

ATTACHMENT C
SUMMARY OF COMMENTS ABOUT INDIVIDUAL WORKSHOPS

This section of the report summarizes information collected from the evaluation forms that were distributed to participants during each workshop they had attended. The bar graph illustrates the responses of participants to a series of questions about the appropriateness and relevance of course material to their job responsibilities, as well as the effectiveness of the instructional materials.

Participants in each course had been asked to respond to a series of questions as follows:

- strongly agree (SA)
- agree (A)
- disagree (D)
- strongly disagree (SD)

Because some participants did not respond to every item, a “no response” category has been included in the bar graphs. In addition, participants were asked to submit written comments about various elements of the workshop, including course content, relevance and appropriateness of case studies, and instructional methods. The following pages present the information collected from the evaluation forms submitted for each workshop.

This attachment also provides pie charts that illustrate the percentages of students for each course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees for almost every course.

Capture Zone Analysis for Pump-and-Treat Systems

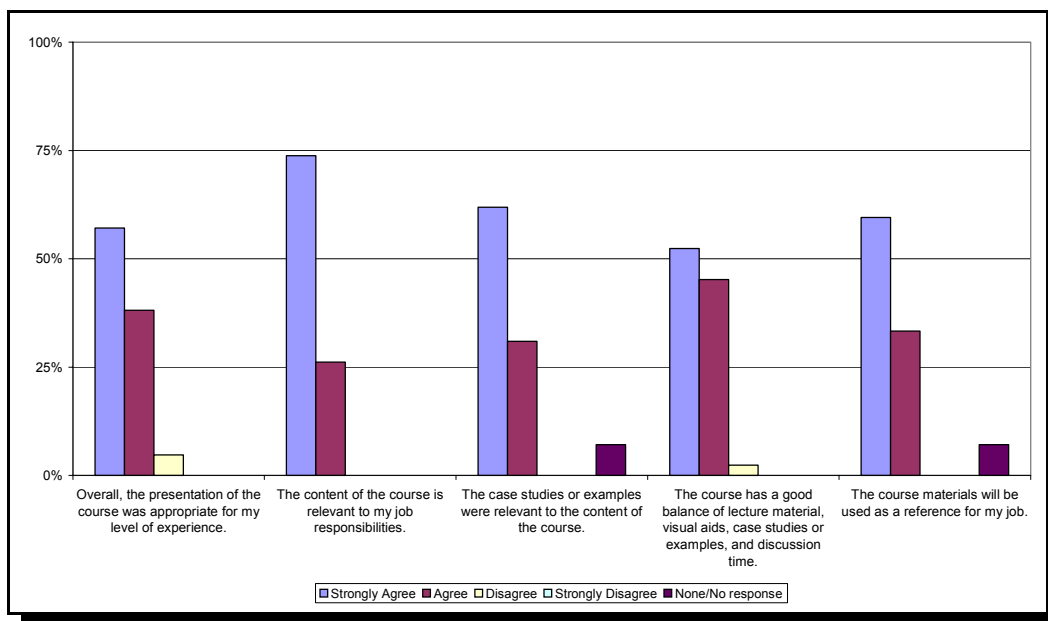
This course presented a systematic approach for evaluation of capture zones for pump-and-treat systems and highlighted a document on the topic that is being developed by EPA. The target audience for the workshop were project managers who reviewed such analyses or made decisions based on these types of analyses. The workshop highlighted the importance of capture zone analysis during groundwater remediation, particularly for sites requiring containment, key concepts of capture, such as “target capture zones” and “converging lines of evidence” and typical errors made in capture zone analysis.

In addition, steps associated with a systematic approach for capture zone analysis were discussed. These steps included the following: (1) To review the site data, site conceptual model, and remedial goals, (2) To define site-specific target capture zone or zones, (3) To interpret water level maps, (4) To perform simple horizontal capture zone analysis, including flow budget calculations and capture zone width calculations, (5) To perform one or more site-specific supporting evaluations, involving water level pairs, concentration trends at monitoring wells, or particle tracking with groundwater flow modeling, and (6) To interpret the actual capture and compare it to the target capture zone or zones.

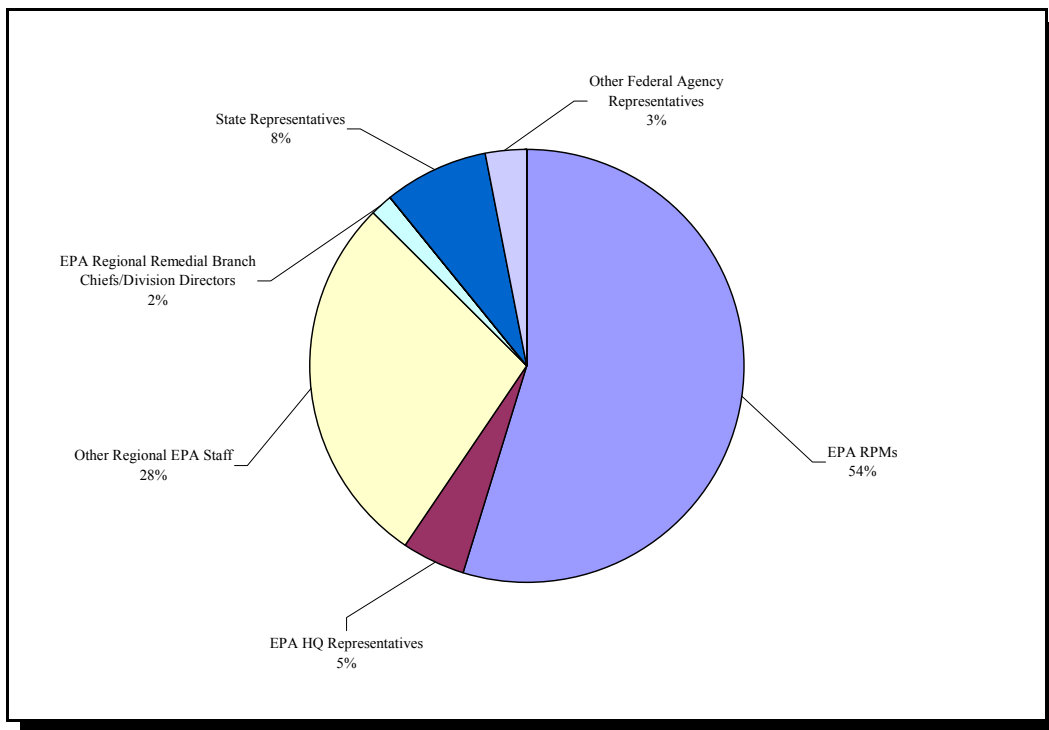
Illustrations from case studies were used to demonstrate key aspects of capture zone analysis.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
64	64	42	A



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Very good course (*Five responses*)
- Good basic overview and good for most RPMs (*Five responses*)
- Useful to RPMs performing reviews of pump and treat systems
- Below my level of expertise as a hydrogeologist (*Two responses*)
- Latest information provided - good planning tool for RD and O&M (*Two responses*)
- Covers the basics and concepts as well as the advantages and limitations of capture zone analysis
- Especially liked the table for making me look objectively at my site
- As an engineer, this course helped me understand some key groundwater concepts
- Show an application of a capture zone model in “action”
- Look forward to upcoming guidance document
- Good coverage of topic with several good tips on specific pitfalls and “to do’s”
- Excellent course, I came away with things to consider at my site which were not investigated previously (*Two responses*)
- Need more information on how to visually define a capture zone

COMMENTS ABOUT INSTRUCTIONAL METHODS

- Very well presented (*Three responses*)
- Divide and present the key concepts with respect to design of extraction well versus performance criteria during O&M - may be in a tabular format with key concepts in one column and check lists for design and O&M in other columns respectively. Also, separate the issues from groundwater model versus actual data (list types of actual data collected - versus chemical performance criteria)
- Rob Greenwald is very knowledgeable about the topic. He also is dynamic and kept us awake!
- Great visual aids (*Three responses*)
- Change slide background (*Three responses*)
- Speakers were very knowledgeable and articulate (*Four responses*)
- Consider computer-based training
- Recommend spending a little more time in providing an illustration on how you determine you have an upward flow gradient
- GeoTrans hits a home run!

COMMENTS RELATED TO CASE STUDIES

- Case studies are not important for this course
- The examples used were good, but real site case studies would be helpful (*Two responses*)

COMMENTS RELATED TO COURSE LENGTH

- An afternoon session continuing with the same topic but providing more details about use of different models would be helpful
- Schedule a longer training session on this topic

GENERAL COMMENTS

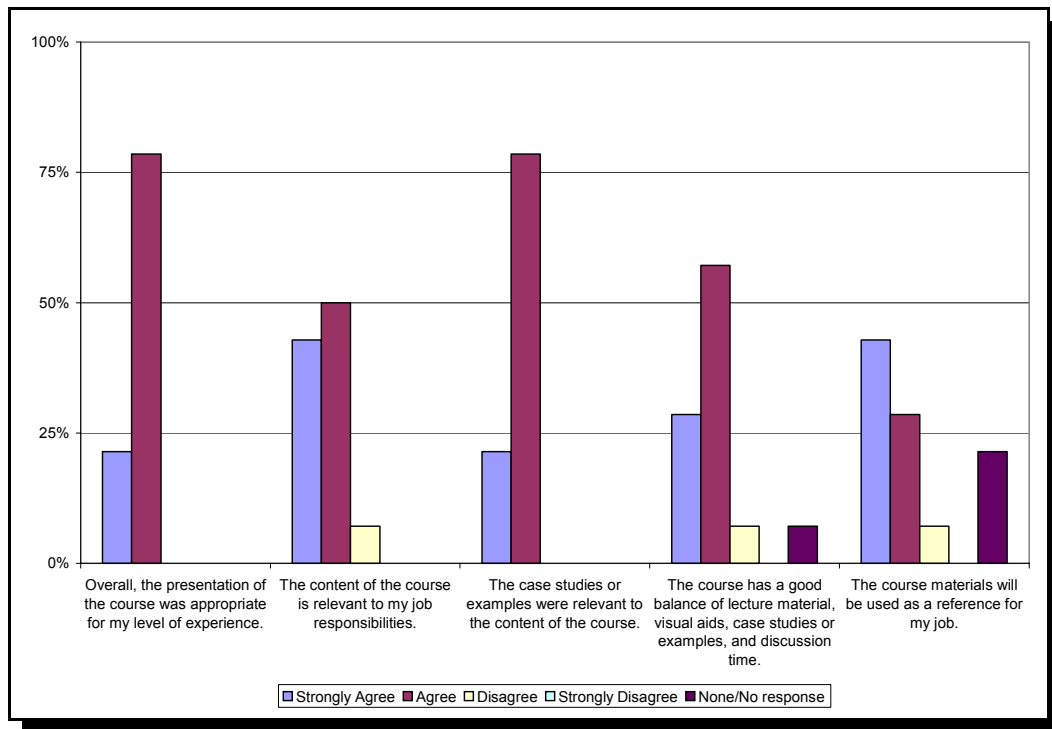
- There should be more courses like this one instead of papers and panels. Also some popular courses should be offered again instead of all workshops at once

Continuing Best Practices in Community Involvement

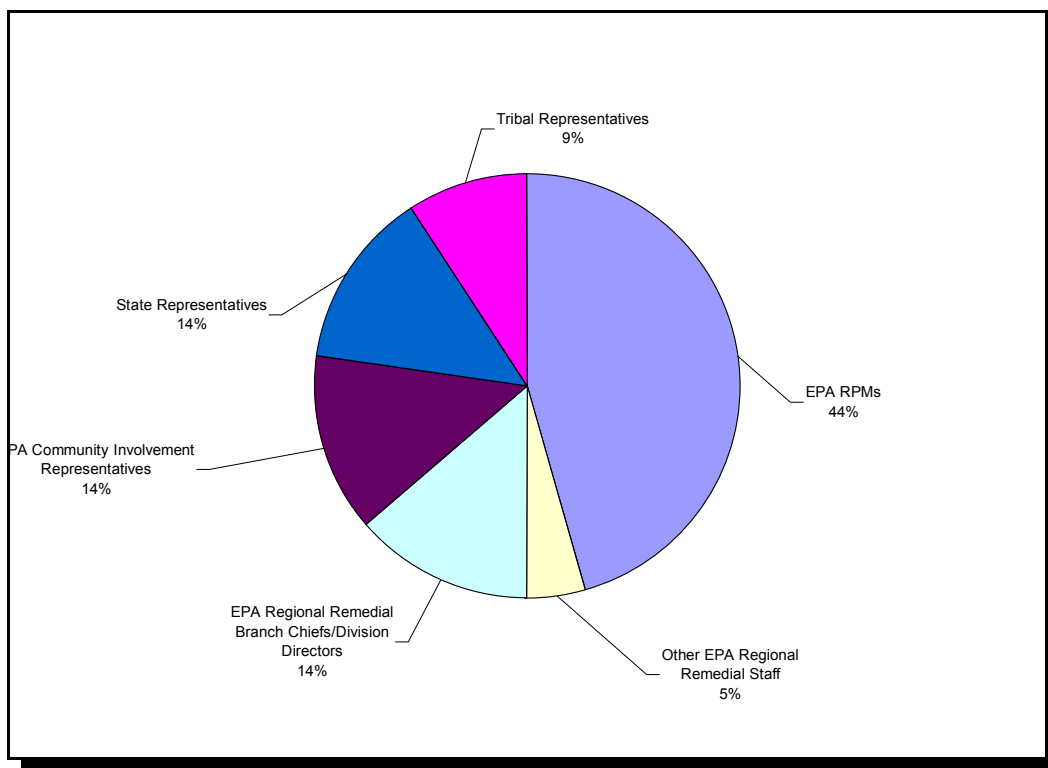
The workshop focused primarily on working with the media and the community. It began with an intensive panel discussion featuring RPMs and community involvement coordinators (CIC) that addressed how they can work together to achieve results. Central to the discussion was the interrelatedness of site teams, the variety of ways in which the regional public affairs offices operated, and how those differences affected the success of Superfund projects. Important topics on the agenda included how to involve the public in cleanups, how to “get good” press, how words have an effect on an audience, and the difference between public affairs and public relations.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
35	22	14	B



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Upgrade class to a more advanced level course on dealing with very controversial sites with difficult public relations issues
- Discuss roles of CIC and describe their responsibilities, so that RPMs can understand who they are dealing with, understand their area of expertise, and how to partner with them, etc.
- Take-away message was useful
- Most of the discussion (first half) not related to course title (*Three responses*)
- Course presented a variety of opinions and overview, but lacked focus and suggestions. I don't feel that I left the session having learned anything which could be implemented in my work
- Panel discussion about where CIC should be located in a region has no benefit - did not relate to the topic
- This course will provide an understanding of CICs

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Move panel discussions after the presentation
- Speakers were knowledgeable and experienced with good speaking skills (*Two responses*)

- Talk about things that cannot be changed - second half was better
- Leo gave us real tools to use
- Community Involvement speaker should not read from a script

COMMENTS RELATED TO CASE STUDIES

- Add more detailed case studies
- Lengthen Hudson River example
- Discuss how to react to certain situations, provide a little introductory training on how to deal with media
- Omaha and Hudson were okay (*Two responses*)

COMMENTS RELATED TO COURSE LENGTH

- Decrease introductory remarks

GENERAL COMMENTS

- Understanding Media by Mick Hans should be part of the Fundamentals of Superfund course for new RPMs

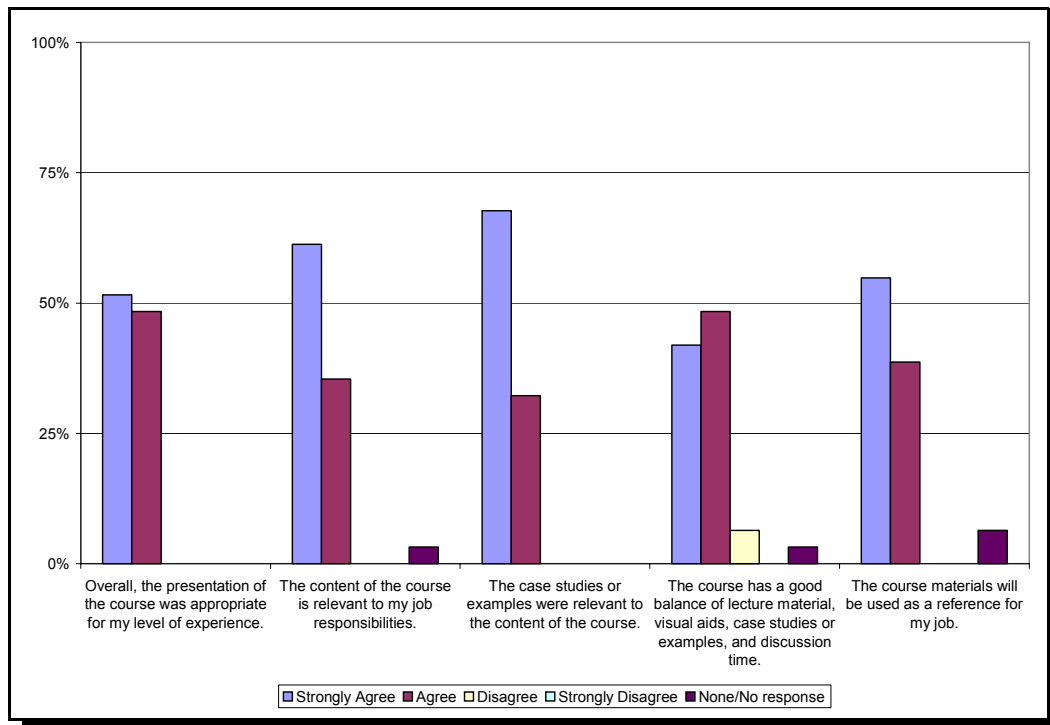
Evaluating Vapor Intrusion from Groundwater and Soils to Indoor Air

This workshop presented the conceptual model for the vapor intrusion to indoor air pathway and described EPA’s new guidance on how to evaluate this pathway. The workshop included: (1) A description of sites in Colorado that led to national attention to indoor air pathway issues, (2) A discussion of the current issues related to this pathway (including sampling issues), (3) A brief overview of the application and limitations of the Johnson and Ettinger model, (4) A summary of empirical data on vapor intrusion attenuation factors, (5) An assessment of the reliability of the new EPA guidance for appropriately screening sites, and (6) A brief description of remedial options.

