

References/Related Links:
Innovative Stakeholder Involvement Processes in Department of Energy Programs A Selective Accounting, Judith Holm, April 2011.
http://www.hanford.gov/files.cfm/FacAgreementand-Consent-Order_FINAL.pdf

2.2.2.3 U.S. Department of Energy, Oak Ridge Site

Mission, Purpose or Goal:
Located near Knoxville, Tennessee, the Oak Ridge complex of facilities is another of the large DOE sites originally created as part of the Manhattan Project and the defense mission has continued. The activities included in this analysis are related specifically to environmental cleanup at active and closed facilities as mandated by CERCLA.

Description:
Oak Ridge has a continuing defense mission as part of the nuclear weapons program. Additionally, Oak Ridge National Laboratory has an extensive and diverse research mission. Oak Ridge has some very technically challenging clean up issues and like other large sites, cleanup activities are conducted in cooperation by DOE, EPA, and the Tennessee Department of Environment and Conservation. There are no known recent issues with stakeholders or concerns beyond ongoing topics of interest in a long cleanup process. More recently there have been concerns from peace activists about the continuing defense nuclear weapons contributions at Oak Ridge.

Key Points/Items of Interest:
Similar to other large sites with extensive public involvement and communications programs, the Oak Ridge site employs a multi-layered and overlapping set of strategies to engage stakeholders and inform them of activities including informal conversations, electronic communication, scheduled meetings and workshops, legally required hearings, and stakeholder advisory groups. Noteworthy public involvement practices include the following:

1. A documented and publically available public involvement plan that is updated every three years.
2. Understanding the disadvantages of the traditional options of public meetings and directly mailings, Oak Ridge has supplemented them with more interactive approaches such as an independent citizens board, the Oak Ridge Site Specific Advisory Board, that provides advice and recommendations; workshops centered on projects as a forum for the open exchange of information and ideas; and citizen working groups for providing focused input for specific projects and issues.
3. Oak Ridge uses an array of methods to communicate —newsletters (including *Cleanup Progress* and *Public Involvement News* that specifically targets stakeholders with expressed interests in environmental issues), annual reports, fact sheets, newspaper notices, and tapes and transcripts of public meetings. In addition, the quarterly *Advocate* informs stakeholders about Oak Ridge Site Specific Advisory Board activities. Special reports document when specific projects and meetings.
4. Oak Ridge advertises a 1-800 telephone number to provide more information about public meetings and other public involvement activities.

References/Related Links:
http://energy.gov/sites/prod/files/2013/12/f5/Public%20Involvement%20Plan.pdf
http://www.orau.gov/ddsc/projects/DOE/oro-public-involvement-news-1113.pdf
http://www.ucor.com/_docs/CleanProg2012.pdf

2.2.3 U.S. Army Chemical Materials Agency (CMA), Public Outreach and Information

Mission, Purpose, or Goal:
CMA is the world leader in programs to store, treat, and dispose of chemical weapons safely and effectively.

Description:
The U.S. chemical weapons stockpile was declassified in 1985. After declassification, the Army worked with regulatory agencies following the National Environmental Policy Act (NEPA) process to determine that it would destroy the stockpile via on-site incineration. Later, process improvements and oversight decisions resulted in two sites implementing a new destruction technique known as neutralization. CMA, which began operations in 1989, was assigned the mission to manage the safe treatment and disposal of chemical agents and weapons at seven stockpile sites using these incineration and neutralization technologies. Because the sites were located in several states, the Army negotiated hazardous waste permits for each state under the Resource Conservation and Recovery Act (RCRA) process.

Over the life of operations, CMA destroyed more than 2.5 million chemical munitions and bulk containers at seven sites throughout the United States. Throughout the chemical weapons elimination process, the CMA Office of Public Affairs operated a creative, highly productive, multi-stakeholder outreach program to openly share information about the program to eliminate chemical weapons from the United States. In 2003 and 2004, CMA's Public Affairs program and selected CMA organizational outreach offices throughout the country were recognized as outstanding with the Army Community Relations Award; LACP Spotlight Awards; PRSA Best in Maryland Award; the Communicator Award of Excellence and Award of Distinction; and Graphic Design USA Magazine Design Award.

Key Points /Items of Interest:
At its high point of operations, the CMA risk communication and public outreach program included the following:

1. Centralized public outreach office at CMA headquarters and decentralized (local) community outreach offices at each of the CMA weapons storage and disposal sites;
2. An information-rich public Web site to enhance information sharing with all stakeholders;
3. Partnerships with EPA and Department of Health and Human Services;
4. A multifaceted risk communication program that incorporates messages and products for international, national, state, and local stakeholders;
5. A multi-stakeholder forum to provide input on how weapons located outside of the chemical weapons stockpile may be safely eliminated (Non-Stockpile Core Group); and
6. Numerous interactive forums on public outreach, information sharing, and lessons learned.

References/Related Links:
http://www.cma.army.mil/home.aspx
http://www.cma.army.mil/aboutcma.aspx

2.2.4 U.S. Department of Homeland Security, the National Bio- and Agro-Defense Facility Environmental Impact Statement

Mission, Purpose, or Goal:
To safeguard against the potential of a terrorist attack using biological pathogens to contaminate agricultural and food infrastructure in the United States, DHS decided to construct the National Bio- and Agro-Defense Facility (NBAF).

Description:
DHS selected a site in Manhattan, Kansas on the campus of Kansas State University after a three year process that included a risk assessment, environmental impact assessment, and security assessment. Public involvement was organized through the National Environmental Policy Act (NEPA) process – a scoping process, followed by a Draft Environmental Impact Statement (EIS), and then an NBAF Final EIS. A Record of

Decision (ROD) was issued and the NBAF is currently under construction. Generally DHS followed the standard formula for public involvement in selecting the site location. Although there was a vocal minority opposition to the Kansas State location, this opposition did not prevent its selection.

Key Points/Items of Interest:
DHS used several different approaches in engaging the community in site selection.

These included:
1. Town Hall Meetings at three locations prior to the public meetings. These presentations focused broadly on why the facility was needed, assurance to the community on what would <u>not</u> be done there, and reassurance that adequate protection and emergency procedures would be employed.
2. DHS held public meetings on the draft EIS to present the impact analyses of siting, constructing, and operating the proposed facility for the eight potential sites under consideration. The public was invited to attend the meetings and provide comments. These meetings included afternoon and evening sessions consisting of: a one-hour open house to view material, register to present oral comments, and speak informally with subject matter experts; formal one-hour presentations; and a formal two-hour comment period.
3. Formal, written comments from both national and local interest groups and comments from the public were invited and analyzed for consideration.