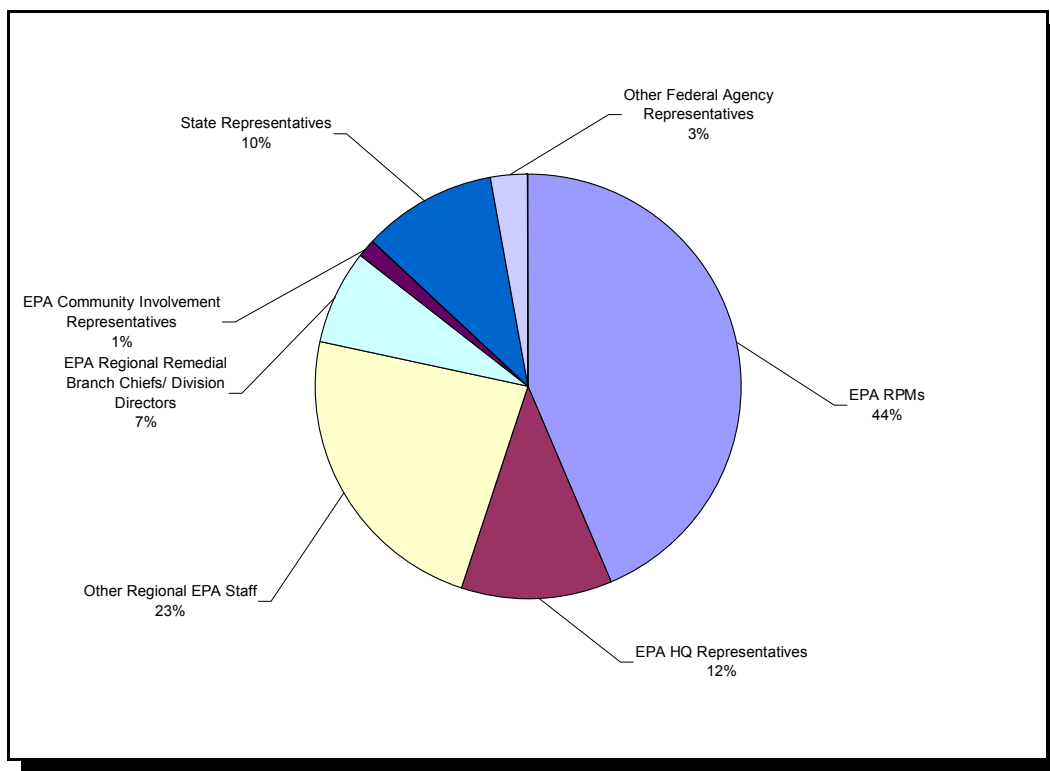
A hands-on exercise at the end of the workshop helped illustrate the application of the new EPA guidance to sites and foster discussion of issues.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
67	69	31	B+



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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 ized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Can provide valuable information
- Increasingly important topic for groundwater contaminated sites
- Good overview and introduction to vapor intrusion (VI) issues (*Three responses*)
- Based on the data presented, I am considering further investigation at one of my sites
- VI is an important issue for all mid-level management as well as RPMs and OSCs
- Groundwater sites should consider VI pathway

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Poor presentation - disorganized, too much jumping around from one topic to another, poor continuity. Needs more rehearsal
- Too much focus on instructor’s opinion - not enough on EPA policy
- I’d like to see a panel with opposing viewpoints
- Q&A associated with the instruction are an important part of the training. Many issues raised in the questions are an important component of the course. Insufficient time for questions (*Three responses*)
- Helen did a great job on presentation of the materials and organization of the course (*Three responses*).
- Good job keeping the course on schedule and breaks on-time

- Overall a good presentation
- More emphasis needed on how to access assistance (ORD) to assess feasibility, plan and conduct project
- Need to limit the amount of graphs - just basic overall message should be presented. Too much detailed information, that would be useful in a much more technical-oriented presentation, not for this general type audience (*Two responses*)

COMMENTS RELATED TO CASE STUDIES

- Good examples, highlighted differences in site conditions and sampling techniques
- Provide more time for case studies at the end

GENERAL COMMENTS

- Need more time to cover the topics effectively (*Three responses*)

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

Lengthen: All topics

Add: A policy perspective from HQ

Implementation issues and examples

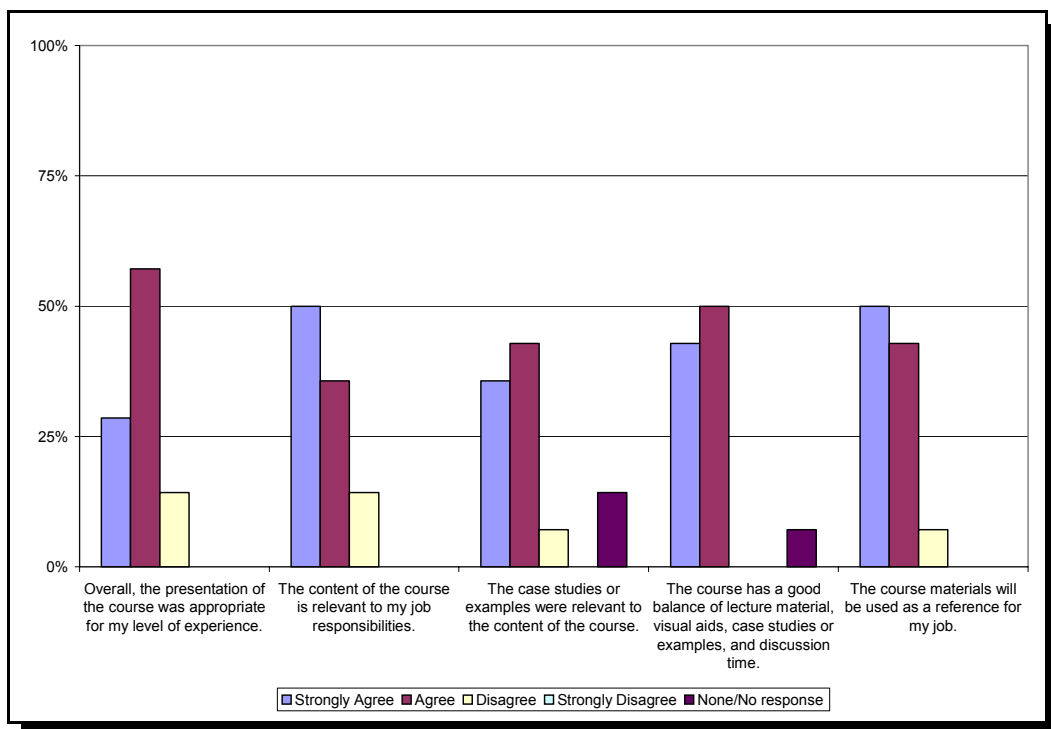
Risk-based management decisions associated with vapor intrusion to indoor air

Federal Facility Remediation Workshop: Overview of Federal Facility Cleanups, Perchlorate, Federal Property Transfers, Lead-Based Paint, FUDS, and the Site Close-Out Process for Federal Facilities

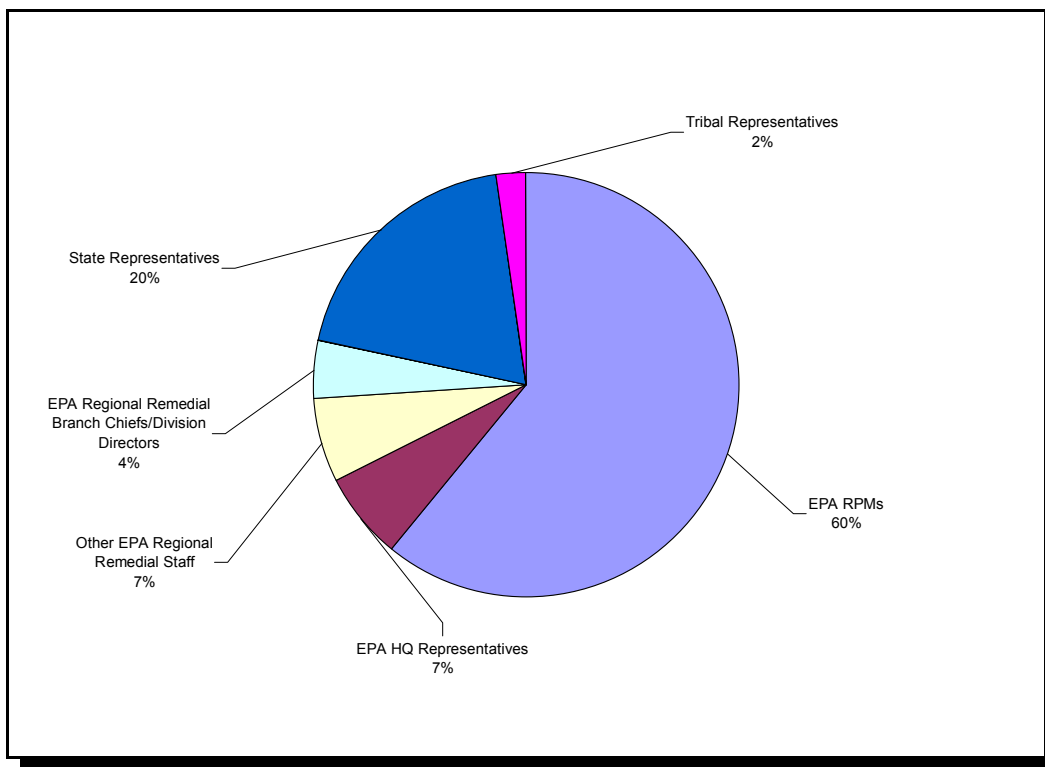
This 3.5-hour workshop focused on current and evolving issues that RPMs encounter during the post-record of decision (ROD) phase of environmental cleanups at Federal facilities. Participants in this workshop achieved the following objectives: (1) Discovered the mechanisms in place to cleanup Federal facilities, including application of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) and the environmental response programs in place at the U.S. Department of Defense (DoD) and the U.S. Department of Energy (DOE), (2) Learned the history and issues surrounding the contaminant perchlorate and the next steps toward resolving the associated challenges, (3) Learned the steps in the process of transferring Federal property and the environmental hazards and statutes that can affect that process, (4) Discovered the roles, responsibilities, and implementation issues associated with residential and nonresidential lead-based paint abatement, (5) Learned the similarities and differences between the CERCLA process and DoD's Defense Environmental Restoration Program (DERP) at FUDS as well as the differences in the site assessment procedures that occur at FUDS, and (6) Learned the milestones, procedures, and documentation associated with CERCLA and RCRA site close-out processes at Federal facilities.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
43	46	14	B



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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COMMENTS RELATED TO COURSE CONTENT

- Useful introduction to Federal Facilities cleanup issues (*Two responses*)
- This course is useful for new RPMs and RPMs working with Federal facilities
- Methodology good - manageable sections
- Presentations were too basic and introductory (*Two responses*)
- This course is not useful for an RPM - I would recommend it to someone not very familiar with Federal facilities or BRAC
- No focus on current or evolving issues during post-ROD

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Very good! Useful to have slide handouts with space for notes
- Instructors offered a chance to interact, which would otherwise be unavailable
- Too much material was being covered in a short time period
- A video would be helpful as a visual tool and would help with the instruction
- I appreciate the time and effort put in by the instructors for putting this course together

COMMENTS RELATED TO CASE STUDIES

- Fact sheets of case studies should be provided
- Would prefer issue-specific case studies
- Would suggest focusing on or highlighting high profile sites as case studies

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

Lengthen: GSA transfer

Add: Information on FUDS - credit for work done, who pays for Federal facility cleanups

More case studies

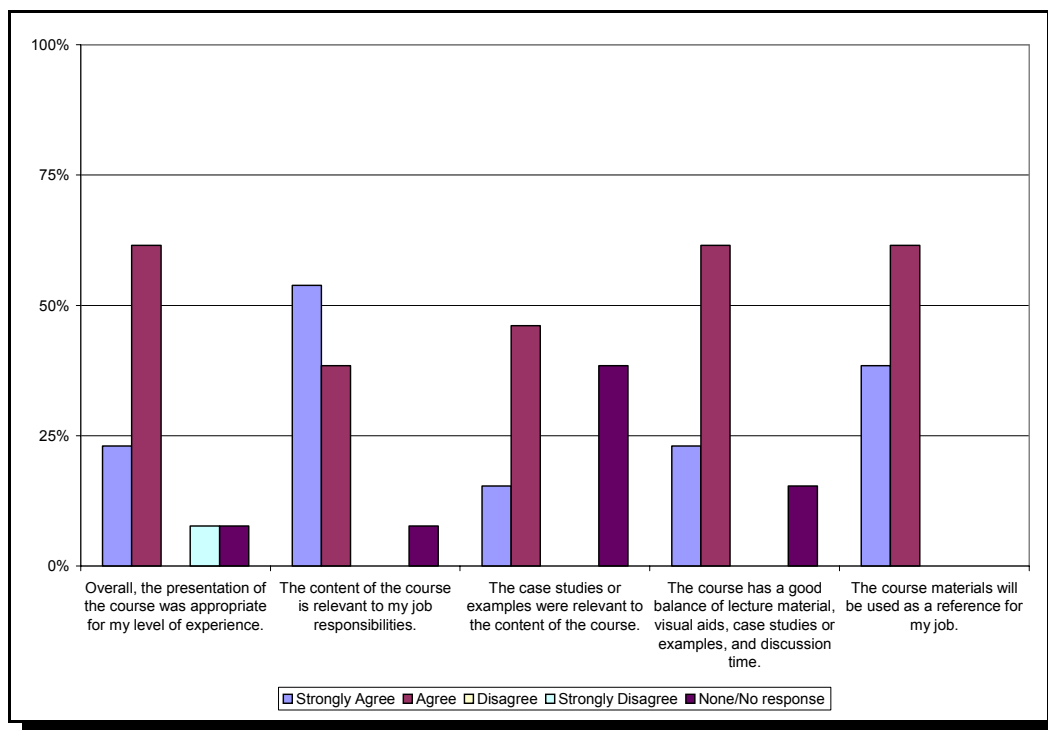
HQ update on global issues being negotiated or discussed with DoD at Pentagon level

Federal Facility Remediation Workshop on Institutional Controls, Post-ROD Changes, Five-Year Reviews, and a Discussion Roundtable for RPMs on Federal Facility Issues

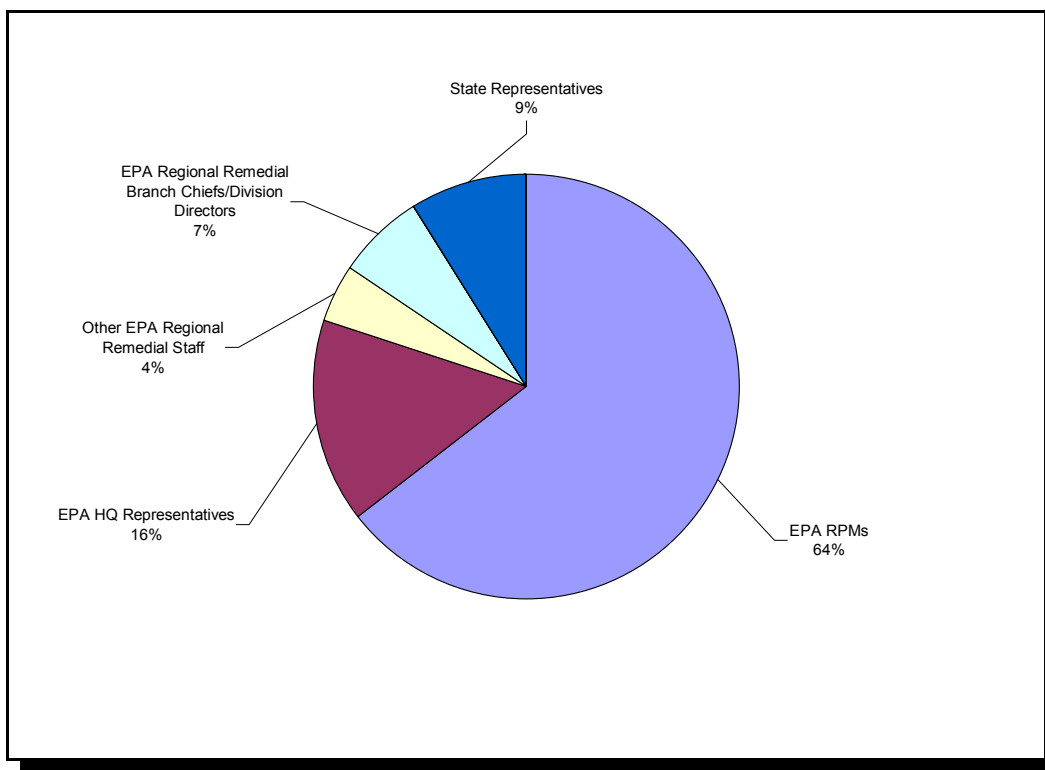
This 4-hour workshop focused on current and evolving issues that RPMs encounter during the post-ROD phase of environmental cleanups at Federal facilities. In addition, this workshop included an update from FFRRO and a time allotment for RPMs to discuss issues and concerns that they had submitted prior to the workshop in order to gain from the experiences of other RPMs across the nation. Objectives of this workshop included the following: (1) To discuss when institutional controls (IC) are needed, planning and analysis considerations associated with different ICs, and how to implement ICs given current agreements with the services, (2) To describe examples of changes that occur at Federal facilities after the ROD and how to address those changes under CERCLA and RCRA, (3) To define the roles and responsibilities for five-year reviews at Federal facilities, describe the elements of a five-year review, and explain the procedures for assessing the protectiveness of a remedy, (4) To provide an update on activities occurring at EPA Headquarters (HQ) and receive feedback from RPMs, and (5) To discuss current issues and solutions being implemented in the field by a number of RPMs across the country.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
41	45	13	B



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COMMENTS RELATED TO COURSE CONTENT

- Course was too basic for experienced FF RPMs - except perchlorate and 5 year reviews
- Good course for new RPMs working with Federal Facilities (*Two responses*)
- Modules need updating with post-ROD and other new guidance
- Great course content

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Break up the class, there were lectures all day. How about videotape-based training? (*Three responses*)
- Presentations were too fast
- Too many acronyms used, this is the first time that I am attending this workshop and I did not know what the acronyms meant (*Two responses*)
- Do a review of the basic relationships between entities - illustrate the big picture and the roles and responsibilities
- The morning session would have benefitted from some interaction
- Instructional methodology was most appropriate (*Two responses*)
- Less talking to us and more interaction - the 5 year review was a sleeper
- Thank you for the Q&A part

COMMENTS RELATED TO CASE STUDIES

- I would have liked to see more case studies (*Three responses*)
- Need more site-specific examples

COMMENTS RELATED TO REFERENCE MATERIALS

- Good references for perchlorate

GENERAL COMMENTS

- Logistics - the room was too big, could not hear the speaker very well. Also, the room was too dark
- In future, it would be helpful to describe course as beginning, intermediate, or advanced. Try to have more advanced courses. Most of the 'beginning' materials have been covered at branch and/or section meetings in Region 9
- Nice to see Federal Facilities-specific course in NARPM

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

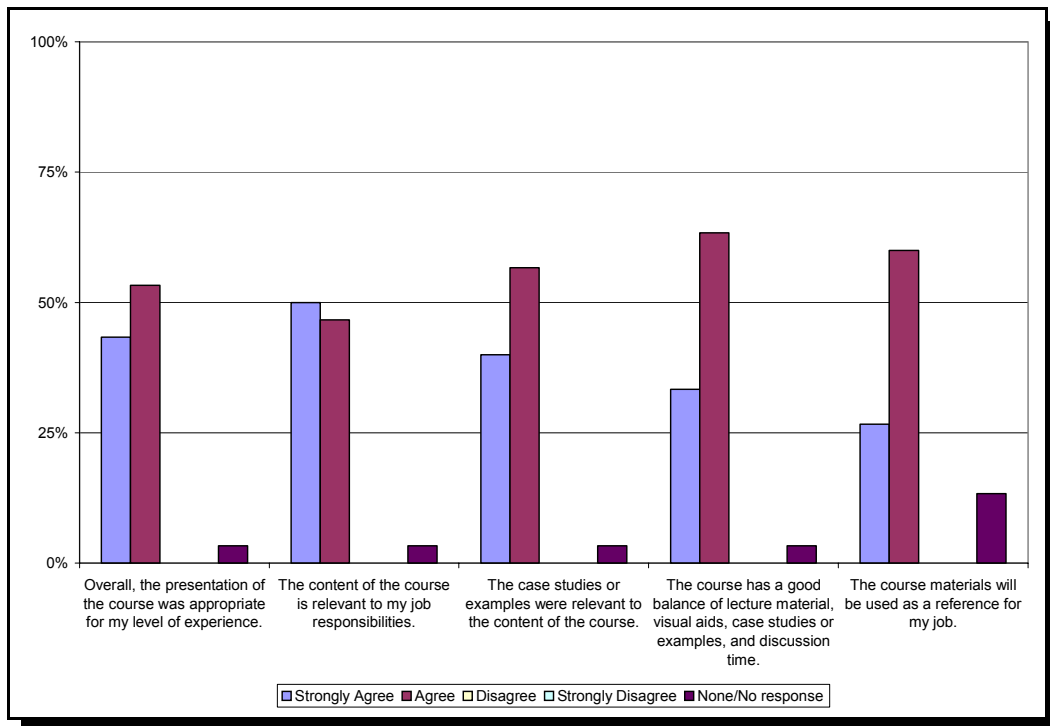
Add: DOE case studies and radioactive work issues

Guaranteed Fixed-Price Contracting and Environmental Insurance

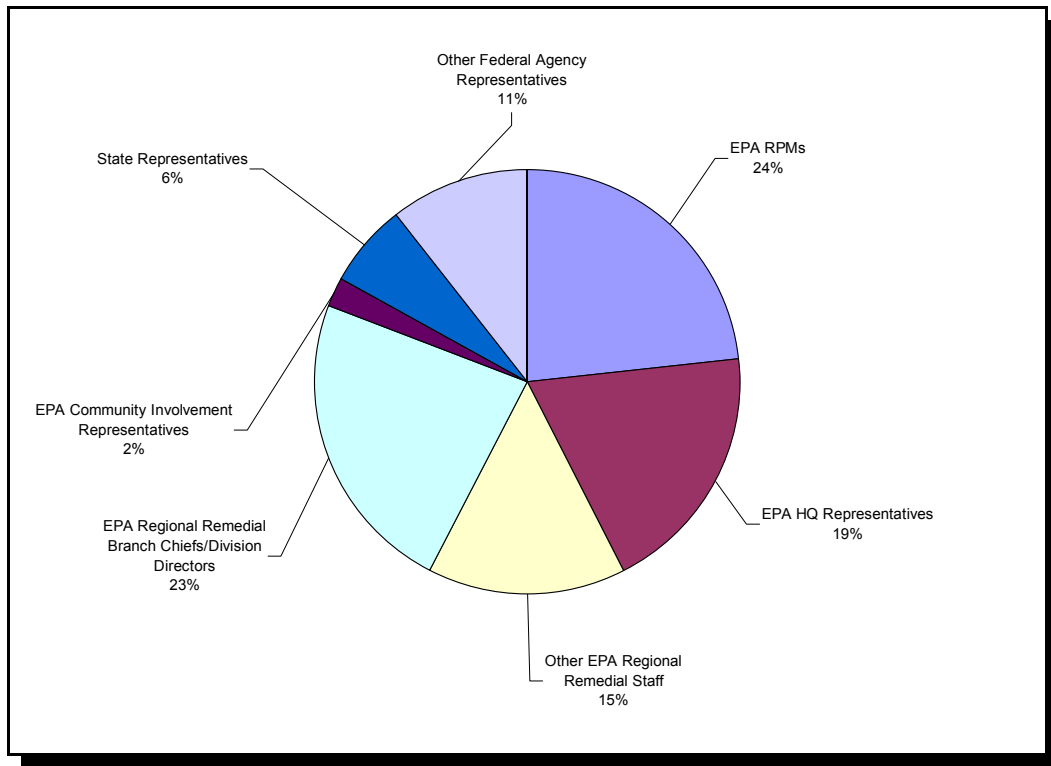
This workshop addressed the use of guaranteed fixed-price contracts and environmental insurance in the remediation context. Guaranteed fixed-price contracting (GFPC) is a performance-based contracting method through which the contractor guarantees to achieve an environmental remediation goal for a fixed-price. The guarantee is further backed by environmental insurance coverage intended to cover any cost overruns. Both the U.S. Army and private potentially responsible parties (PRPs) have reported some success in achieving faster cleanups for less money using GFPC and environmental insurance. The workshop panel provided an overview of GFPC, including EPA's effort to pilot GFPC. Environmental insurance was also discussed, including cost cap and stop loss; finite risk; and pollution legal liability coverage.

The graphic below illustrates information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
48	47	30	A-



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COMMENTS RELATED TO COURSE CONTENT

- Should provide examples of incentives and disincentives, and performance measures
- Focus on sites where these principles have been applied - successes and failures
- Crucial to find a way to reduce government cost
- Insurance discussion is very relevant but needs to be condensed
- This is a new contracting tool - everyone needs to know all the options available to execute projects
- Very informative
- Anyone involved in RA contracting would be interested in this course
- Interesting discussion on contracting options (*Two responses*)
- Important information to understand from state’s perspective

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- If DoD has experience on this topic, they should be allowed to present. If that is an expensive proposition, then have their presentation videotaped
- Discussion questions provide good information
- Visual aids were very concise
- Presentations in general were on point

- I liked the mix of four speakers. I think KC did a good job of establishing the foundation of the subject with his discussion on insurance and differentiating between insurance on an asset versus prospective insurance
- Panel discussion would be useful

COMMENTS RELATED TO CASE STUDIES

- More details needed in case studies
- Information on Omaha Lead Site was very informative (*Two responses*)
- Add more case studies

GENERAL COMMENTS

- If DoD has experience on this topic, they should be allowed to present. If that is an expensive proposition, then have their presentation videotaped
- If this course would be available online, it would be accessible to many more people

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

Add: Performance-based workshop

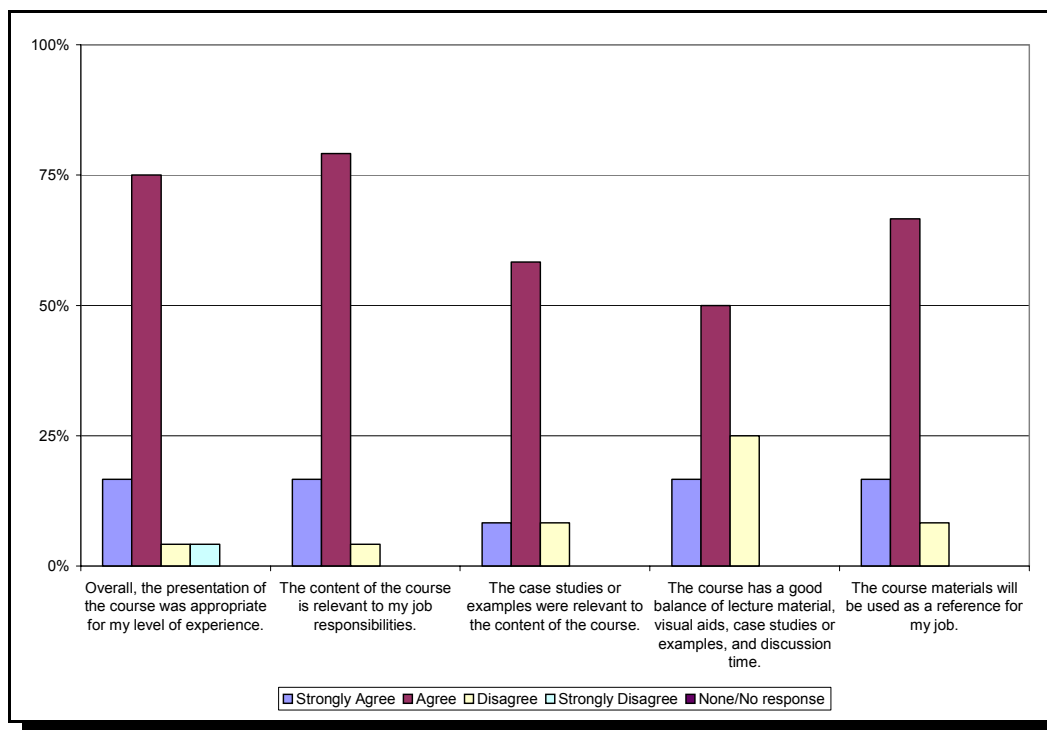
Industrial Processes

This course provided participants with a description of industrial chemicals, processes, and release mechanisms frequently associated with Superfund sites. Knowledge about these items enabled the participants to formulate more effective site evaluation and remediation strategies. Workshop participants were able to: (1) List key chemicals associated with particular industries, (2) Describe the associated chemical and physical processes, (3) List typical modes of industrial release of hazardous substances, and (4) List applicable laboratory and field analytical methods.

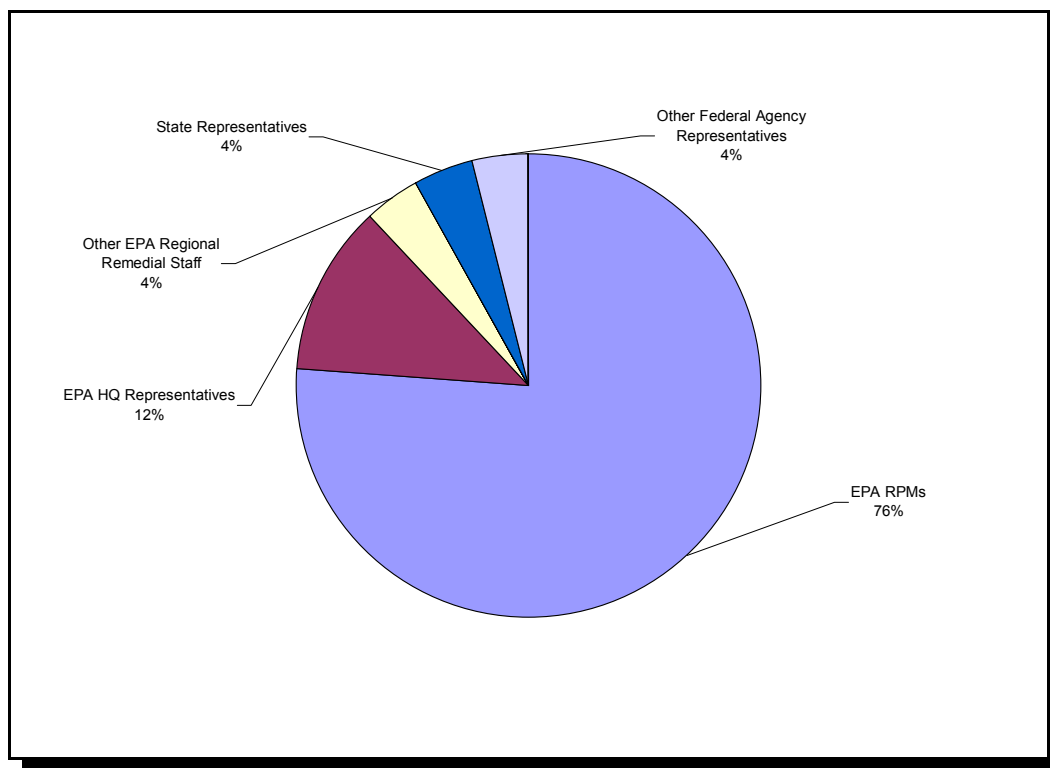
The four industries that were scheduled to be covered in the workshop were manufactured gas plants (MGP), pesticide formulation manufacturing, municipal landfills, and metal finishing operations. The metal finishing module featured electroplating and chlorinated solvent degreasing operations. The modules were normally presented as part of a comprehensive 3.5-day set of basic and applied chemistry courses, titled “Chemistry for Environmental Professionals-Fundamentals and Chemistry for Environmental Professionals-Applied” (for more information, visit <http://www.trainex.org>). Seven additional industrial process modules were developed and are potentially available for presentation in a future version of the workshop.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
24	25	24	B+



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COMMENTS RELATED TO COURSE CONTENT

- Abstract did not meet expectations, thought course would cover wide range of processes and provide more practical information such as a list of chemicals to look for at our sites (*Two responses*)
- The descriptions of the processes in the abstract was useful, but I was hoping to get more information on the chemicals and by-products (*Two responses*)
- Some course content was relevant. I particularly learnt a lot from the MGP portion, since I manage 2 MGP sites
- Common processes were presented, I have 2 of the 4 types of sites presented
- A good mix of processes, liked the LF and MGP examples
- Good balance of detail and simplicity. Obvious practical experience of instructors made material understandable and easy to relate to
- Liked simplified process diagrams
- The schematic process diagrams for the processes are unique. I have never seen 2F broken down into a process diagram
- Liked the list of chemicals at landfills. Similar lists for other industries would be helpful
- Please update the presentation. Some information is outdated, some from 1990
- Course content needs to tie in more with remedial aspects, and emphasize probable future AOCs
- Wanted more information conveyed on mechanics of manufacturing for each module

- Over-preparation for the MGP example - all good information but at the end, led to 'audience overload'
- Great course for new RPMs
- This course will help in the early stages of a project to know what types of contaminants to look for at a particular type of site
- Good for general understanding of old industrial processes (*Two responses*)
- Good background on some of the common causes at Superfund sites
- Omit personal assumptions such as 'dioxin is not that big of an issue' ..it is!

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Not much discussion time
- The method was good, although computer-based or videotape-based would work well too
- Videotaping would be better, the first part of the course was very good
- Too much lecture content
- Classroom presentation is better than videotaped training

COMMENTS RELATED TO CASE STUDIES

- Too few examples and case studies
- Case studies were relevant, especially good examples were pesticides and metal plating
- Missed most of the case study because session started when keynote speaker was still speaking at lunch. Next time coordinate keynote speaker's schedule with instructors
- Need more examples of chemicals found in specific processes and their by-products and what methods should be used to analyze them (specifically landfill constituents)

GENERAL COMMENTS

- It was great to listen to practical applications for using chemistry in the field. I look forward to more classes like this
- At NARPM 2005, there should be a Roundtable discussion forum on cleanups at MGP sites
- Timing could be improved - improve time management
- Plan similar course for multi-source sediment sites and focus on PCBs, chemical forensics, and reading the chemical record
- Important material for those who deal with such sites on a daily basis, but by nature very dry - probably better not to have this course after lunch

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

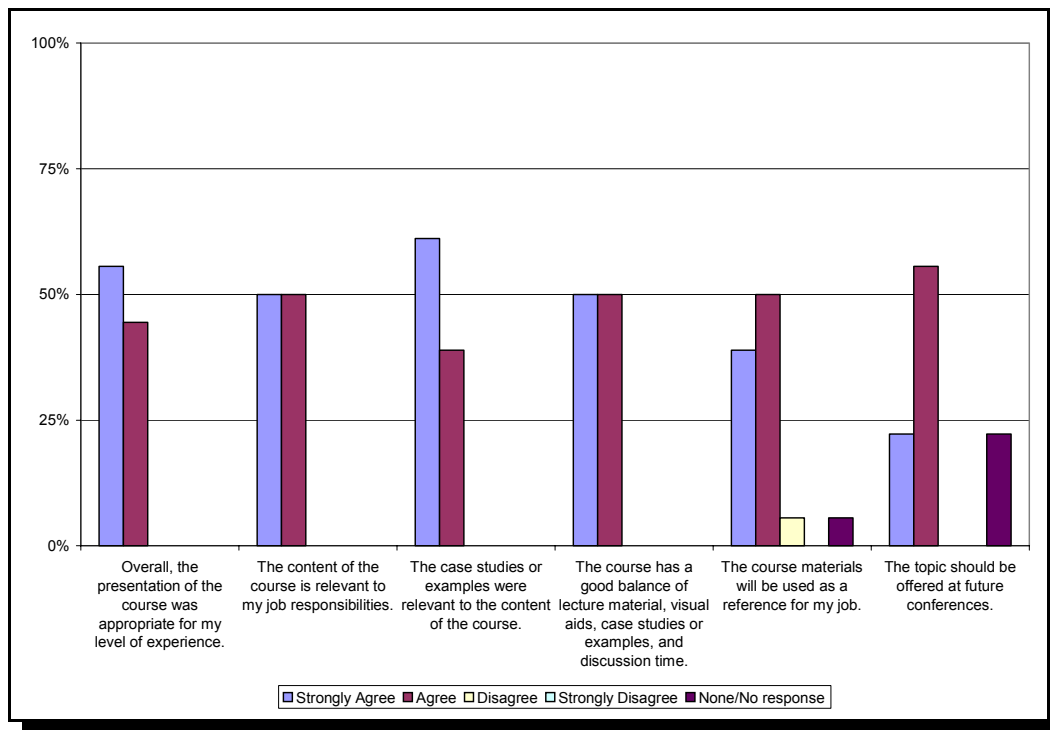
- Shorten: General chemistry part, and historical background (*Three responses*)
 Gas plants and pesticides
- Lengthen: Modes of release component, and mechanics, chemical-specific examples with by-products, and coal gas manufacturing
- Add: Information on semi-conductor industry, mining, paper mills, and power plants
 Manufacturing process from 1800's to present
 Information on specific chemicals to watch for
 Focus on process and waste streams and by-products, focus on wastes generated from gas plants