References/Related Links:
https://www.dhs.gov/environmental-impact-statement-process-nbaf
http://www.the-scientist.com/?articles.view/articleNo/31959/title/Opinion--Misguided-Science-Policy

2.2.5 Centers for Disease Control and Prevention, Crisis and Emergency Risk Communication Program

Mission, Purpose, or Goal: The Crisis and Emergency Risk Communication (CERC) program educates and trains public information officers, public health responders, leaders, and others about the principles and application of crisis and emergency risk communication when responding to a public health emergency.

Description: The Centers for Disease Control and Prevention (CDC) created a comprehensive program for planning and conducting crisis and emergency risk communication to assist communicators to provide information that allows an individual, stakeholders or an entire community to make the best possible decisions about their well-being, under nearly impossible time constraints, while accepting the imperfect nature of their choices. The CERC program draws from lessons learned during public health emergencies and research in the fields of health and emergency risk communication. It incorporates best practices from the fields of risk and crisis communication to meet the needs of partners and stakeholders in preparing for, responding to and recovering from the threat of bioterrorism, emergent diseases, and other hazards.

Key Points/Items of Interest for CDC CERC:
CDC provides the following communication strategies and tools.

1. Disseminate training curricula and tools to help public health communication professionals effectively prepare for and respond to public health emergencies. These include the Crisis and Emergency Risk Courses Manual, a downloadable training program which is supplemented by a curriculum of individual training courses, including Working with the Media.
2. Introduce crisis and emergency risk training curricula and tools developed by CDC's Emergency Risk Communication Branch for public health officials. Additional tools include CDC RiskSmart™ which is a questionnaire-based system to detect, assess and help an organization respond to opportunities and threats.
3. Train communicators to subsequently train public health professionals to systematically plan, develop, implement, and evaluate crisis and emergency risk communication activities. CDC provides information for citizens and resources and toolkits for professionals for a variety of emergency preparedness situations ranging from bioterrorism to chemical spills, as well as cases studies and webinars from those who used the CERC approach during an actual public health emergency.
4. Provide Health Communication and Social Marketing tools including comprehensive webpages, Primers on Health Risk Communication, Risk Communicator newsletters/resources aimed at emergency risk communicators, CDCynergy Emergency Risk Edition, and a blog - http://blogs.cdc.gov/publichealthmatters/
5. Provide a summary of scientific literature in health communication and marketing. The *Health Communication Science Digest* (HCSD) series is designed to enhance awareness of emerging health communication and marketing scientific knowledge by providing easy access to recently published articles and reports with particular relevance for the public health communication community.
6. Use other communication tools. CDC created a set of Gateway Buttons which share health messages and information about campaigns and causes online. Buttons are graphic elements that usually include an image, a short message, and a link for more information.

References and Related Links:

- http://www.bt.cdc.gov/cerc/
- http://www.bt.cdc.gov/hazards-specific.asp
- http://www.cdc.gov/healthcommunication/Risks/index.html

2.2.6 Defense Environmental Restoration Program (DERP), Community Involvement for Formerly Used Defense Sites (FUDS)

Mission, Purpose, or Goal:
“The Department of Defense shall involve the local community in the environmental restoration process as early as possible and shall seek continued community involvement throughout.”

Description:
Through the Defense Environmental Restoration Program (DERP), DoD cleans up the environment on active installations, installations subject to Base Realignment and Closure (BRAC), and formerly used defense sites (FUDS). The Army, Navy, Air Force, and Defense Logistics Agency (DLA) manage their own cleanup programs.

DoD began environmental restoration activities in 1975 under the Installation Restoration Program. The 1986 Superfund Amendments and Reauthorization Act (SARA) refined and expanded CERCLA, and formally established DERP and funding for the program through the Defense Environmental Restoration Account. Also during the 1980s, Congress recognized that DoD no longer needed some of its installations and subsequently authorized five rounds of base realignment and closure (BRAC) in 1988, 1991, 1993, 1995, and 2005. Environmental restoration at closing and realigning installations is funded.

The Department has made significant progress towards reducing potential risks to human health and the environment through DERP. By the end of Fiscal Year 2009, the Department had completed cleanup at:

- 78 percent hazardous waste sites and 43 percent military munitions response sites on Active Installations
- 79 percent hazardous waste sites and 62 percent military munitions response sites on BRAC installations
- 70 percent hazardous waste sites and 35 percent military munitions response sites on FUDS Properties

Key Points /Items of Interest:
The following excerpts from the DERP and FUDS manuals illustrate the key points of the cleanup program.

1. "DERP, CERCLA, and the National Contingency Plan provide for formal consideration of diverse environmental factors and meaningful opportunities for public involvement on proposed response actions."
2. "Each installation, BRAC location, and Formerly Used Defense Site conducting environmental restoration in accordance with CERCLA shall develop a community relations plan (CRP)."
3. "The installation, BRAC location, and FUDS shall ensure the scope and level of detail contained in the CRP is commensurate with the extent and duration of the environmental restoration activities."
4. "Each installation, BRAC location, and FUDS shall designate a POC for environmental restoration activities. The POC shall be identified to the local community through appropriate means (e.g., a newspaper notice) and will serve as the entry point for community inquiries or comments. Installation, BRAC location, and FUDS shall also provide contact information for its public affairs office."
5. "Information on environmental restoration activities shall be made available to the public in a timely manner, using appropriate mechanisms for disseminating information to the public as outlined in the CRP (e.g., local media, public meetings, and websites). However, where litigation exists involving environmental restoration

activities, the DoD Component legal staff shall be consulted on the appropriate or required means for providing documents to the litigating party or the public."
6. "Stakeholders shall be given the opportunity to be involved in updating the MAP, except for updates to elements that include Government cost estimates for future procurement actions."

References and Related Links:
- *Defense Environmental Restoration Program Management*, DoD Manual Number: 4715.20, March 9, 2012

2.2.7 Tri-County Regional Planning Commission (Michigan), Public Involvement Program

Mission, purpose, or goal:
The Tri-County Regional Planning Commission is a voluntary organization that brings together local governments and agencies in the mid-Michigan tri-county area to address quality of life issues in the region, with a specific focus on transportation planning. In December 2013, the Commission adopted a public participation plan which directs it to follow a process that proactively involves the public through providing timely public notice, complete information, full public access to key decisions, and early and continuing public involvement in developing plans.

Description:
The Commission employs a variety of outreach techniques and strategies to involve citizens in planning for quality of life and transportation issues in the area. Specifically with regard to public participation in transportation issues, the commission complies with Federal regulations and requirements, including the following:
1. National Environmental Policy Act (NEPA) of 1969, which requires public input during the project development process;
2. American with Disabilities Act (ADA), which encourages the involvement of people with disabilities in the development of transportation plans and services;
3. Presidential Executive Order on Environmental Justice for minority and low income populations to avoid disproportionately high and adverse effects on human health and environment; and
4. Executive Order 13166 on Limited English Proficiency.

Key Points/Items of Interest:
Among the strategies used to communicate with the public are the following:
1. Ongoing work to identify "traditionally underserved" organizations and individuals;
2. Hard copy mailings and e-mail announcements;
3. Postings on community bulletin boards;
4. Legal and formal published notices;
5. Press releases and press briefings;
6. Presentations to community groups;
7. Workshops using polling software for real-time voting;
8. Website posting of agendas and minutes from commission meetings;

9. A portal with an idea-sharing page for users to pose topics and engage in discussions (the portal is accessible through Google Translate to engage those with limited ability to read and speak English);
10. Grants to facilitate involvement by marginalized or underserved populations; and
11. Public forums involving nominal group techniques.

References and Related Links:
http://www.tri-co.org/Commission/Public_Participation_Plan_12-17-13.pdf
http://www.tri-co.org/

2.2.8 San Francisco Bay Area Rapid Transit District (BART), Outreach

Mission, Purpose, or Goal:
Because the San Francisco Bay Area Rapid Transit District (BART) is not without controversy, BART developed a public participation plan to guide it in engaging diverse community members throughout its service area.

Description:
Between 2009 and 2013, BART experienced the shooting deaths of two civilians by BART police, as well as the deliberate turning off of the wireless signal for riders to limit communications among organizers of a protest linked to the 2009 shooting. During this period, BART created a continually evolving communications plan which emphasizes ensuring opportunities for public participation. These include gathering input from low income, minority, and Limited English Proficient (LEP) populations. The extensive public involvement process BART followed to develop its public participation plan is itself worth reviewing since it employed many of the suggestions included in the final plan. In addition, the plan is flexible allowing the option of modifications to reflect changes in demographics, transit services, and communication methods.

Key Points/Items of Interest:
The plan identified the following guiding principles for effective public participation:

- Flexible; Inclusive; Respectful; Tailored; Proactive and Timely Participation; Clear, Focused and Understandable; Trustworthy; Responsive; Transparent in Impact; and Authentic and Meaningful.

Because situations that call for public participation will vary (e.g., fare changes, service changes, or construction projects), the BART plan indicated several factors to consider when developing public participation strategies for a specific issue:

1. Determine the affected population and select methods that specifically involve these populations. Don't expect the target population to come to standard public meetings but offer walking tours of specific stations; a "roadshow" with representatives staffing tables at community events, malls, or supermarkets; comment cards at a kiosk; and provide refreshments.
2. Partner with community-based organizations (CBOs) that can identify the outreach methods and locations that will work best for their constituents.
3. Determine specific language services (languages, interpreters) that will be needed.

The plan includes an extensive "Menu of Public Participation Methods," from which to choose when planning to involve the public in a specific issue. These methods include different ways to inform the public, invite participation, and seek input such as:

1. Printed materials and information at BART stations;
2. Websites and other materials (in English and six other languages);
3. Social networking (Facebook and Twitter, webcast meetings, information videos;
4. Media targeted to different ethnic communities, as well as ensuring that BART representatives attend community meetings to provide updates;
5. Means for non-Board members to comment at Board meetings as well as visible and active involvement by BART Directors at all public meetings;
6. Focus groups and community meetings such as open houses, workshops, and large group discussions, scheduling them to accommodate community members; and
7. Special events, key person interviews, surveys, telephone information/comment lines and local advisory committees to ensure the greatest possible outreach and feedback.

Significantly, BART's plan states that "there is no 'golden rule' as far as the preferences of any given population are concerned, so circumstances influencing participants affected by a particular project … need to be considered." Once a communication strategy has been offered, BART can then monitor and track public participation, such as the number of participants at an event, survey response numbers, webpage downloads, and percent of participants that express satisfaction with the process or results. In addition, the plan indicates that community members expect that BART will share how it has taken public participation into account in its analyses.

References:
http://www.bart.gov/sites/default/files/docs/Revised_BART_PPP_Final_7-8-11.pdf
http://www.bart.gov/sites/default/files/docs/Appendix_M_PPP_Development_Summary_Report.pdf

2.2.9 Maine Department of Transportation, Public Involvement and the Sagadahoc Bridge

Mission, Purpose, or Goal:
The Maine Department of Transportation faced local community concerns about the aesthetics, design, maintenance and traffic potentially arising from a new bridge for U.S. Route 1 across the Kennebec River.

Description:
The Sagadahoc Bridge, completed in 2000, carries U.S. Route 1 across the Kennebec River between the Town of Woolwich and City of Bath in Sagadahoc County, Maine. The new bridge replaced a bridge opened in 1927. The new bridge, the first design-build project ever undertaken by the Maine Department of Transportation (MDOT) consists of traffic lanes, a breakdown/bicycle lane, and a barrier-protected sidewalk. The use of the design-build method presented challenges to MDOT and the local community because MDOT did not have a public involvement process for its first design-build

project. The community expressed concerns about aesthetics early in the process. MDOT created a new public involvement process to address community concerns.

Key Points/Items of Interest:
MDOT used several creative public involvement initiatives to work with the community.

1. The Bath Bridge Advisory Committee (BBAC) was formed before the design/build RFP was released to address local community concerns about potential visual and aesthetic impacts, maintenance and protection of traffic during construction and traffic circulation after completion. The BBAC influenced numerous elements of the bridge design.
2. The community was involved in selection of the design/build contractor. Proposals were evaluated by a scoring committee comprised of local residents, the BBAC, MDOT staff, a university professor, an environmental advocate and Federal Highway Administration division staff. A representative of Texas Department of Transportation was also involved in scoring proposals, as an outside opinion. The BBAC and local residents served specifically on sub-committees evaluating the proposals for their attention to community impacts and aesthetic issues. One resident stated that their participation in the evaluation led them to consider the new bridge to be "their" project.
3. Similar to other successful public engagements, a variety of outreach tools included direct-mail newsletters, a dedicated project website featuring construction updates, a toll-free information hotline, press releases, and cable television programs. Public outreach events to increase awareness and encourage participation included public forums, open houses and public tours of the project site. A project display was created for MDOT's annual legislators' open house. Banners, posters, a slide show and information packets highlighting the project, the design charette (see below) and BBAC meetings were developed. A particularly unique initiative of MDOT was the creation of an in-school program to educate area children on the history of the river crossing and the construction of the new bridge. MDOT produced a slide show with presentations given to all local schools by the project manager. Additionally, MDOT made presentations to more than 15 community-based civic and public organizations.
4. A design charette served as a forum for introducing the project to the community, exploring needs, and identifying design solutions. Following brainstorming by workshop participants about the design and aesthetics of the bridge, their ideas were collected, organized, and presented to the BBAC and MDOT for evaluation.
5. Naming the bridge was a joint effort by the town and city.
6. A professional public relations firm managed public communications and media relations services for the project.
7. Public involvement continued throughout the process of construction to keep the public informed. Construction activities received widespread media coverage and public interest during bridge construction.