Institutional Controls Working Session

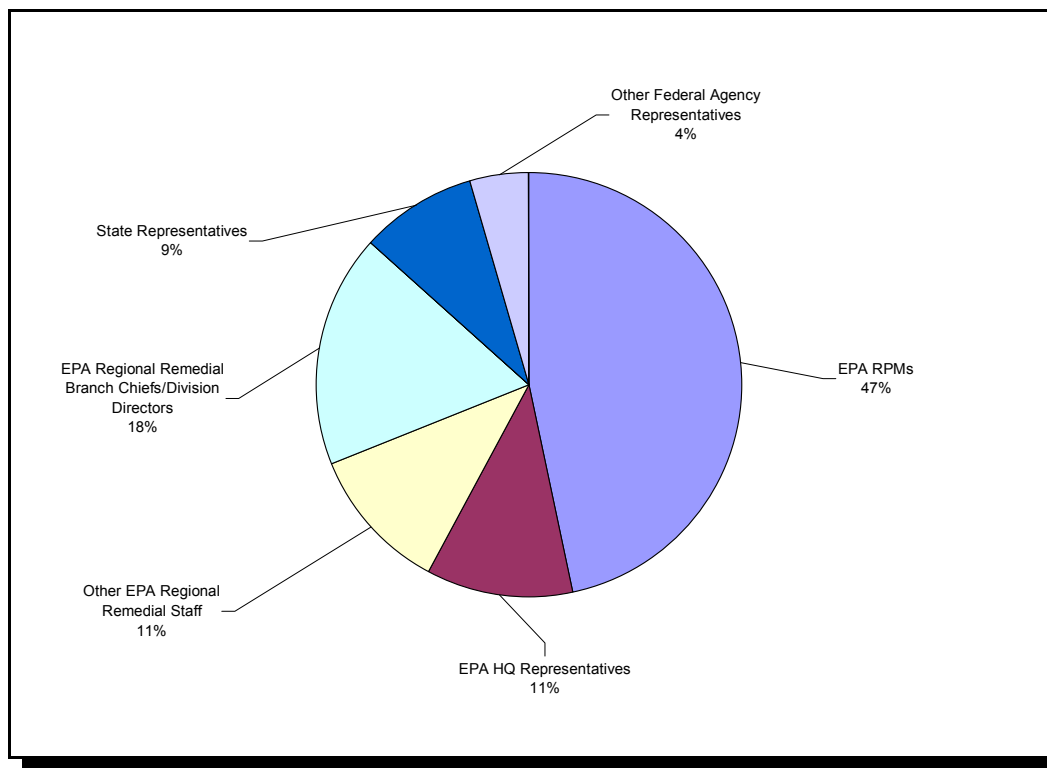
This interactive working session presented participants with the opportunity to share specific IC issues, problems, and lessons learned and to receive feedback from their peers and IC experts. Examples and issues involving both private and Federal facilities were encouraged. Participants also learned of new initiatives underway to improve the effectiveness of ICs and were asked to provide input. Ideas were generated during the session, and workshop leaders conducted follow-up on appropriate issues after the annual training conference. To help make this a successful session, participants were asked to come prepared with specific examples of issues that they faced and were encouraged to provide brief written summaries of specific issues prior to the annual training conference.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
64	45	28	A-



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COMMENTS RELATED TO COURSE CONTENT

- Excellent presentation on a current issue
- A lot of restating the difficult issues, but not many answers

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- PowerPoint presentation handout and guidance relevant to ICs should be available during presentation (*Seven responses*)
- Nice presentation style - mobile, heartfelt but also funny.
- Use of prizes with attached concepts underscored point clearly (*Two responses*)
- It was good to spend time after presentation to air out specific issues and questions
- Open discussion format was good especially with introduction of the class and addressing specific questions (*4 responses*)
- Good balance of presentation and discussion (*Two responses*)

COMMENTS RELATED TO CASE STUDIES

- Nice Q&A format
- Add a more realistic application in the real world
- Many examples/specific case studies used. Broad range, yet specific enough for NPL site work at the RPM stage

- Adding more case studies might be of value - it is clear what the problem is, and examples of successes would be good
- Recommend discussing 5 year reviews and getting to a ROD (*Two responses*)
- Good learning tool
- Excellent session
- I am currently writing a ROD and plan to incorporate ICs at another site

GENERAL COMMENTS

- IC issue is here to stay. Most definitely recommend offering this subject at future NARPM conferences

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

Omit: Impact of Institutional Controls on Stars and Star Assurances

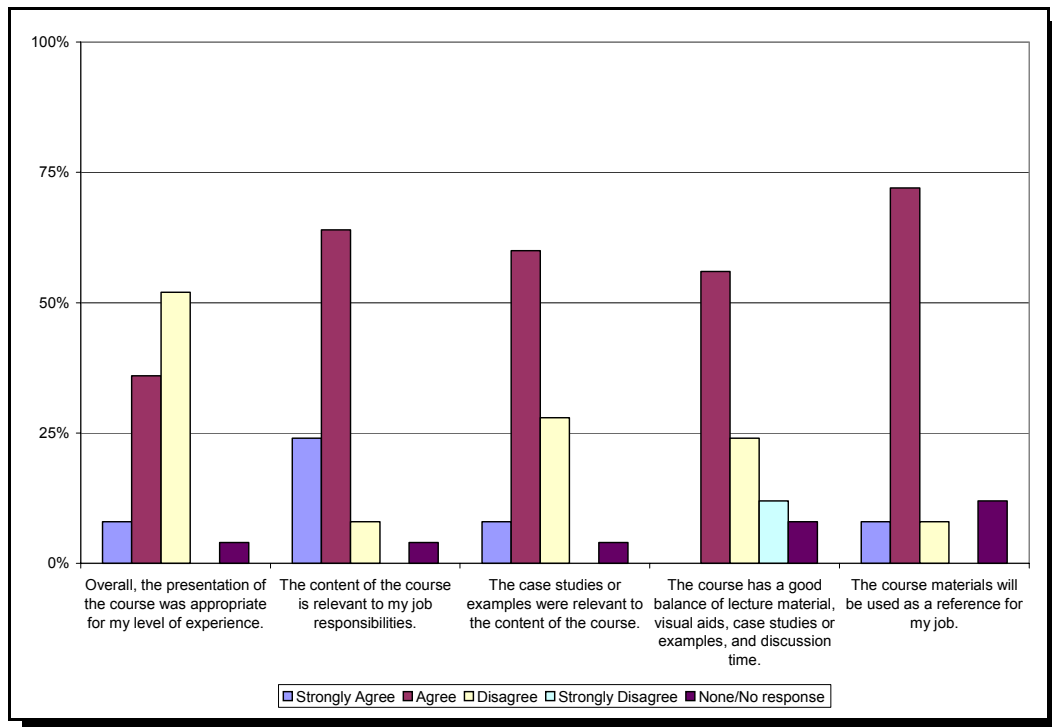
New Field-Based Groundwater and DNAPL Characterization Tools

This 4-hour workshop provided RPMs and hydrogeologists with an overview of the newest tools available to help assess groundwater contamination and help locate dense nonaqueous phase liquids (DNAPL). The workshop included a discussion of and case studies for the following technologies: (1) Groundwater collection devices (for example, drive points), (2) Direct-push deployed membrane interface probes (MIP), (3) Direct-push deployed fluorescence detectors (for example, laser-induced fluorescence [LIF]), (4) Direct-push deployed X-ray fluorescence (XRF) detectors in the saturated zone, (5) Passive diffusion samplers, (6) Field-portable gas chromatograph and mass spectrometer (GC-MS) (for example, HAPSITE), (7) Direct Sampling Ion Trap Mass Spectrometer (DSITMS), and (8) HydroSparge.

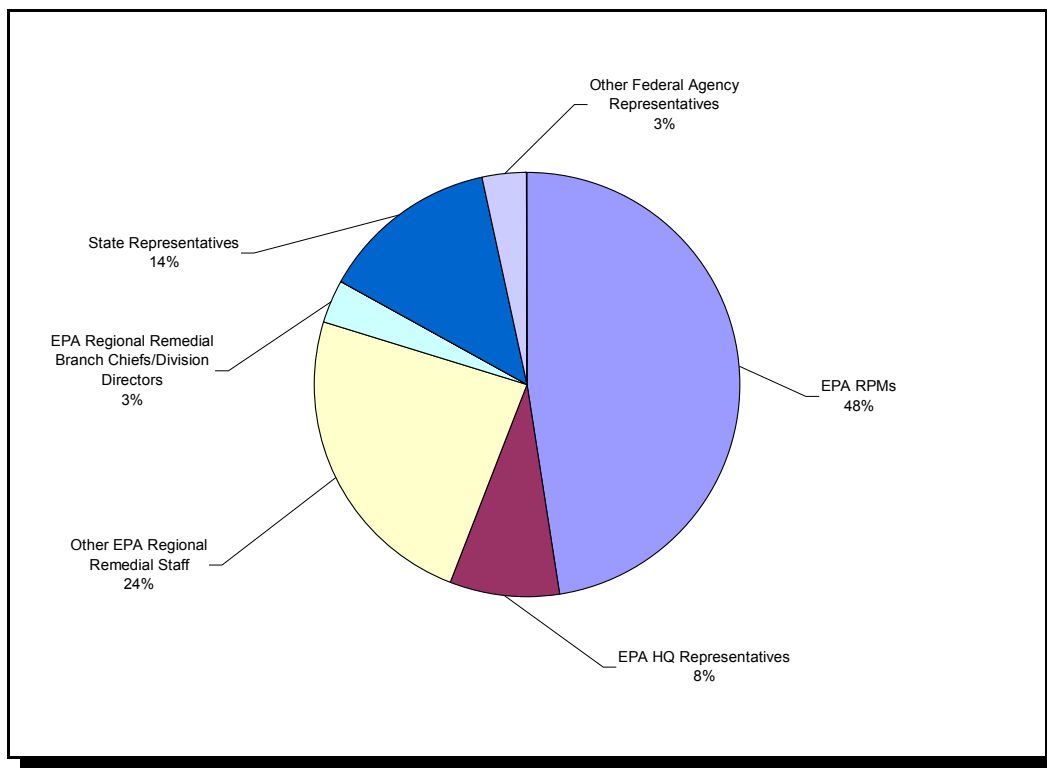
Workshop participants achieved the following objectives: (1) Understanding of the basic science of the above listed tools and their capabilities, and (2) Identified additional technical information, technology support, and vendors.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
64	59	25	C



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Good overview especially instrumentation
- Relevant but not especially enlightening
- Would not recommend the course in its present form, but it could be a really good course if the title of the topic matched the presentation
- The course covers a wide range of technologies available to assess DNAPL, one of the most common types of sites I work on
- The title of the class lead me to believe that it would be a presentation of tools, not case studies (*Six responses*)
- This course needs to be completely redone
- It was too technical and assumed that the audience had advanced knowledge
- Unorganized - Case studies were technical, but methods explanation was very basic
- Too little new information
- The course focused more on approach and TRIAD strategy rather than field-based groundwater tools
- I was expecting details and lessons learned and discussion of new technologies for tracking DNAPLs - not a historical discussion of a couple of sites that happened to have DNAPLs.

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- The presenters were not organized, bored with the section, especially the GW tools section, not all materials given in the course book were used
- Need to present GW tools, advantages and situations in which to use these tools
- Very good technical discussion
- Speakers were very knowledgeable
- I think a full lecture of ‘just showing pictures’ and ‘throwing out names’ is not helpful. I would have expected a more full day class on tools, down-hole sensors etc! (*Three responses*)
- The presentations should be simplified and made more succinct instead of flipping hundreds of graphs/charts. I was totally lost
- The excellent slides should be used for a whole new class with another presenter to teach a ‘101’ class on each of the tools
- General overview of the various characterization tools was poorly presented (*Two responses*)
- The multi-level tool presentation by Dick Willey was good
- Video would have been helpful (*Two responses*)
- The instructor’s attitude was the worst - It is obvious that he wanted to present the case studies. He went through the tools as if he did not care. He changed the agenda of the class radically, causing the lecture to be less informative and less effective for the audience (*Two responses*)
- Need to present more basic and introductory material and details on field-based tools
- This course would have been better if the original agenda had been followed and more preparation by the instructors
- Stop using slides that are too small to be seen by the audience
- Speaker was looking at the screen and reading slides. I believe that he was a paid contractor. If we are going to pay contractors, then we should at least get well-trained professional speakers. I can read the information on my own and learn more that way

COMMENTS RELATED TO CASE STUDIES

- Some of the case studies were confusing (*Two responses*)
- Case studies were excellent
- Visual aids were very helpful in understanding the case studies
- Top heavy with case studies - Case studies went into too much detail, many of them failed to support theme (the characterization tools) (*Two responses*)
- Case study of the Fort Lewis site was poorly presented
- Fort Collins example validated the little experience that I do have
- Some vertical profiling is not practical for cleanup purposes (Waterloo example)
- Some parts of the course were better than others; sampling methods presented are not particularly new
- Too much time was spent on irrelevant background as opposed to just getting to the lessons learned regarding DNAPL investigation tools
- One hour was wasted on a lecture about a site where DNAPL sources were easy and simple to find. Why was this case study, describing a simple conceptual site model even included?
- The last case study should have been the starting point for this session. The last case study was done in an excellent manner and is an example of exactly what I was looking for. It gets an “A”

COMMENTS RELATED TO REFERENCE MATERIALS

- It would have been helpful to have handouts of all lectures (*Two responses*)
- Did not find related to the Savage Well Case Study
- Written materials were more helpful for the ‘tools’ section than oral presentations. Notes below each slide very helpful (*Two responses*)

GENERAL COMMENTS

- I must have missed the memo that this course assumed that (a) I know more than I do regarding NAPLs in soil/groundwater and (b) information would be covered at lightening speed. Helpful for others I am sure - not for me. When will “NAPLs for dummies” be offered?
- All workshops should be like this “overview of tools,” and what works and when it doesn’t! So why did it get rushed through? Need to know more about what drives your decisions! This is the information I needed most. What good is just hearing the name spit back out?!?!
- Characterization tools should be a separate course
- This course should specify level of experience needed; someone with a good deal of field-based experience would not get that much out of a significant portion of the course
- All speakers should attend a public speaking class prior to being selected as presenters - at least a short course one day before the conference begins - to help them give present better and teach them to speak to the audience and not the screen

COMMENTS RELATED TO COURSE LENGTH

- Lengthen: Discussion on new innovative tools (*Seven responses*)
 Applications for cleanup purposes, not research!
- Omit: Some case studies (*Four responses*)
- Add: Basic information on tools - What are they? How do they work? (*Two responses*)
 RPM roundtable discussion on tools that have been used to find DNAPLs and lessons learned

Operation and Maintenance for 2004 and Beyond

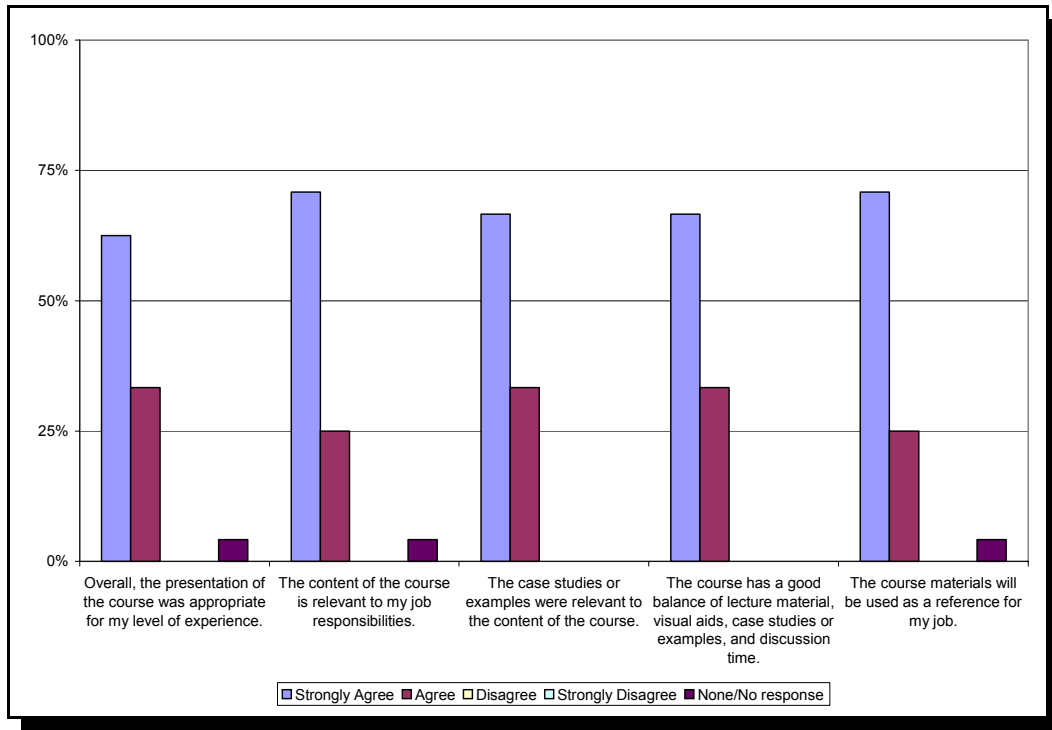
The 8-hour Operation and Maintenance (O&M) workshop built on the strong points of the popular O&M workshops previously offered at the NARPM annual training conferences. The workshop was suitable for RPMs who were just embarking on the O&M phase of a remedy and for RPMs who were already overseeing O&M at their sites. The workshop covered the basics: (1) planning for O&M, (2) ensuring a smooth transition to O&M, (3) overseeing O&M activities effectively, and (4) optimizing the remedy during O&M. New to the workshop were lessons learned from the 30 remedy optimization evaluations that EPA had conducted. Also included was a case study with student participation that illustrated what to expect during a remedy optimization evaluation.

The workshop was followed by an information session on *Effective Strategies for Improved Design and Long-Term Management of Groundwater Remedies* (with emphasis on pump-and treat).