References/Related Links:
http://planning.dot.gov/Documents/PublicInvolvement/sagadahoc.htm

2.2.10 Private Sector

2.2.10.1 Rumpke Consolidated Companies, Community Outreach

*Mission, Purpose, or Goal***:**
Rumpke's outreach mission is to protect, preserve and enhance the company's reputation among all key audiences using the most appropriate and effective communications strategies and tactics available.

Description:
Rumpke was founded by William F. Rumpke near Cincinnati, Ohio in 1932 and currently provides environmentally friendly waste disposal and recycling solutions in Ohio, Kentucky, Indiana, and West Virginia. One of the largest privately owned residential and commercial waste and recycling firms in the nation, Rumpke is Ohio's Recycling Leader, recycling more than 700 million pounds annually. This family-owned and operated company employs more than 2,600 people, 75 of whom are family members.

Rumpke's Founders built their business with the community in mind. Today, Rumpke continues the tradition of the Founders by keeping the community informed of changes that take place at Rumpke facilities located near the homes of customers. Rumpke's very active outreach program is focused on keeping the community informed about the business and its local facilities.

Key Points/Items of Interest:
In the area of outreach, Rumpke pledges that the business will use the following tools to keep the community informed of facility updates.

- Updates to the Rumpke website, www.rumpke.com.
- Cooperation with the media to encourage local reporters to cover changes at Rumpke facilities.
- Provide expert contacts to answer questions from the public.
- Provide presentation materials to any customer who missed a Rumpke-sponsored public meeting and requested a copy of the meeting materials.
- When necessary, Rumpke places public notice ads in local publications to announce meetings and other changes.
- Scheduled facility tours.
- Presentations to schools and various organizations regarding Rumpke landfills.
- If possible, Rumpke will participate in public beautification projects (near its facilities).
- Provide information about local Rumpke facilities when participating in local events.
- Invitation to the community to provide suggestions and feedback.

2.2.10.2 American Chemistry Council, Responsible Care Program

Mission, Purpose or Goal:
The American Chemistry Council (ACC) is a trade organization representing companies engaged in the business of chemistry. The ACC Responsible Care Program is intended to enable member companies to improve their environmental, health and safety performance and go beyond government regulation to continuous improvement.

Description:
The American Chemistry Council developed the Responsible Care Product Safety Code to drive continuous improvement in the safety of chemical products and to demonstrate this throughout the environmental, safety, health and security (EHS&S) management system. Participation in this program is required for member and partner companies – all of whom have CEO-level commitment to it. A central element of this program is performance monitoring and reporting of environmental, health, safety and security for individual companies, as well as the overall chemical industry. The ACC code requires that member companies publicly report metrics for environmental performance, energy (both emissions and efficiency), safety, and accountability. The latter includes metrics for community outreach and emergency response incidents. Some metrics are reported on a company basis, while others are aggregated for the entire industry – and these are all reported publicly to demonstrate the commitment of ACC members to continuous improvement in EHS&S performance.

Key Points/Items of Interest:
Participation in the Responsible Care Program benefits members in a number of ways. These include:

1. Continuous improvement in chemical product safety by extending good risk management practices to the life-cycle of a chemical product – from creation to transport to disposal;
2. Organizational efficiencies by using existing management systems with the Responsible Care certification process (which includes ISO 14000 as one process);
3. Improved community relations with outreach through the Responsible Care Community Advisory Panels to strengthen relationships with members, other business and communities;
4. The Department of Homeland Security has recognized the *Responsible Care Security Code*, developed as part of the Responsible Care program, as a Qualified Anti-Terrorism Technology. Member companies derive certain liability protections should a terrorist action happen at their facilities. Implementation of this *Code* may also result in reduced insurance premiums;
5. Mandatory practices required for certification to the Code for chemical manufacturers, related to product safety performance and communication as well as safe operations throughout the entire manufacturing process. In addition, the code promotes both energy efficiency in the design and development of products and the reuse and recycling of materials;
6. Work with customers to foster safe and secure use, transport and disposal of chemicals and provide easily accessed and used hazard and risk information.

7. Commitment to design and operate facilities in a safe, secure and environmentally sound manner;
8. Creation of a culture to continuously identify and manage process safety risks throughout all levels of an organization; and
9. Mandatory certification to the Responsible Care Management System process by an independent, accredited auditor, with more than 220 companies participating.

References/Related Links:
http://responsiblecare.americanchemistry.com/
http://www.americanchemistry.com/

2.2.11 Recurring Themes/Trends

The review of the organizations in Section 2.2 identified a number of recurring themes and trends, as well as some unique approaches. A thoughtful commitment to public engagement is the most compelling theme across these highlighted organizations. A significant number of the organizations developed a handbook or plan (public involvement handbook, community involvement handbook, community relations plan) to guide and inform the public engagement process. Though the techniques varied, nearly all highlighted organizations offered members of the public multiple opportunities to be involved throughout the course of the respective projects. Most of the agencies provided the opportunity for public comment, often both oral and written, on draft plans. Additionally, several organizations committed to responding to public comments. To ensure continuous communication with the public, these organizations collectively employed a range of community involvement activities and outreach tools such as advisory groups, multi-stakeholder forums, fact sheets, workshops, newsletters, websites, social media such as Twitter, blogs, and Facebook, training courses, and others.

Some organizations made every effort to schedule meetings at the convenience of the targeted public, even offering site tours, some day-care and/or refreshments. In some cases, feedback was obtained formally through questionnaires designed to detect and assess the importance of particular issues. In other cases, agencies arranged for community visits, poster sessions, and targeted media, as well as toll-free information hotlines. One agency translated key information into languages used in the surrounding community while another used "Google Translator" to reach ethnic minorities. One industry developed a certification program for its members to ensure that they complied with desired environmental, safety and health goals. Another agency set up areas for viewing a construction project so that the public could easily see what was planned, be engaged in selecting the contractor, and participating in a "name that bridge" contest. The review suggests the broad use of a variety of flexible communication tools adapted to the situation as needed.