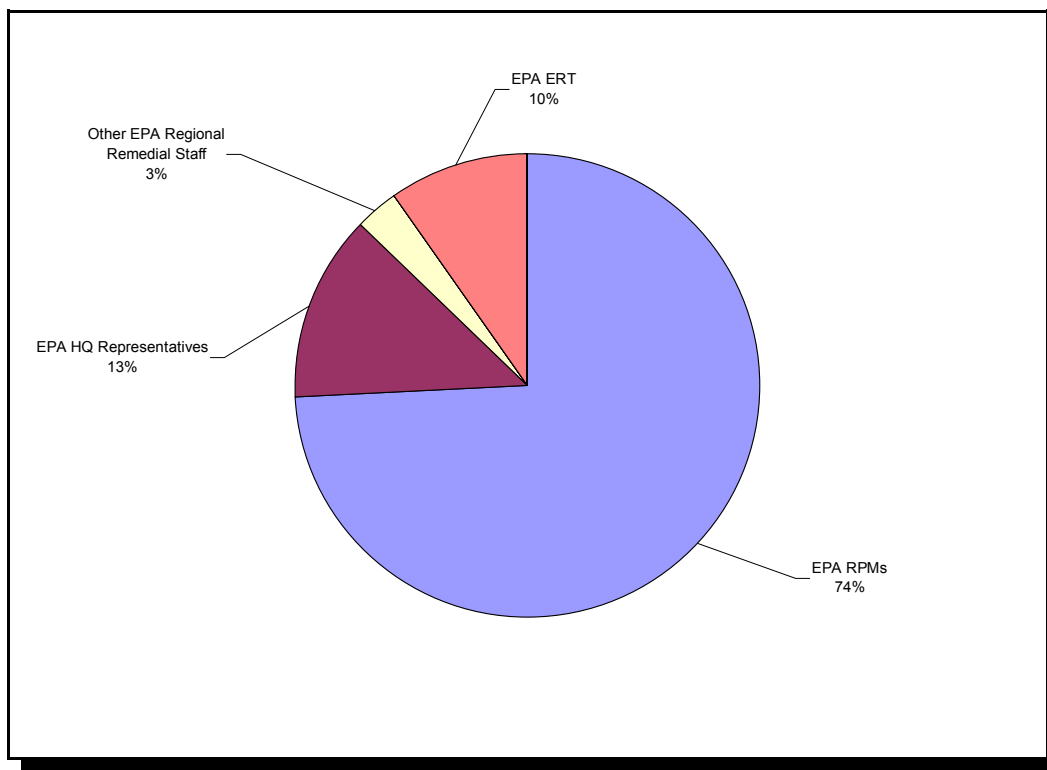
This session addressed recent and upcoming EPA guidance documents for managers of pump-and-treat systems and other groundwater remedies. These guidance documents were based on professional engineering and hydrogeologic experience as well as lessons learned during remedy optimization evaluations conducted at over 30 fund-lead sites with pump-and-treat systems. The following four EPA guidance documents were discussed: (1) *Elements for Effective Management of Operating Pump-and-Treat Systems* (December 2002) provided an overview of a manager's responsibilities for setting appropriate system goals, evaluating performance, evaluating O&M costs, and continually improving a remedy. Topics included conceptual models, capture zone analyses, reporting, and typical areas for reducing cost, (2) *Cost-Effective Design of Pump-and-Treat Systems* outlined design parameters for both extraction systems and treatment plants, and provided appropriate methods for estimating these design parameters. Available technologies and how to select the appropriate technology were then discussed. Illustrative examples were provided, (3) *O&M Report Template for Ground Water Remedies with Emphasis on Pump-and-Treat Systems* provided managers with detailed information on what should be included in O&M reports so that managers, regulators, and other stakeholders can properly evaluate system performance, and (4) *Effective Contracting Strategies for O&M of Pump-and-Treat Systems* (Coming Soon!) highlighted important considerations for developing an O&M contract that protected both the customer and the contractor and facilitated cost-effective performance while allowing for system improvements.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
34	31	24	A-



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Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- This topic is important to my job
- Thorough and very relevant to managing O&M
- Great introduction to O&M and stresses why O&M oversight is important
- Practically related to RPM issues, almost all RPMs have O&M issues (*Two responses*)
- Most sites are headed towards O&M and therefore this course is important
- Thanks for a good course (*Two responses*)
- Relevant information
- This course clarified the correct interpretation of regulations and guidances related to O&M
- The training was great! Don't change a thing, except for updates to the O&M process such as institutional controls etc
- Good principles for the Superfund process

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Teaching methods were appropriate (*Two responses*)
- Internet-based training should be tried out (*Seven responses*)

- Online course offering is good, but may want to offer ‘live’ in a few years since O&M will be more and more important in the years to come
- Very well organized (*Two responses*)
- The instructors were very well prepared, and explained concepts very well

COMMENTS RELATED TO REFERENCE MATERIALS

- I really appreciate the list of references and web addresses
- Useful reference materials

COMMENTS RELATED TO COURSE LENGTH

- Course should be divided into 2 days

GENERAL COMMENTS

- EPA, in general, is unwilling to enforce against the state. How can we require the states to perform all that EPA determines is necessary? It appears that besides making the states agree to the SSC, the two other things that EPA is empowered to do is 5-year review (no enforcement) and retain approval of ‘shut down’

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

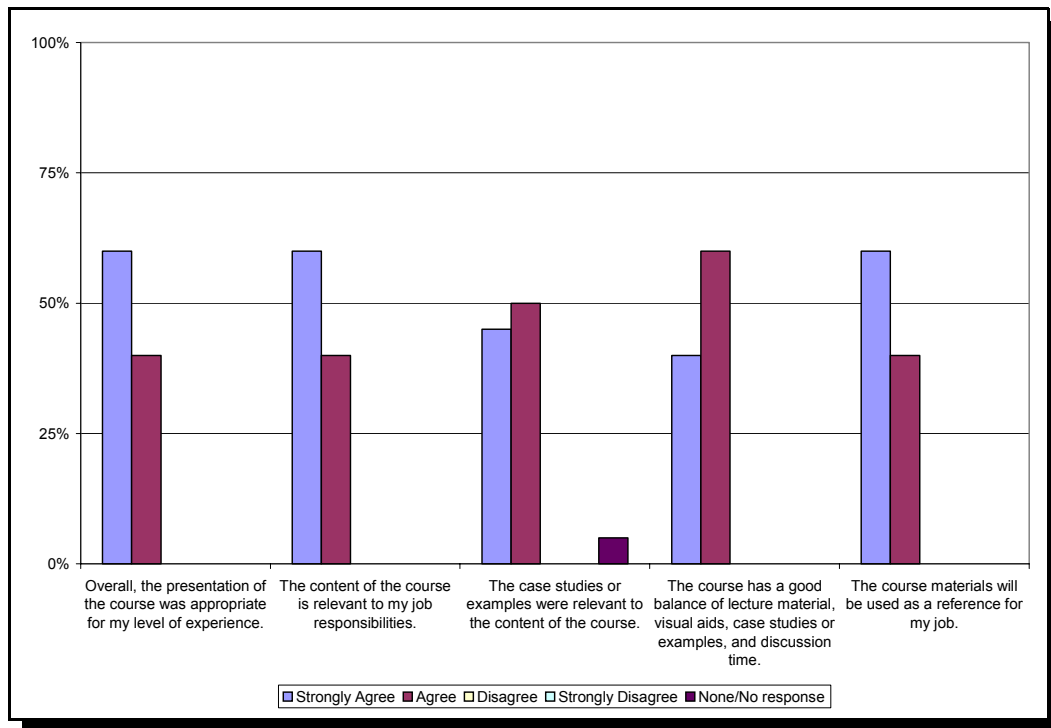
- | | |
|-----------|---|
| Shorten: | Optimization exercise |
| Lengthen: | How to establish O&M criteria |
| | Discussion on problems, strategies and resolutions regarding O&M takeover |
| Add: | How we can enforce the SSC |

Planning for Sampling

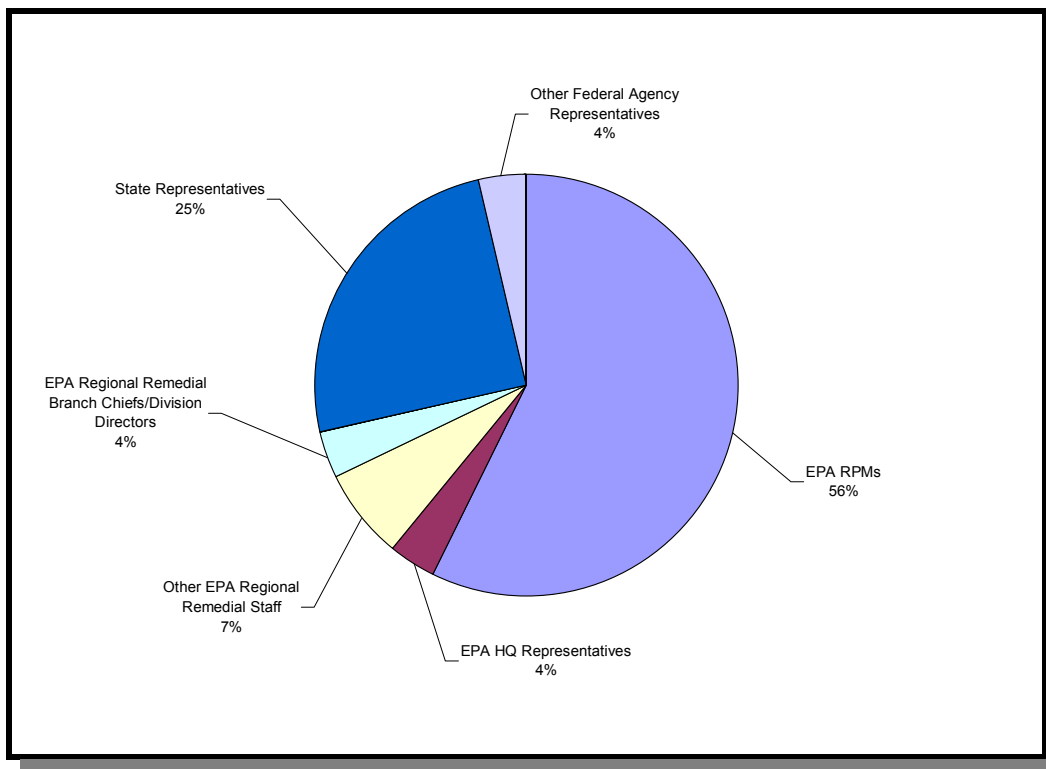
This workshop examined different ways, that you can plan for sampling; how you can link your sampling plan to the decision that you are trying to make; and how you can use Visual Sample Plan (VSP), a software program developed by EPA, DOE, and DoD, to help create the appropriate sampling plan. “Effective sampling leads to good decisions” is a maxim that we can all agree with but that we find difficult to implement. There are many reasons for this, some beyond our control, but others we can plan for. The workshop started with a discussion of planning for data collection and the importance of sample representativeness and then considered commonly used sampling schemes, introduced the VSP software program and concluded with an overview of some more sophisticated sampling schemes. The workshop was intended for anyone wishing to have a better understanding of planning for sampling, and a copy of the VSP program was part of the workshop materials. There were no prerequisites for this workshop.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
30	28	20	A



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COMMENTS RELATED TO COURSE CONTENT

- Title should be “Statistical Sample Planning” versus “Planning for Sampling”
- Course is useful for new RPMs (*Two responses*)
- This is a great tool to assist RPM during decision-making process (*Two responses*)
- This course will improve sample planning to ensure we get the information needed for the least amount of money
- Gives a good overview of statistical sampling approaches
- Provide a map for practical applications between the various sampling techniques and the types of superfund sites, either as a table, a decision tree or a flowchart, from general data to specific data
- Would have liked if the VSP program was given out, although it can be downloaded
- Good session. Statistics made simple!

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Excellent delivery by instructors (*Two responses*)
- Teaching methodology was appropriate (*Four responses*)
- Great presentation (*Two responses*)
- Instructors were very good - clear and enthusiastic and gave useful examples

COMMENTS RELATED TO CASE STUDIES

- More specific superfund site examples would help

GENERAL COMMENTS

- I wish that this course and VSP program have a real clean guidance document addressing gray areas, standard division, historical data use, and new sites with no data (historical)
- I think you left some people in the audience about 1/3 of way through the RSS
- I have been looking for a course like this for years and never found one until now. Good basic explanation of statistics behind sampling schemes
- This was a great course. I learned a lot and will use this information when I return to the office

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

Lengthen: Rank-Set Sampling

Add: Statistical calculations

Risk Assessment data management

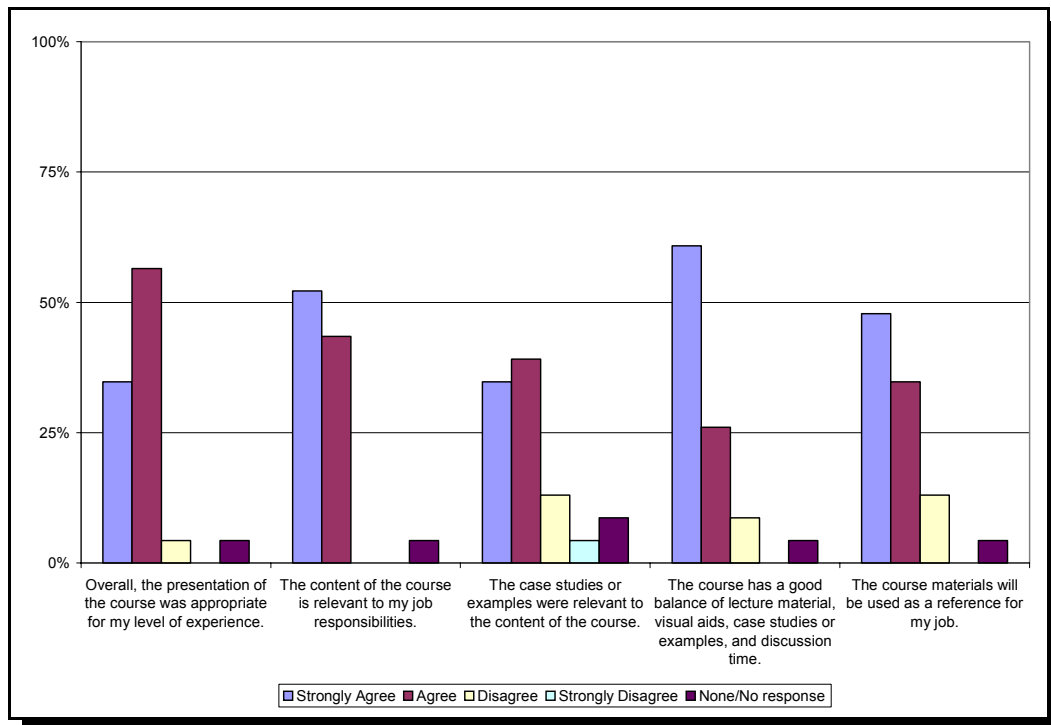
Exercises (individual and group) to practice combination of sampling strategies, case studies

Project Management for RPMs

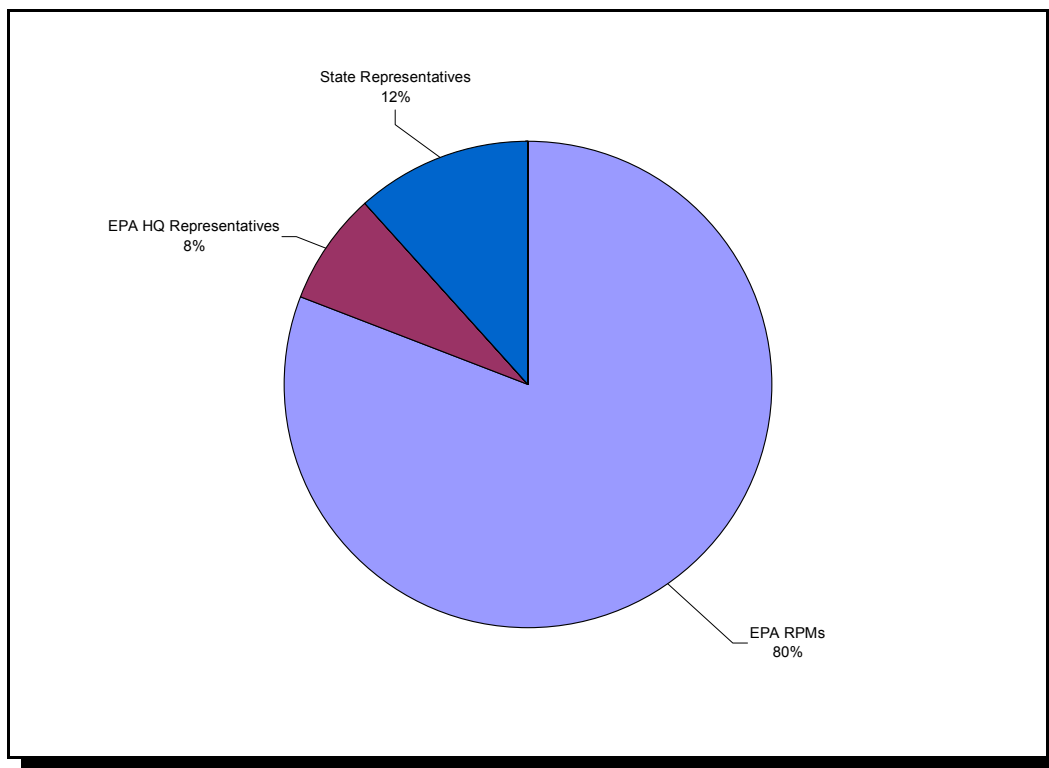
This one-day introductory training workshop was ideal for those who found that more and more of their work assignments are project-oriented. This workshop guided the participants through any phase of the CERCLA process, including a remedial investigation (RI)/feasibility study (FS) or the corrective action decision (CAD)/ROD. The workshop was a process to guide the participants and make them better project managers. The four-step process will help the participants and their team stay focused and efficient. When it comes to effective project management, the challenge for most individuals is not “How do I manage this project?” but “How do I balance multiple projects plus my other tasks and commitments?” This is why the course taught Franklin Covey Project Management—An Approach That Really Works. What the workshop did not do was help the participants pick an appropriate cover for their landfill or a specific remedy to remove those pesky polychlorinated biphenyls (PCBs). What it did do was show them how to manage a project effectively as well as how to focus on the right project at the right time. The participants acquired the skills to: (1) Implement a simple, four-step project management process of **visualize, plan, implement, and close**, (2) Interview key stakeholders, (3) Create clear vision statements that reflect key stakeholder buy-in, (4) Divide the project into manageable pieces in order to create a plan and a time line, (5) Ensure that appropriate “go” or “no-go” decisions are made during the process, (6) Hold effective meetings, (7) Coordinate project workload with weekly and daily schedules, and (7) Close the project by evaluating successes and identifying future improvements. This approach to project management will help the participants and their team members create, plan, implement, and complete successful projects on time and within budget.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
30	26	23	B+