Viewed collectively, the 11 organizations offer a generalized model of successful public engagement. The model includes:

- A strong commitment to public engagement/public involvement that goes beyond merely informing the public;
- Identification and analysis of the many and varied stakeholders that may be impacted by the project;
- An established process or processes for public engagement/public involvement that is developed collaboratively and widely distributed among all stakeholders;
- Employment of a wide range of outreach tools and public involvement activities;
- Opportunities for the public to provide direct input;
- A process or method to demonstrate to the public how their input is considered and/or influences decision making;
- Transparent communication about decisions; and
- A values-based commitment to learn and adapt.

2.3 Selected Public Engagement Anecdotes

In the context of this memorandum, public engagement anecdotes include

- Excerpts and summaries of interesting passages from published documents,
- Summaries of interviews with public involvement experts that were conducted in support of this project, and
- Excerpts of published speeches and/or papers of other public involvement experts.

2.3.1 Excerpts from Published Documents

2.3.1.1 The Public Outreach Program Management Plan, Comprehensive Everglades Restoration Plan (CERP).

The following excerpt from this plan provides excellent contrast and distinction between the terms "public information" and "public outreach:"

> "Public outreach, and its two primary component activities, information and involvement, were integral components of the [CERP] Restudy effort. Public outreach will remain a high priority activity throughout implementation of the CERP."

The paragraphs below are paraphrased summaries of information provided in the CERP.

<u>Public Information</u>
Public information is meant to raise the awareness of the public-at-large. The strategies and mechanisms for doing so generally involve mass communication tools such as newspapers and electronic media, including television, radio, and the Internet. Though agencies often refer to the public-at-large as the "general public," in reality, the "public" is far from homogenous. The general public is actually made up of a number of differing "publics."

The challenge that a broad outreach program must meet to be truly successful is recognizing the differences between these publics, and their level of knowledge, interests and preferred means of receiving information. Thus, public information strategies generally begin with identification of broad audience types and progress through recognition of smaller groups of more specialized interest. Next, appropriate messages and tools are developed for each. Public information products usually contain general descriptions about the project. They tend to present nontechnical, brief messages consisting of the project purpose, problems, opportunities, potential solutions and benefits. Project updates and notices of upcoming events are two typical messages carried in public information products.

Public, Stakeholder, and Agency Involvement

Outreach efforts must go far beyond simply informing the public and actually seek to engage or involve the interested public in the implementation processes. The typical process for engaging the public during the development and implementation of a plan is through public hearings, meetings or workshops. For these events, the mechanisms used for public notice are those that will be received by the widest audience. Generally, mass communication tools are used: newspapers, television, radio and the Internet. The [people responsible for this project] also typically send out written notices to its mailing list of interested individuals and groups including elected officials, community-based organizations, nonprofit organizations, business organizations, and others.

For example, the CERP effort showed that some members of the public have a far greater level of interest in the Everglades restoration than others. These are the members of the public who want to have an actual voice in the process. These individuals are often associated with "interest groups" such as community or civic associations. Others are associated with groups that have an even higher level of interest because they are more directly impacted by activities and policy decisions. These "stakeholder" groups include the sugar industry, water utilities, local governments, tribes, environmental organizations, recreational user groups and others. Numerous public agencies have been heavily involved in the Restudy and CERP, and are also very likely to want to participate in the implementation processes.

Much of the outreach work that is conducted for interest groups, stakeholders and other public entities revolves around issue identification and management. Issue identification and management is a proactive strategy in which organizations identify emerging issues and/or trends. It involves: 1) identifying issues, 2) analyzing those issues, 3) setting priorities, 4) selecting program strategy options, 5) implementing a program of action and communication, and 6) evaluating effectiveness. Issue management involves developing and establishing relationships with those affected by the CERP. On a narrower scale, this process can help identify issues of a very localized, but important, nature. On a broader scale, it helps identify potential economic, social and political issues that can affect the entire CERP or other program.

Reference: *Public Outreach Program Management Plan, Comprehensive Everglades Restoration Plan*

2.3.1.2 Brookings, Making Public Participation Legal

The following excerpts were taken from a Blog post by Sandy Heierbacker (October 25th, 2013)

"Most of the laws that govern public participation in the U.S. are over thirty years old. They do not match the expectations and capacities of citizens today, they pre-date the Internet, and they do not reflect the lessons learned in the last two decades about how citizens and governments can work together. Increasingly, public administrators and public engagement practitioners are hindered by the fact that it's unclear if many of the best practices in participation are even allowed by the law."

"Making Public Participation Legal, a new publication of the National Civic League (with support from the National Coalition for Dialogue & Deliberation), presents a valuable set of tools, including a model ordinance, set of policy options, and resource list, to help communities improve public participation."

"The tools and articles in *Making Public Participation Legal* were developed over the past year by the Working Group on Legal Frameworks for Public Participation — an impressive team convened and guided by Matt Leighninger of the Deliberative Democracy Consortium (DDC)."

"Wednesday's launch event was opened by Darrell West, Brookings' VP and director of Governance Studies and the director of the Center for Technology Innovation. Members of an expert panel described the overarching problem as the lack of guiding principles to govern civic engagement."

"The main remedy the panelists proposed was the *Model Municipal Public Participation Ordinance*. The model ordinance, which consists of three sections (Definitions, Public Participation Policy, and Principles for Public Participation) describes "public participation" (inclusive of the terms public comment, public hearing, public engagement, and community engagement) as "any form of in-person, technology-aided, or online communication that provides for discussion, dialogue, or deliberation among participants, allowing residents to engage meaningfully in the policy process."

http://ncdd.org/13090
http://deliberative-democracy.net/
http://ncdd.org/rc/item/7457 (Model Municipal Public Participation Ordinance)
www.tinyurl.com/p2law (full document: Making Public Participation Legal)

2.3.1.3 Cultivating Science: Engaging the Scientific Community With the Public Communication As a Dialogue, Not a Lecture

The excerpts below were taken from an article by Rick Borchelt, Director of Communications, and Kathy Hudson, Director of the Genetics and Public Policy Center at Johns Hopkins University.

“In our view, the end game of public engagement should be empowerment: creating a real and meaningful mechanism for public input to be heard far enough upstream in science and technology policy making and program development to influence decisions. It is not about making a decision among a scientific elite, and then staging public events to move the public toward agreeing with that desired outcome. It is about empowering lay citizens to learn all they want about pending program or policy issues (not what scientists believe they *need* to know to weigh in), and then giving them access to deliberative processes where that knowledge can be questioned, applied, and incorporated with knowledge or questions gleaned from outside the scientific process.