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COMMENTS RELATED TO COURSE CONTENT

- Discussion seemed to focus on 'ideal' situations instead of real world examples
- Very good discussion in the class
- Tailor small group activities for RPMs instead of using Franklin Covey materials verbatim (*Three responses*)
- Discussion at the end of class was very useful since it focused on specific RPM issues
- Incorporate use of PDA and computer resources
- Too many 'team' activities
- Skills learned in this course will be directly applicable in my job and life

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Instructional methods coupled with interactive sessions and hands-on exercises were excellent! Attention grabbing!
- Very dynamic presentation of helpful information (*Two responses*)
- I liked the energy level of the course instructor (*Two responses*)
- Mark is a terrific and motivated speaker (*Five responses*)
- Great time management - Mark kept the course on track

- I appreciate Mark’s enthusiasm and interest in adding to our tool kit! (*Three responses*)
- Instructor was friendly and willing to answer to questions. At my request, he agreed to hold the information session. I appreciate his flexibility

COMMENTS RELATED TO CASE STUDIES

- Would have been useful if more than one site could have been discussed as examples of using these methods and being successful
- Inadequate case studies (*Three responses*)
- Case studies used should be relevant to Superfund/ RPM-related situations (*Ten responses*)
- Mark infused plenty of relevant Superfund examples as well as other anecdotes
- Second half of the class was useful
- Case studies reinforced the content

COMMENTS RELATED TO REFERENCE MATERIALS

- I have used the Franklin Covey planner for the past 12 years. A good addition to the tool kit!
- “Project tools” are dated. Use more recently developed tool kits

COMMENTS RELATED TO COURSE LENGTH

- Increase course length - too short of a time frame for material to be covered (*Three responses*)

GENERAL COMMENTS

- Put together a new course on Time Management (*Three responses*)

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

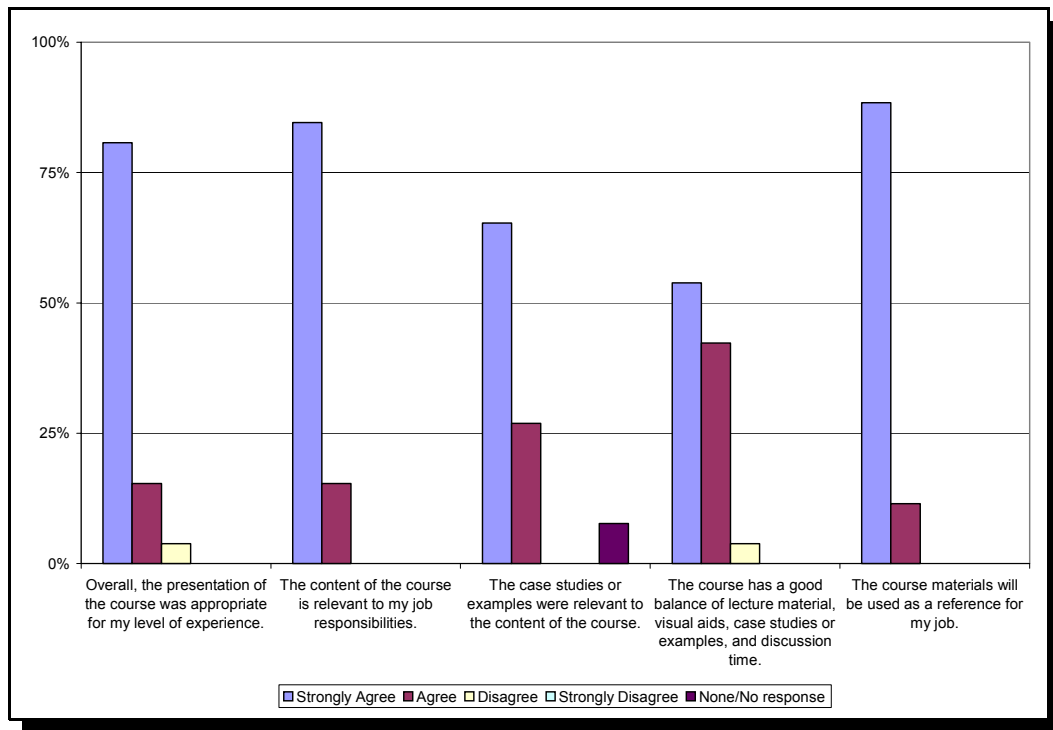
- Shorten: Presentation of the Franklin Covey Planner
- Lengthen: Closure and effective implementation
 Application to EPA RPM activities, and how to balance multiple tasks
 Section on ‘interviewing key stakeholders’
 Implementation and time management module
 Closure module

RCRA for RPMs

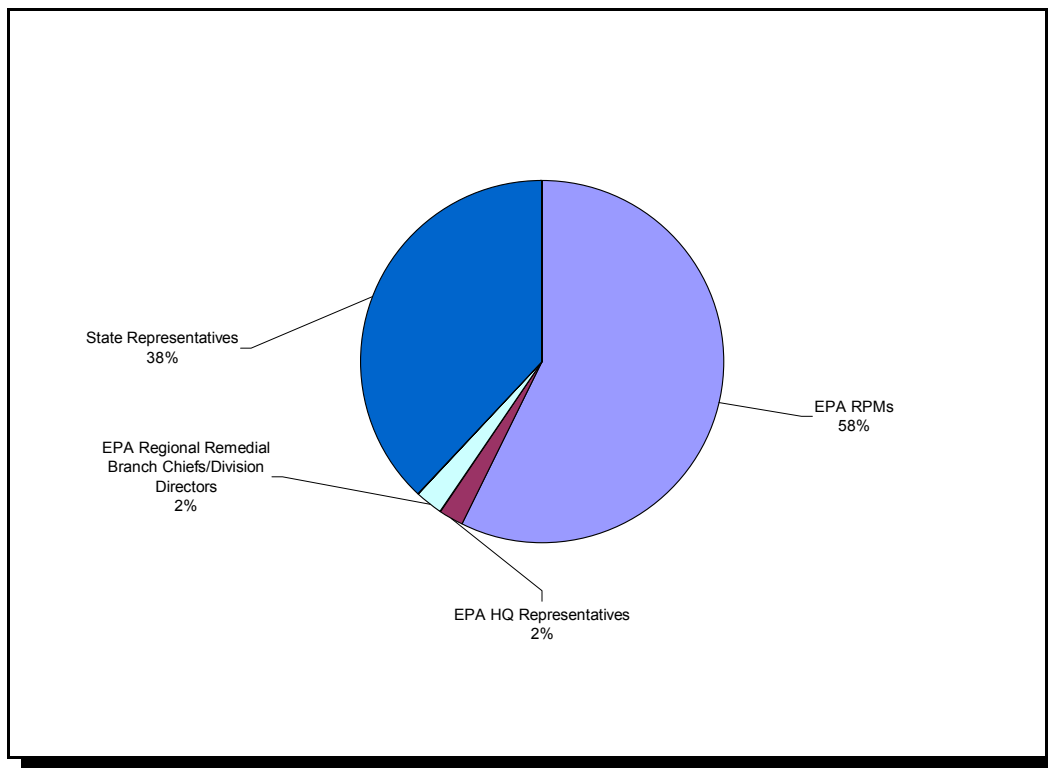
This interactive one-day training workshop, explained the RCRA requirements that apply or are relevant and appropriate to most CERCLA cleanups. The workshop was designed for participants with limited understanding of RCRA as well as RPMs with a good knowledge of RCRA who want a refresher course or additional instruction in specific RCRA topics. By taking the workshop, participants achieved the following: (1) Learned to navigate the legal framework for implementing RCRA; and (4) Examined special rules and policies that apply to management of remediation waste. The workshop addressed the “contained-in” policy, revised requirements for corrective action management units (CAMU), staging piles, the area of contamination (AOC) policy, alternative LDR treatment standards for soils, and other rules and policies created to provide flexibility in managing hazardous remediation waste.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
49	42	26	A



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COMMENTS RELATED TO COURSE CONTENT

- RCRA is confusing for RPMs. Hence important course to have at the conference. Should be required as part of training (*Two responses*)
- From a state perspective, this course yielded insight as to how Federal regulations are applied at Superfund sites. I have gained knowledge on how to help in the process from the state as well as learned about the limitations that exist for the RPM with regards to waste disposal and other responsibility
- Best course by far of the whole conference!
- This course gave a broad overview of different areas in which RCRA might affect cleanup at Superfund sites
- Great basic overview for CERCLA experts with minimal RCRA knowledge (*Three responses*)
- I needed an “Introduction to RCRA” course first! Course was too fast-paced (*Two responses*)
- Excellent resource materials

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Excellent presentations (*Four responses*)
- Excellent speakers - very knowledgeable in this subject (*Five responses*)
- Simple, easy format - I’ve never had such a simple and understandable presentation of a complex subject. I have a fairly clear basic understanding of the concepts. Thanks!

- Lengthy questions should be kept until after the presentation
- Change pages 142, 144 if there are no ARARs for off-site!
- Dave is very knowledgeable, but answered questions too slowly
- Paul was an excellent presenter, but could improve by being careful not to leave out important, basic details from examples by simply assuming that the audience is aware of them
- This is tough subject to cover in one day - The instructors did a good job of giving us an overview
- Instructors did not seem to be cognizant of time constraints. Some sections went longer than scheduled

COMMENTS RELATED TO CASE STUDIES

- Ran out of time for case studies (*Two responses*)
- Would like more case studies
- Case studies should include field examples

COMMENTS RELATED TO COURSE LENGTH

- Spend more time on introductory material such as definitions etc.
- This course should not be a one day course. A lot of information to digest even with some RCRA experience coming into the course

GENERAL COMMENTS

- I am going to try to bring this course to HQ for my staff
- Please come to Region 9 and teach the 2-day course

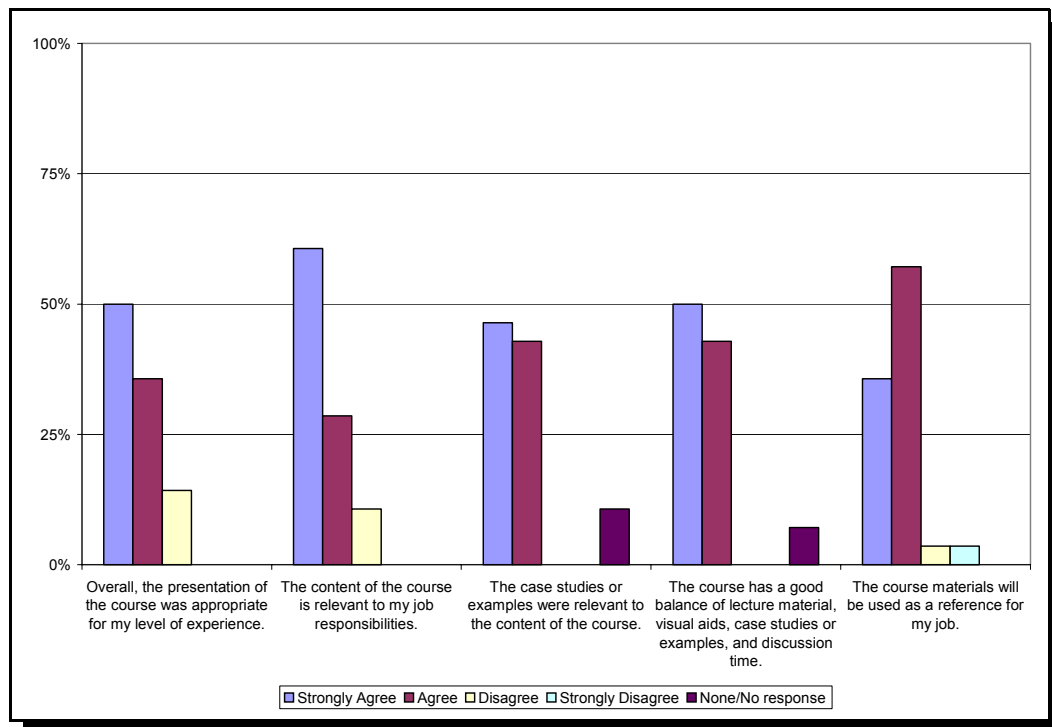
Remedial Action Management and Contracting Strategy Workshop

This workshop provided a broad view of topics that RPMs must address in preparation for managing Fund-lead Superfund remedial action projects. There are many technical and administrative issues that an RPM must consider when planning a remedial action. Project risks and uncertainties must be clearly understood, to properly define the scope of work. Remedial cost savings will be realized when the construction strategy is planned well and the appropriate contract vehicle is selected for the scope of work identified. The workshop was a prototype for several short training sessions being developed for regional delivery. The workshop was designed to be interactive, and audience participation was encouraged. Participants were also asked for feedback on the workshop's content and presentation format.

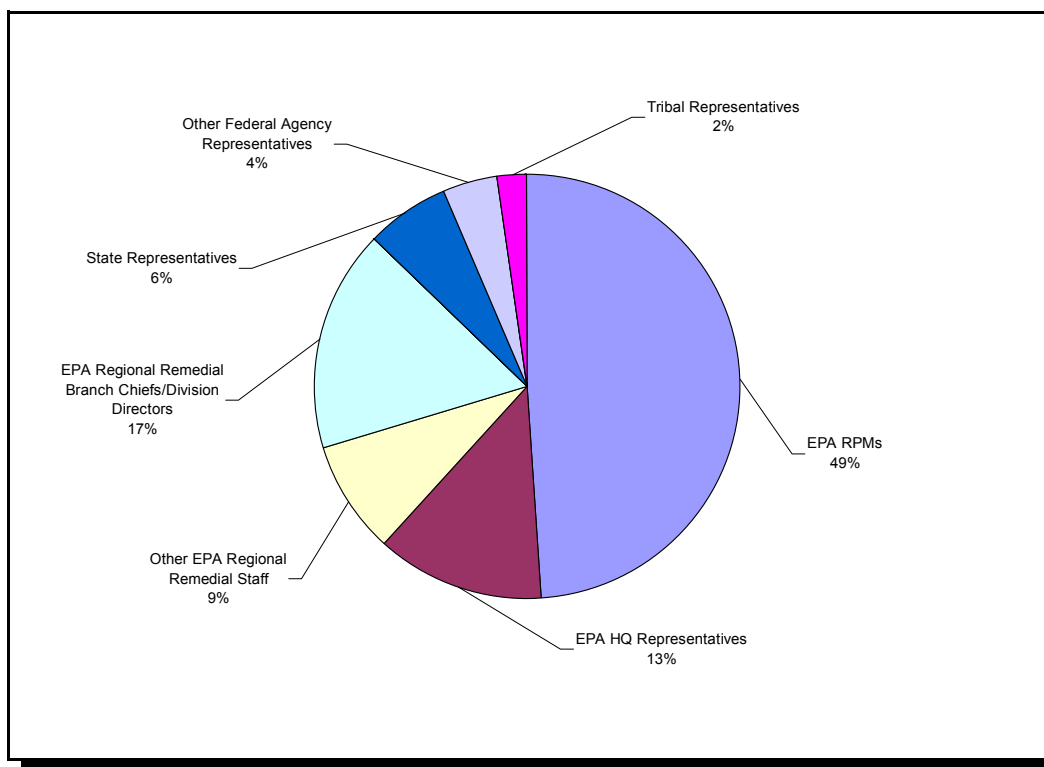
Key topics covered included the following: (1) Appropriate considerations during the design phase, such as the project risk analysis and project planning considerations, (2) A description of the operation of the National Risk-Based Priority Panel as it relates to remedial action project funding and scope, (3) Development of the remedial action contract strategy, (4) Management of remedial action activities, (5) Considerations for post construction activities, (6) Project characteristics related to selection of the construction contract type, (7) Types of contract mechanisms available for construction projects, and (8) Management and resource considerations relevant to contract type selection.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
48	47	28	B+



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Module 1 was very helpful in providing context for decision-making. Module 2 was useful to determine the typed contract that might be used for particular projects
- Describe the types of contracts - do not assume that everyone knows what a ‘sealed bid contract’ is
- Very informative course
- Important topic - contract strategy and management is a key topic for every job and can make or break a job
- Every RPM and manager under Superfund remediation or removal program should take this course
- This course seems most relevant for an RPM with limited RA experience
- I have had considerable experience in EPA, but limited RA experience. Therefore, even senior RPMs need more help in this area
- I expected more RA contract help - “lessons learned” etc
- Have an RPM discuss various strategies that they employ and best practices
- Excellent information - candid and well thought out. Contracting strategy section was too fundamental for me
- Really appreciated the Superfund history component - this should have been mandatory for all RPMs
- The overview of the historical and current framework was very helpful for me to get a basic understanding of how, where and why we are today in terms of funding (*Two responses*)
- Applicable to any RPM, whether overseeing RI/FS, or RD/RA (*Two responses*)

- Good balance of technical work and appropriate/available contracting mechanisms
- Part 1 was too ‘wishy washy’ and Part 2 way too simple, beating one easy idea to a slow and miserable death!
- Challenged me to learn more about priority panel/funding process as well as getting more advice regarding contract management
- First session was right on! Recommend finding a broader forum such as plenary session or a lunch speech
- PPA needs more flushing out - RPM could inflate costs based on uncertainties and problems
- Second session needs more direction on its application - RAC, Corps, etc

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- John was able to provide more information because of his experience (*Two responses*)
- The speaker is very enthusiastic and knowledgeable
- Excellent job of engaging audience, good mix of lecture, discussion, anecdotes, questions from audience etc.
- Excellent presentation (*Four responses*)
- John’s experience cannot be replicated (*Three responses*)

COMMENTS RELATED TO CASE STUDIES

- Add more case studies (*Three responses*)
- Good real-life examples (*Four responses*)

GENERAL COMMENTS

- Although intensive training may not be realistic in this funding scenario, I think EPA would suffer without good, thorough training for the later stages of RD/RA. RPM peer training is limited to work overload. Suggest a longer training at NARPM

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

- Shorten historical information (*Four responses*)
- Lengthen information on contracting details and examples (*Four responses*)
- Suggest a half-day course with more details for ‘senior’ RPMs

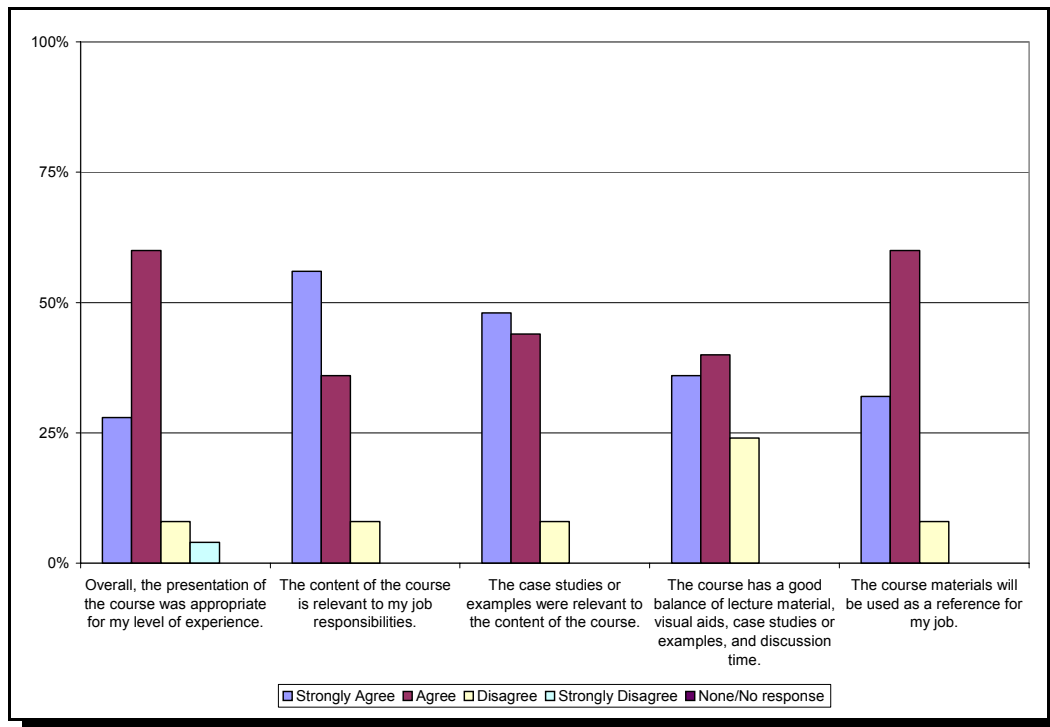
Sediments Workshop

This four-hour workshop was developed to build on the concepts presented at previous NARPM annual training conferences, most recently the 2003 module presented in Colorado Springs, Colorado. The interactive workshop featured a series of case studies designed to provide RPMs with a technical and policy-based framework to properly manage the challenges posed by contaminated sediment sites. Specifically, the workshop presented: (1) The results of EPA’s recently completed sediment remedy effectiveness review, (2) Techniques to delineate potential remediation areas through streamlined ecological risk assessments, (3) River and stream channel stability and morphology evaluations, (4) Field data collection activities to support river and stream sedimentation studies and numerical sediment transport models, and (5) Uses of bioaccumulation data and models during remedy selection and remedy evaluation.

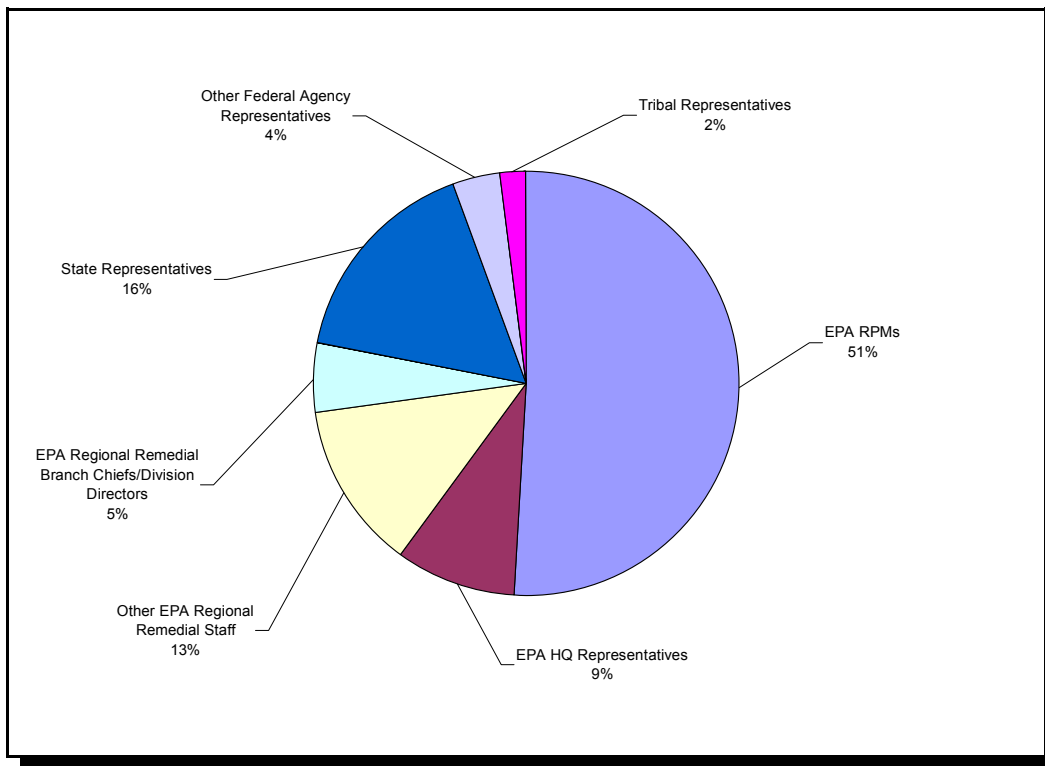
Leaders of the workshop included RPMs, staff from OSRTI, and modelers from the EPA ORD and the USACE with a range of experience at complex sediment sites across the United States. The workshop also included question-and-answer sessions at the end of specific modules to allow an exchange of ideas by the participants and workshop leaders.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
66	55	25	B



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- I do not want an overview. I want an interactive detailed discussion (*Two responses*)
- These were four separate lectures, it was not an interactive workshop (*Two responses*)
- Sediment information is valuable to making decisions on my site
- Presentation and discussion on stream morphology/model was very helpful and interesting
- Good information and overview regarding approaches to handle sediment sites
- More information on ponds versus just stream beds would be beneficial
- Too general for models - need examples or case studies (*Two responses*)
- The revised sediment guidance information will be most useful
- This was a good course - shorten some of the deeply technical information to keep presentation on schedule and also allow for more discussion time (*Four responses*)
- Practical approaches to sediment sites were presented
- Excellent! (*Two responses*)
- Too basic (*Two responses*)
- Participants should be engaged in discussion about real issues and obstacles at their sites and should try to help each other on reaching a consensus on how to deal with specific issues. Before the conference, participants should be asked to provide a synopsis of an issue to resolve and then we can have a real workshop

- We need to have a real debate over “MNR”/No action with monitoring and why we choose to do nothing with contaminants in water body systems posing risks while we (the regulator community and public funds) spend millions on minimal technology requirements for landfills that do not pose any risks, except to trespassers. The workshop would be more useful as a pro and con debate with HQ, RPMs and others participating and representing different points of view
- EPA guidance discussion was not too helpful since it provided guidance only on non-controversial issues
- Identify controversial issues

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- USACE presentation was informative for river sites and also well presented
- This workshop would have been more useful if Mr. Zeller had sought out participation by other sediment RPMs in other regions and would have set up an interactive discussion on sediment issues
- The individual speakers were good, but this should have been called a paper discussion, not a workshop
- Great presentations
- All presentations were excellent and informative
- Speakers need to be cognizant of time
- Highlighting a tool like ‘streamlined’ ERA is fine. But we need to know about the approach and then a discussion on why it was used and how it helped make a remedy decision

COMMENTS RELATED TO CASE STUDIES

- More in depth portrayal of use of model on case studies. For example, for the HBC model run on the computer or computer simulation of real-time entry into streamlined model
- Good case studies to highlight subject
- Suggest adding case studies from other regions
- ERM case study was interesting, photos were helpful
- Add more case studies (*Three responses*)

COMMENTS RELATED TO REFERENCE MATERIALS

- Save paper- just reference websites or published literature should be enough (*Two responses*)

COMMENTS RELATED TO COURSE LENGTH

- All sections were of a good length - enough time to get concept across but not too long so that it got boring

GENERAL COMMENTS

- Please provide general guidelines to all speakers such as define all acronyms, put 2 slides per page, provide a list of tools and resources and websites

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THE COURSE

- | | |
|-----------|--|
| Shorten: | Bio-models
Stream stability topic
General guidelines (<i>Two responses</i>)
Modeling and channel modification (<i>Four responses</i>) |
| Lengthen: | 8 steps
Case studies and tools and resources
Craig Zeller’s case study |

Omit: Lectures
Add: Interactive panel discussion (*Three responses*)
Working with trustees and stakeholders
Small stream evaluation and cleanup remedy
Information on sediment remediation options such as dredge, cap, MNA and when each is appropriate Debate session

Strategies for Implementing Surface Soil Cleanup

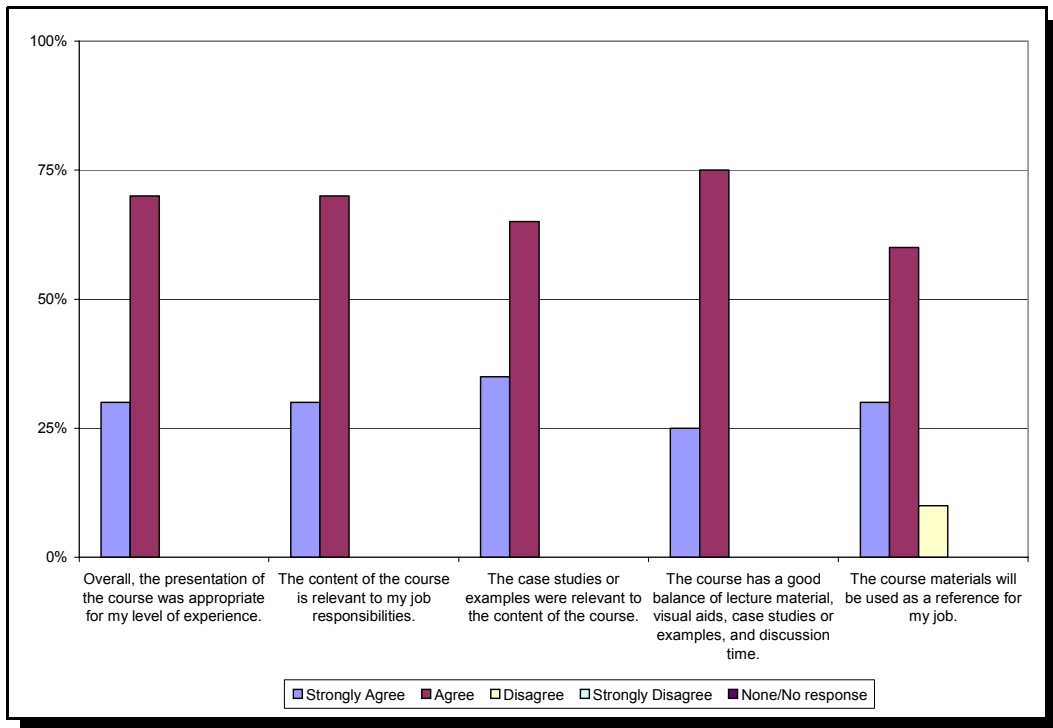
This workshop introduced the concepts and methods in the EPA OSWER guidance titled *Guidance on Surface Soil Cleanup at Hazardous Waste Sites: Implementing Cleanup Levels*. The guidance was recently completed and provides methods for implementing surface soil cleanups in a cost-effective manner. Achieving EPA's goal of protecting human health and the environment requires that soil cleanups at hazardous waste sites eliminate unacceptably high risks associated with potential exposure to contaminated soils.

Two key concepts, the exposure unit (EU) and the not-to-exceed level and area average, were discussed. The EU is the geographic area within which a receptor comes in contact with a contaminated medium during the exposure duration. The EU should be defined based on the receptor, the exposure medium, and the nature of the receptor's contact with the medium. The second key concept is the difference between the implementation of a cleanup level as a not-to-exceed level or as an area average. The familiar not-to-exceed option entails treating or removing all soil with contaminant concentrations exceeding the cleanup level. The area average option involves treating or removing soils with the highest contaminant concentrations such that the average or 95 percent upper confidence level (UCL95) concentration remaining on site after remediation is at or below the cleanup level. This approach requires determination of a "remedial action level (RAL)," the level to which all contaminant concentrations in soil within an EU must be reduced to ensure that the average or UCL95 concentration for the EU is at or below the cleanup level.

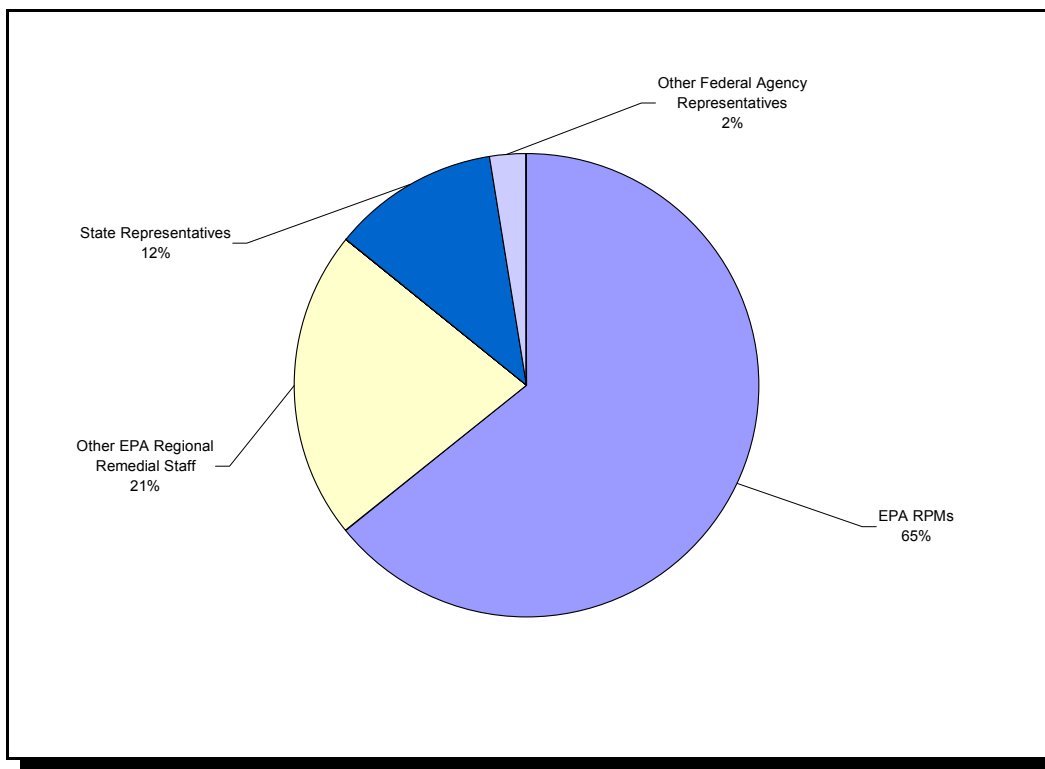
Participants also were offered insight on the portion of the OSWER guidance "*Deciding How to Implement the Cleanup Level*." The workshop and the OSWER guidance were intended to help risk managers decide whether to implement cleanup levels as not-to-exceed levels or as area averages, and this part of the guidance discusses these options with respect to their advantages, disadvantages, and appropriate uses. Some of the factors to be considered in making the decision to implement a cleanup level as an area average are, the size of the EU; the quality and quantity of site data; the potential acute toxicity of the chemicals of concern; compliance with applicable or relevant and appropriate requirements (ARAR); and community acceptance.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
55	42	20	B



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Definitely a great tool for RPMs to ensure appropriate data management
- Good information session, probably the most interesting and applicable seminar during 3 days of classes
- Course was a little heavier in statistics than I thought it would be
- Title of this course was ‘Strategies for implementing surface soil cleanup’, there were no strategies discussed
- Course material did not reflect title of this course
- Need more information on State, EPA, and public acceptance of this method
- Some topics were redundant

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Slides with white background show up much better, for presentation materials containing numerics and tables, please do not use blue/violet background
- Minor audio problems with earlier speakers
- I prefer PR6 as cleanup level
- Could have moved a bit faster
- Some printout of slides were too small to be seen (*Two responses*)
- If you must talk statistics, you have to translate into terms that RPM can relate to. This includes presentations and answering questions (i.e. speak in plain English)

- Instructional methods were most appropriate (*Two responses*)
- Good presentation (*Two responses*)

COMMENTS RELATED TO CASE STUDIES

- Very complex topic, should provide a dynamic example

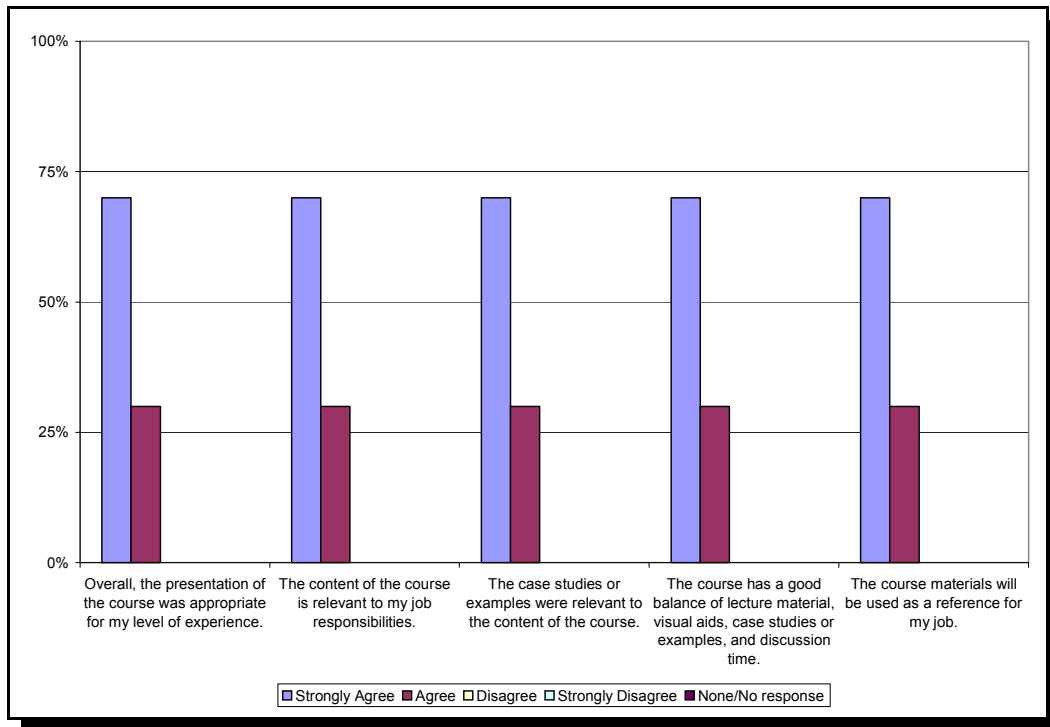
Superfund Land Revitalization and Ecological Restoration

This one-day training workshop explained the relevance and importance of ecological restoration in the Superfund program and discussed implementation strategies and specific repair techniques to speed the recovery of disturbed and impoverished land. By taking the workshop, participants achieved the following: (1) Learned why ecological restoration is important to the Superfund program; (2) Gained an understanding of the relationship between land disturbance, functioning ecological systems, and how restoration projects are managed; (3) Learned various repair techniques currently in use; and (4) Examined case studies and successful ecological restoration projects. The workshop included discussions of successful restoration projects at formerly contaminated sites, including creation of wildlife habitats and restoration of wetlands.