“And it is about agreeing up front to accommodate public input politically, not just to listen and nod politely. Unlike the unidirectional and hierarchal communication that characterizes scientific literacy and public understanding models of science-society relations, public engagement practiced as iterative dialogue *does* result in demonstrable shifts in knowledge and attitudes among participants. At GPPC, we have documented and measured these shifts during town hall and online deliberations. But the shift is not always in the direction scientists might expect or prefer. Public engagement is not about getting the policy you want; it’s about getting the public input you need to craft sustainable policy that enjoys public confidence.”

“Public engagement is also about agreeing up front to accommodate public input personally. Public engagement changes people. The public gains knowledge, shares expertise, and reflects on how much risk society is willing to accept to realize the promise of emerging technologies. Less appreciated, but perhaps even more significant, is the expectation that scientists who enter into public engagement should see their knowledge and attitudes change, too. This is the real mark of successful public engagement: Rather than insisting upon the public’s deeper appreciation and understanding of science, its primary goal is scientists’ deeper understanding of the publics’ preferences and values.”

http://scienceprogress.org/2008/04/engaging-the-scientific-community-with-the-public/

2.3.2 Summaries of Interviews with Public Engagement Experts

2.3.2.1 Amanda Pratt – Director of Communication, Rumpke Consolidated Companies

Brief biography
Amanda Pratt is the director of corporate communications at Rumpke Consolidated Companies, Inc. in Cincinnati and is responsible for overseeing all corporate communications.

The list below is Ms. Pratt’s response to the question: how do you describe a model public communication program?

To operate a model public communication program, an organization must:

1. Research audiences, issues, and related topics. In other words, it is important to do your homework.
2. Communicate consistently in good times and in bad or challenging times.
3. Communicate with your internal team first. Make them your first priority. This communication may be done by simply circulating key messages internal to your organization to let others know what is going on. When Rumpke started the Sanitary Landfill Eastern Expansion zoning process, the Communications Directorate met with the senior management team first, then all 1100 employees in the Cincinnati Metro area. We gave employees a tip sheet for communicating about the landfill expansion that included key messages. We also created a video and showed that video to employees along with a presentation.
4. Use all communication media including video, the web, presentations, television and radio advertising, social media, and mailers. When using social media, have a policy that your organization follows. When issues arise over social media, move the conversation to other media outside of social media such as email, phone calls, meetings, etc.
5. Have a relationship already established with the media prior to any issues arising.

2.3.2.2 Andrew Walker – Manager, Communication and Involvement Program, Battelle Memorial Institute

Brief biography
Andrew Walker is the Manager of Battelle's Communication and Involvement Program which provides communication and outreach services on a range of complex issues, including designing and implementing effective approaches for cooperative interaction and communication on a range of issues among Federal, state, tribal, local governments and the public.

The interviewer asked Mr. Walker to identify the top lessons he has learned from his 30 plus years of public involvement experience.

"The first thing is that the key element in public involvement is *involvement*. Public organizations have an obligation to engage the public in open and honest dialogue. That said, public involvement is not necessarily public agreement. You can't and probably won't make everybody happy. Although compromise is possible, a goal of public involvement is having an open process where all views are exchanged and considered. Expectations should be realistic and that even after the best public engagement efforts not everyone will be satisfied with the outcome. The public should understand that the final decisions rest with the organization and that abrogating decision making is not part of the process. Clarity on process and expectations can help participants feel less disappointed in the end result."

"Second, at the beginning of any public involvement process I believe several important things should happen. The process of involvement should be made clear and well communicated. This includes the goals, objectives, and ground rules. A well communicated public involvement plan, that the public had an opportunity to contribute to, helps document these important elements."

"Third, public involvement should be looked upon as an opportunity for public organizations to engage members of the community with the possibility of several realistic goals. These include the opportunity to learn community concerns and for community members to suggest opportunities that advance overall program success. At a minimum litigation may be avoided and project timelines met. Yet, there are examples in public involvement case studies where suggested community ideas were effective in making a project more technically and politically successful. Where public involvement has resulted in a positive change to the organization's plan, make sure that is well communicated and the public thanked for its contributions."

"Fourth, I believe that public involvement and public information are intertwined. If an organization is really serious about public involvement and really wants to do it right, you don't just check the block and do the minimum requirements. They need to go beyond the minimum of what is required and use a multi-layered approach to get the public involved, i.e. advisory groups, more interaction than just scheduled formal meetings, and if appropriate consider funding independent technical advisors to the public that maybe considered more focused on their concerns and perhaps able to communicate issues in a less technical way. Regardless, look for a range of methods to communicate and engage. Don't adopt a one size fits all approach."

"Finally, and this is based on my personal emergency planning experience, cooperative emergency planning between a site such as a power plant or chemical facility, and the host community is an extension of public and community involvement and should not be undervalued. Organizations with effective, integrated, and practiced (with local communities) emergency management programs understand that preparing for and responding to a crisis represents an opportunity to meet their responsibilities and keep the public's trust and confidence."

2.3.2.3 – Beverly Silverberg, President of Beverly R. Silverberg Communications

Brief biography
Beverly Silverberg is president of *Beverly R. Silverberg Communications, Inc.* which creates and administers successful information and public affairs campaigns for both public and private sector organizations to prepare their management and staff to deal with high risk situations and issues.

How would you describe effective public outreach by any organization? What does it take to be effective?

"It takes a really honest, open, two-way communication. It's simply not enough for an agency to be good at communicating, you must be good at communicating with the audiences you're addressing. You have to be perceptive and receptive. You must ensure the audiences are listening and engaged. You must engage them and be engaged with them. In order to be engaged, there are a whole lot of skills and competencies you need to have. You first need to know who they are, what they're interests are, what their problems with you are. You can only do this by doing research on the groups/audiences you will be engaging. Knowing your audiences is the only way you can properly engage them."

Are there any pre-qualifiers, genetic predispositions, or other attributes that would make someone more effective in public engagement?

"Someone who is outgoing and comfortable in front of others. Someone who is cool, confident, competent, and communicative. Let those who are uncomfortable speaking in public eliminate themselves. They need tough skin – not overly sensitive. When someone accuses them of something, they cannot get defensive or emotional."

Do you think people can be trained to be very effective communicators? And, if so, how do you go about that?

"Absolutely, I think training improves people's skills and self-confidence. There are communication skills that can be taught successfully, and that goes hand-in-hand in improving self-confidence."

2.3.2.4 – Greg Mahall, Chief of Public Affairs for the U.S. Army Chemical Materials Activity

Brief biography
Greg Mahall is the Chief of Public Affairs for the U.S. Army Chemical Materials Activity (CMA). Prior to that, he was a Public Affairs specialist for the U.S. Army Environmental Command (AEC) dealing with environmental issues surrounding base closures and defense restoration projects.

A summary of Mr. Mahall's interview follows.

Describe CMA's Public Outreach and Information Program
"Over the course of the program, we operated without a net. There were no programs under the Department of Defense umbrella from which we could borrow or mimic ideas. There was a program at Yucca Mountain that provided some similarities and we took a look at their public outreach operations. We staffed each site with two public affairs officers – one dedicated to storage activities and the other to destruction operations – and a local community information office in the nearest municipality closets to our sites. These Outreach Offices were staffed with local residents familiar with local issues. In the early days, we determined that the greatest safety risk was the storage operations. Because our initial information campaign coincided with construction of the destruction facilities, the public picked up the perception that the heavy information flow was because destruction operations were dangerous – and the truth was the exact opposite – storage operations posed the greatest risk. "

What did you do well regarding public outreach?
"We opened outreach offices in the local communities – near the destruction sites. We put all our information out for all to see and digest. To a person, the CMA Public Affairs staff knew that we were doing everything possible to keep the public safe. We were putting out what we considered to be the truth and technologically correct, but we also allowed the opposition to put their information out alongside ours. We were not sales people, rather we emphasized that we were the distribution point for the technical information in order for the people to come to their own conclusions."

"We were constantly battling the conspiracy theory that the government was covering up something. We embraced this public perception as real and dealt with it openly throughout our outreach program. Every government faux pas in other agencies unrelated to us would be used against us to demonstrate the overarching point and solidify mistrust against us."

What would you change regarding CMA Public Outreach and Information?
"We evolved over time. As I said earlier, there was not a model to copy – a lot of this was learning as we go. For example, we did not start out with the policy of allowing the opposition to put their material alongside of ours. But we learned that was the right thing to do. We also learned how to conduct public meetings. In the early days, we had a long table up on a stage where our team sat and we faced the audience in an "us-versus-them" style. And, the first public meeting I attended (using the "us versus them" set up) was four hours of pure hell. We learned that it was better to spread out and integrate with the public, so we started doing public availability sessions."

"A public availability session is a series of information stations. We would bring all the program partners (regulators, safety, emergency management, etc.) into a local gym or other meeting facility and set them up at individual stations where the members of the public could have one-on-one or smaller intimate conversations with experts. We would set up all day so we could get the lunch crowd, the afternoon crowd, the after dinner crowd, etc. We were there as long as there were members of the public who wanted information or wanted to talk. This worked much better for us that our earlier public meetings and it also took away the public stage for the opposition to perform on and garner their "10 second sound bites." Sensational sells and both the media and activists counted on taking advantage of the public displays set up by such situations."

Give us a list of some of the finer points you learned about public outreach?

- Be plain spoken – get rid of the jargon
- Know your audience
- Go into the meeting with realistic goals and the messages you want to convey
- Be prepared to handle the emotional visuals that the media will almost assuredly cover, such as a crying mother asking a highly emotional questions
- Be prepared to handle the emotions of the meeting
- Be prepared to take a beating on controversial issues (we had people come to meetings wearing gas masks or carrying rubber chickens)
- Success may be as simple as completing a public meeting with everyone intact

What tools did you equip your staff with to handle all of this?

- Practice speaking and writing in plain language
- Teach them to understand audiences; something as small as dressing like the audience can make a big difference (don't wear suits and ties)
- Practice speaking in less scientific terms and more practical terms – especially when things get emotional
- We used risk communication techniques to train our people
- KISS principle rules – practice on non-scientific types before the meeting
- Understand temperaments
- Don't take the attacks personal
- If needed, use an independent third party or facilitator for the hot topic meetings (try to use a facilitator that is a local person)
- Make sure there are many more positives covered than negatives – it typically takes three positive messages or occurrences to overcome one negative message or occurrence
- Be empathetic
- Remember, the intense emotions are generated by a minority, and responding to them appropriately has an influence on how the rest of the public perceives your organization.
- Must be aware and in control of situation – which may be your facilitator. Distraction techniques --- such as multiple questions and run on sentences – are designed to make it impossible for you to answer and attack your credibility.
- Correct wrong statements.
- Understand the inherent public perception --- women are "caring," men are "technical' or "scientific." A woman has to prove she is smart; a man has to prove he cares.

2.3.3.5 – Peter Sandman, Ph.D., Risk Communication Expert

The following two anecdotes were taken from Dr. Sandman's presentation titled: Trust the Public with More of the Truth: What I Learned in 40 Years in Risk Communication, presented in 2009 to the National Public Health Information Coalition, Miami Beach FL, October 20, 2009

"…my first article with the word "outrage" in the title: *Facing Public Outrage,* published in *EPA Journal*, included this paragraph: To the experts, risk means expected annual mortality. But to the public (and even the experts when they go home at night), risk means much more than that. Let's redefine terms. Call the death rate (what the experts mean by risk) "hazard." Call all the other factors, collectively, "outrage." Risk, then, is the sum of hazard and outrage. The public pays too little attention to hazard; the experts pay absolutely no attention to outrage. Not surprisingly, they rank risks differently. "Risk = Hazard + Outrage" became my trademark (though I never trademarked it)."

"If there's an overarching concept that has dominated the 40 years since I switched my dissertation topic from book publishing economics to environmental communication, I think it's the problem of trust. I don't mean the problem that the public doesn't trust my clients. It's true that the public doesn't trust my clients, but that's not a problem – that's an achievement. It would be a mistake to trust my clients … any of them. And it would be a pretty temporary mistake. Institutions that are trusted tend to abuse the trust; and then the public finds out; and then they're not trusted anymore. The problem isn't that the public doesn't trust my clients. The problem is that my clients expect the public to trust them. They keep asking to be trusted, instead of working to be accountable so they don't need to be trusted. And the problem is that my clients don't trust the public. That's true whether the client is a large multinational corporation or an environmental activist group or a public health agency."

http://www.psandman.com/articles/berreth.htm

2.3.3 Recurring Themes/Trends from Anecdotes (2.3.1 and 2.3.2)

The excerpts of published papers, speeches, and expert interviews collectively reinforce the value of effective public engagement by stressing the importance of:

- recognizing the many and varied stakeholder groups that may be involved;
- accurately identifying and managing issues;
- understanding the need to adapt outreach strategies to the situation;
- thinking about public engagement/public involvement as opportunities for meaningful dialogue and not necessarily a pathway to agreement;
- clearly defined processes up front that explain how the organization and the public will work together;
- going beyond minimum requirements and communicating often and consistently (in good times and bad);
- allowing public input to shape the project professionally as well as influence those involved personally;
- committing to using a range of outreach tools and techniques; and
- demonstrating a values-based commitment to engagement.

True public involvement is having an open process where all views are exchanged and considered. Expectations should be realistic and that even after the best public engagement efforts not everyone will be satisfied with the outcome. On the side of science, true public involvement should result in evolving attitudes and opinions among scientists based on deeper understanding of the publics' preferences and values. Public engagement practiced as iterative dialogue *does* result in demonstrable shifts in knowledge and attitudes among participants and sometimes leads to change in the direction of a plan. For example, the Sagadahoc Bridge examples describe how active engagement of the public improved the planning process and defused negative community outcry with a better result for all.

Section 3 – Training Considerations

The training considerations presented here are based on the contractor team's overall experience in development and delivery of communications training; specific experience training NRC managers and staff; guidance from the chairman's memorandum; and guidance from the NRC subject matter experts. The goal here is to provide NRC a collection of training techniques, and to offer training suggestions to enhance NRC staff performance during public meetings.

3.1 Competencies and Skills of Effective Communicators/Presenters

Communicating effectively with the public requires a range of skills and competencies to meet the many and varied situations and circumstances the communicator may find himself in. In this context, communicating with the public includes

- making presentations,
- answering questions,
- engaging in one-on-one or small group instruction,
- responding appropriately to difficult questions in a highly emotional environment,
- being interviewed by a member of the media, or
- facilitating a discussion.

Our team's considered opinion is that the skills required for communicating with the public can be acquired and the competencies developed through training, practice, and experience. In fact, the classic definition of skill is the ability to do something well, usually gained through experience and training. The paragraphs below include recommended competencies and skills for NRC staff that will be conducting presentations or otherwise addressing members of the public during public meetings.

Recommended Office of Personnel Management Competencies:

- Interpersonal Skills – Treats others with courtesy, sensitivity, and respect. Considers and responds appropriately to the needs and feelings of different people in different situations.
- Oral Communication – Makes clear and convincing oral presentations. Listens effectively; clarifies information as needed.
- Written Communication – Writes in a clear, concise, organized, and convincing manner for the intended audience.
- Public Service Motivation – Shows a commitment to serve the public. Ensures that actions meet public needs; aligns organizational objectives and practices with public interests.

Other recommended general competencies and attributes include:

- Honesty
- Respect for others
- Empathy
- Personal courage
- Integrity
- Sensitivity to diversity and multiculturalism
- Technical knowledge

The most important skills for NRC staff to be effective in communicating with the public include the following.

- Planning for public engagement
- Developing and accomplishing appropriate goals for the public meeting or other form of outreach
- Preparing effective presentations
- Delivering presentations
- Developing and presenting key messages and supporting information
- Presenting technical data in a manner that is clear and appropriate for the audience
- Listening actively and attentively
- Organizing material and sequencing ideas logically
- Facilitating discussion
- Demonstrating subject matter knowledge
- Engaging in meaningful dialogue
- Using charts, maps, graphs, illustrations and analogies to make key points
- Developing a rapport with the people at your meeting
- Responding to difficult questions in highly emotional situations
- Establishing two-way communications
- Overcoming personal fear, stress and anxiety
- Using effective nonverbal communication skills (positive body language)
- Embracing the "KISS" principle: Keep it short and simple!
- Inviting feedback
- Closing with impact

3.2 Assessment Tools to Assist NRC in Selecting Staff to Engage the Public and Deliver Presentations in an Effective Manner

There is an abundance of assessment tools to help individuals understand themselves and others. For example:

- The Myers Briggs Type Indicator (MBTI) is the most widely utilized personality preference instrument in the world and is commonly used to improve understanding and communication.
- The Strength Deployment Inventory (SDI) is a suite of psychometric tests and a practical methodology for empowering people to improve relationships and manage conflict more effectively.
- *Fundamental Interpersonal Relations Orientation*™ (FIRO®) instruments help people understand their interpersonal needs and how those needs influence their communication style and behavior—and in the process improve their personal relationships and professional performance.
- DiSC® is a personal assessment tool used to improve work productivity, teamwork and communication. DiSC is non-judgmental and helps people discuss their behavioral differences.

Assessment tools should be used to help NRC staff better understand themselves and others. However, our team urges caution in using these or any other assessment tools to prequalify NRC staff for making public presentations. Because of the vast range of combinations of personality preferences, communication styles, skill-levels, behaviors, conflict management techniques, etcetera, it would be extremely difficult to identify any specific combination or combinations that will ensure a person performs well in delivering public presentations.

Our team believes strongly that communication and presentation training along with experience and exposure to public meetings is the best resource for preparing NRC staff to present to the public. The use of formal and informal assessment tools during training will facilitate skill improvement through greater understanding of self and others.

3.3 Potential course offerings for NRC staff.

To ensure full preparation for conducting presentations in a wide variety of public settings, our team recommends that NRC staff who will engage with the public through presentations, questions and answer sessions, or through other means should attend the following training courses.

- *Conducting Effective Public Meetings* – this course is designed to prepare participants to successfully engage with the public during NRC public meetings and thoroughly address public concerns about health, safety and the environment while building credibility that the NRC is vigilantly performing its regulatory role.

- *Effective Risk Communication and Public Outreach* – this course prepares participants to thoroughly and effectively address public concerns of stakeholders regarding health, safety and the environment, while strengthening credibility that the NRC is vigilantly performing its regulatory role.

- *Media Training Workshop* – this course prepares participants with hands on opportunities to respond accurately and effectively to reporter's questions, consistent with the NRC mission of openness and transparency. Participants are also equipped to effectively communicate the NRC's mission and its critical messages.

- *Basic Presentation Training Course* – this course is designed to provide NRC employees with the understanding and skills to give effective internal and external oral presentations. It provides participants with a solid understanding of the science, art, fundamentals, principles, and experiential insights that contribute to effective presentations. Training includes communication/presentation fundamentals; instruction on the three critical components of all presentations; developing and delivering prepared speeches; organizing and delivering impromptu speeches; and presentation organization and design. Participants are provided multiple opportunities to develop and deliver presentations in response to realistic scenarios. Instructors record and playback each presentation and professionally coach participants on techniques for improvement

- *Advanced Presentation Training Course* – the advanced course is built around hands-on practice, professional coaching and critique, and tailored exercises designed to address each participant's individual needs. Advanced presentation training includes a review of basic course content; detailed audience analysis; advanced techniques such as motivating audiences, using powerful messages and themes, and storytelling for more compelling presentations; and individualized coaching to sharpen presentation techniques. As in the Basic course, participants are provided multiple opportunities to develop and deliver presentations in response to realistic scenarios. Instructors record and playback each presentation and professionally coach participants on techniques for improvement.