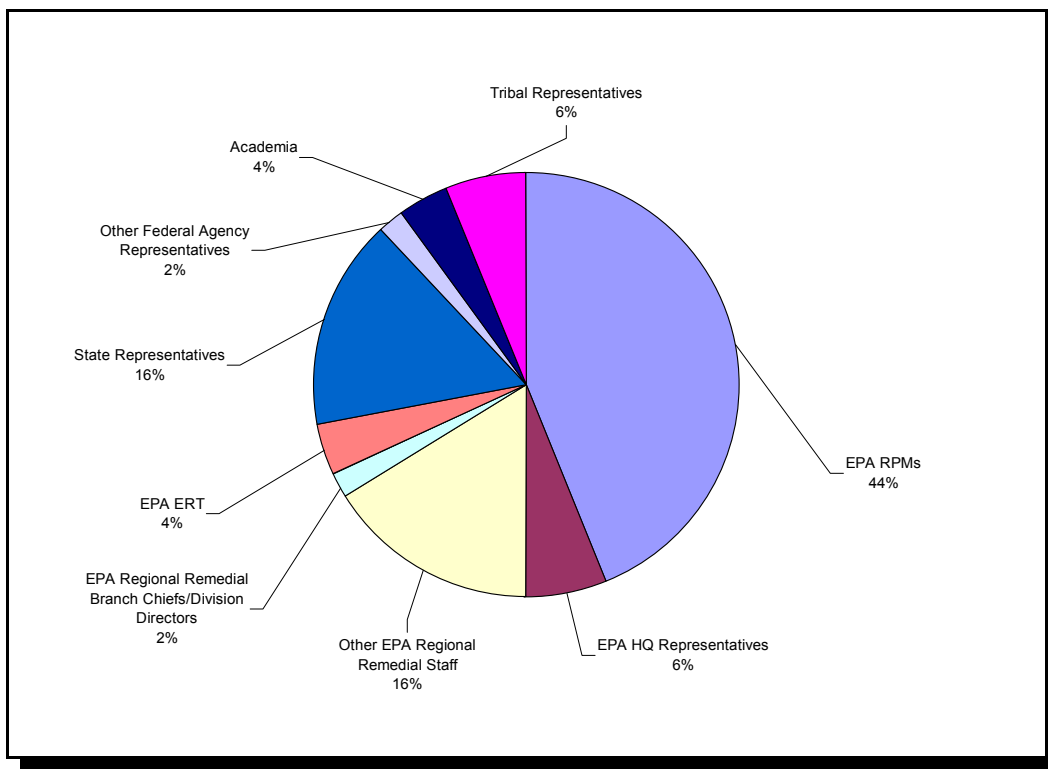
The workshop was conducted by staff from ERT and by nationally recognized experts on ecological restoration.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
69	50	10	A



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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COMMENTS RELATED TO COURSE CONTENT

- Good information on restoration portion of course
- Course material should follow lecture better
- This is a course that provides fairly useful information on how to further accomplish site cleanups and return the sites to productive use

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Dr. Handel and Dr. Brown were fantastic speakers, highly knowledgeable and their presentations were very effective (*Two responses*)
- The RPM presentation was ‘no value added’
- Would have preferred more Q&A with the professors

COMMENTS ON CASE STUDIES

- The RPM case study could have been incorporated into previous discussions (*Two responses*)

GENERAL COMMENTS

- Excellent seminar. Need many more exactly like this in order to reach a larger audience
- It is good to include an RPM on the panel, but bring an RPM who has worked with one of the professors or ERT and combine the talk - so that there is more time for discussion

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

- Shorten: The entire course, seemed to lose participation in the afternoon, half day should work better
 Nadeau's presentation
- Add: Phytoremediation

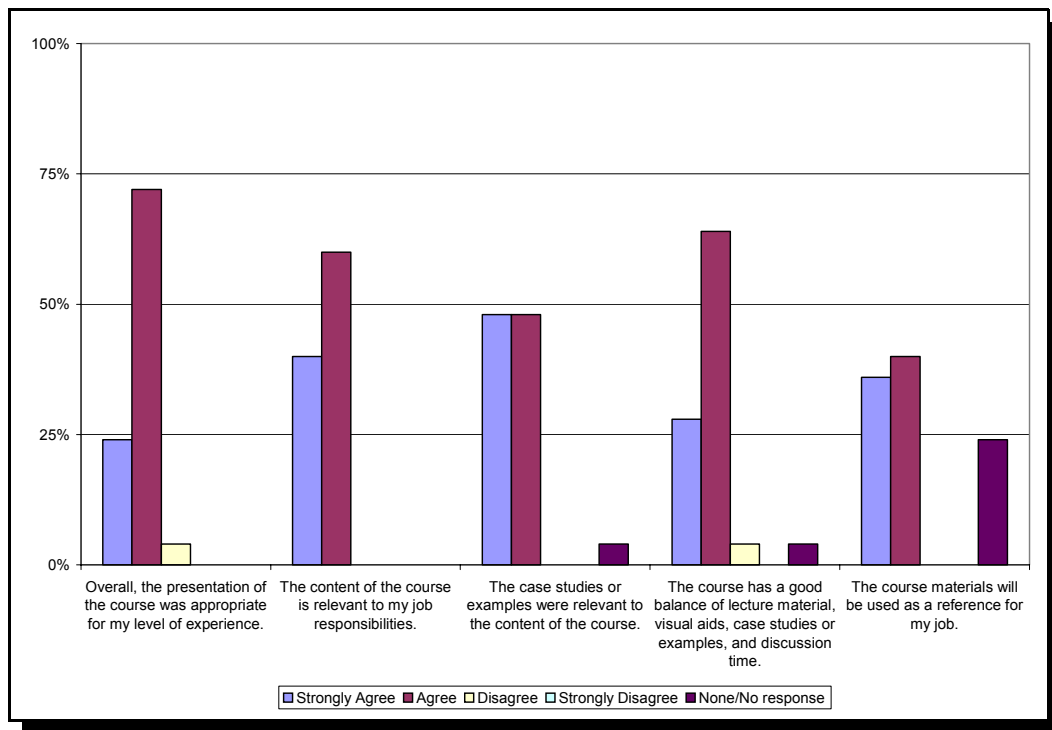
The Triad Approach to Managing Decision Uncertainty for Better Cleanup Projects

The 3.5-hour training workshop, provided the basics of the Triad approach to site cleanup and used case studies to illustrate successful implementation of the approach. The Triad approach combined systematic planning and decision uncertainty management with dynamic work strategies and state-of-the-art, real-time measurement technologies. This approach lowers project costs while increasing confidence that data are correctly interpreted so that exposure and remedy decisions are correctly made. The workshop was relevant to regulators, environmental program managers, risk assessors, and data quality control staff. By taking the workshop, participants achieved the following objectives: (1) To understand the basics of sampling and analytical uncertainty and their effects on data quality, (2) To understand the mechanics of using Triad: systematic planning, dynamic work strategies, and real-time measurement systems, (3) To understand how Triad improves the accuracy of conceptual site models (CSM), and (4) To identify available Triad documentation and technical support.

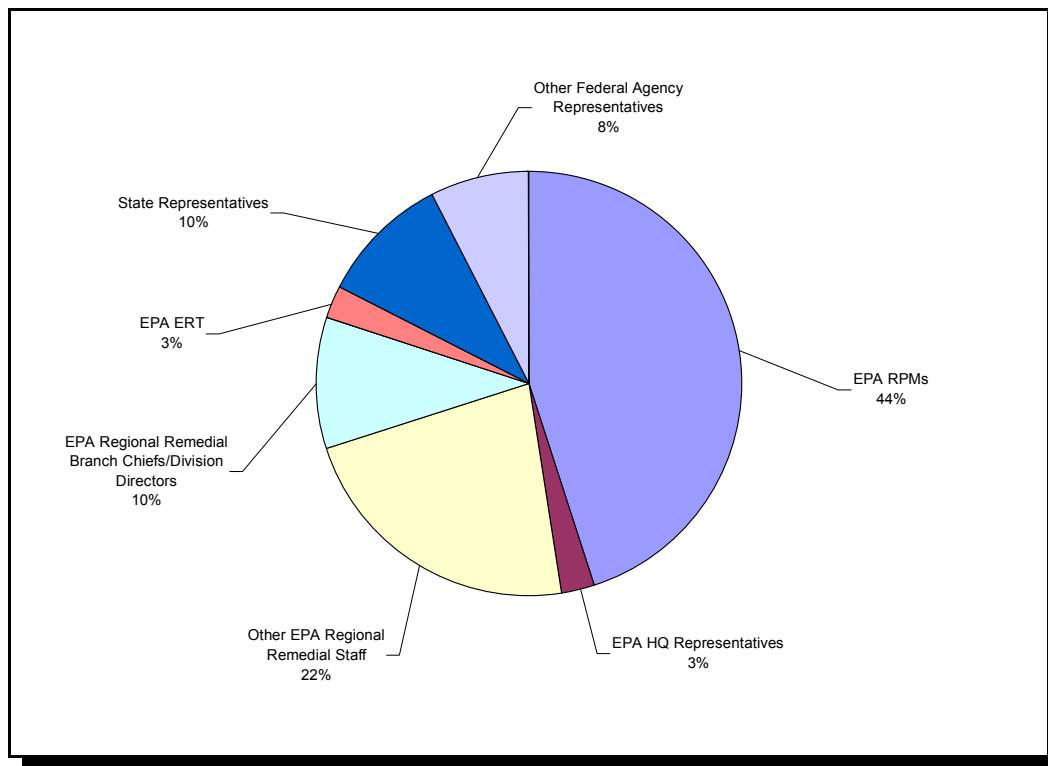
The instructional methodology for the workshop included lectures, case studies, and a panel discussion.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
45	40	25	B+



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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COMMENTS RELATED TO COURSE CONTENT

- Good overview of the TRIAD approach (*Five responses*)
- Too many details were provided. Details should be part of another course (TRIAD Part II) (*Two responses*)
- No real discussion time (*Three responses*)
- Too much detail packed into too short a time period (*Five responses*)
- Most RPMs should use this approach
- Important information will help streamline data gathering and site characterization needs for NPL sites (*Two responses*)
- This course is very important in making decisions for cleanup and remediation
- This approach will result in reduction in project cost and better data for decision making (*Two responses*)

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Ask audience questions periodically, so as to ensure that information is not being lost
- Great job by Robert Howe in delivering the course (*Two responses*)
- Introduction by Travis Cain was too long

- The speakers were presenting their version of the TRIAD. It should be made clear that this is just one way of using the TRIAD in a spectrum of other options. Don't knock DQO experimental design issues, it is not easy to use, but also has its merits. Acronyms presented (slides SP-29 and SP-30) do not clarify issues
- Excellent presentations
- This topic would be very dry without an instructor who is enthusiastic and knowledgeable
- Good job giving a sense of the strengths and weaknesses of the approach
- Straight lecture is too boring. Must consider breaking up the lecture

COMMENTS RELATED TO CASE STUDIES

- Case studies were not discussed in depth. Examples were explained too hastily

COMMENTS RELATED TO REFERENCE MATERIALS

- Excellent materials (*Two responses*)

GENERAL COMMENTS

- Add references to those within EPA who can help with statistics
- This course should be a required course for RPMs

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

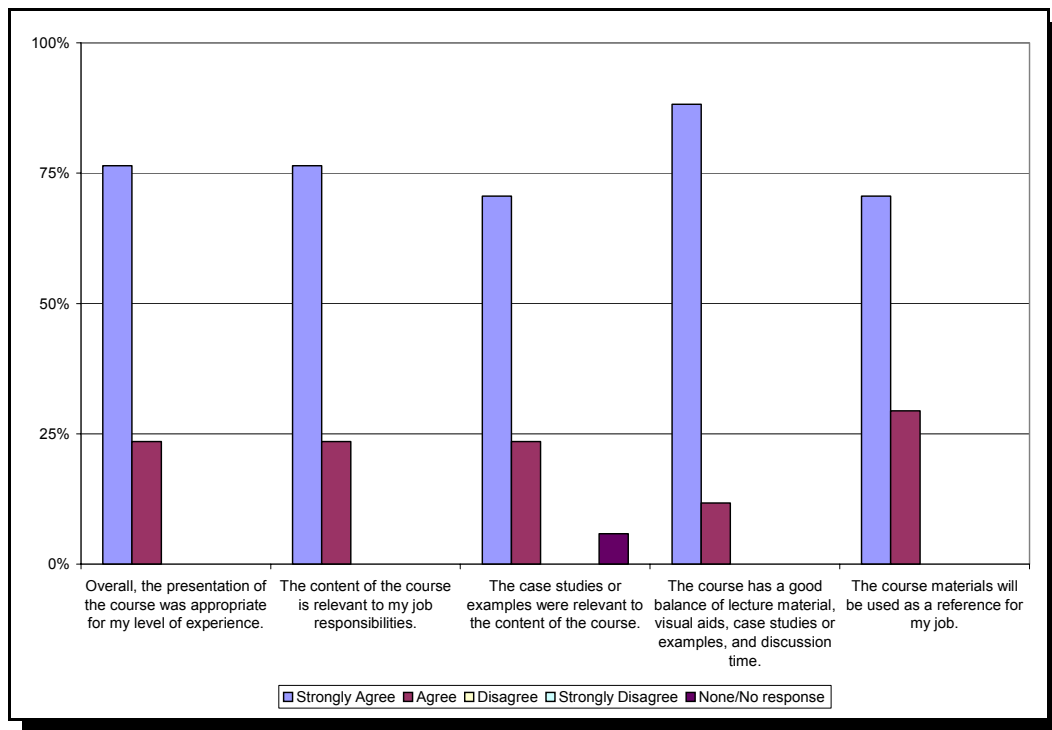
Add: Information on stakeholder agreement on data quality needs and conceptual models
 Ways to incorporate TRIAD at different stages of site cleanup

Using the DiSC Assessment Process for Personal and Professional Development

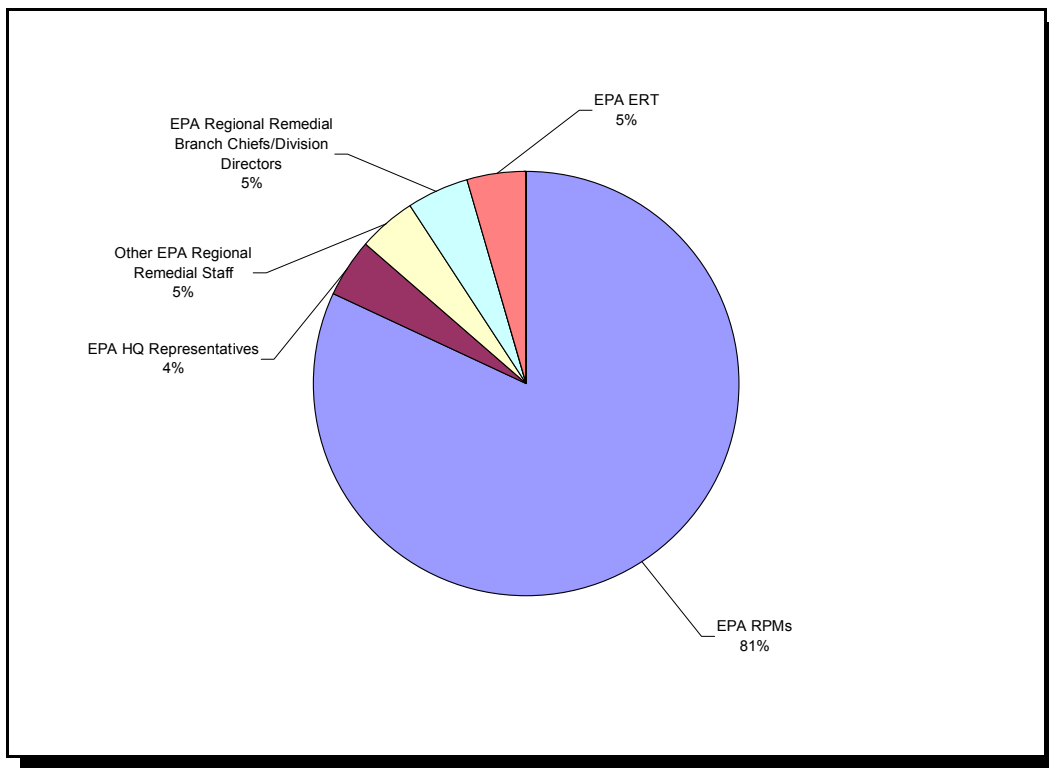
This 3.5-hour workshop taught the participants to identify the behaviors that aid or hinder their personal and professional success using the DiSC System of behavioral management. Performance research has shown that individuals with the highest levels of performance are those who manage themselves effectively. Preregistration and completion of an on-line evaluation test were required before participating in the workshop. Individual participants developed their own self-management plans to maximize their performance based on their behavioral styles.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
26	22	17	A



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COMMENTS RELATED TO COURSE CONTENT

- Excellent! (*Two responses*)
- Excellent content, very relevant to my job
- Good pace, content and exercises
- Good discussion on how to handle different situations
- Great course (*Two responses*)
- The DiSC model does not seem accurate for me

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Great instructor/facilitator
- Sharon Ridings did a great job teaching this course (*Four responses*)
- Excellent method of presentation (*Two responses*)
- Well planned course (*Two responses*)

COMMENTS RELATED TO CASE STUDIES

- Instructor provided good real life examples (*Two responses*)

COMMENTS RELATED TO REFERENCE MATERIALS

- Interesting materials

GENERAL COMMENTS

- Bring back each year!

COMMENTS RELATED TO COURSE LENGTH

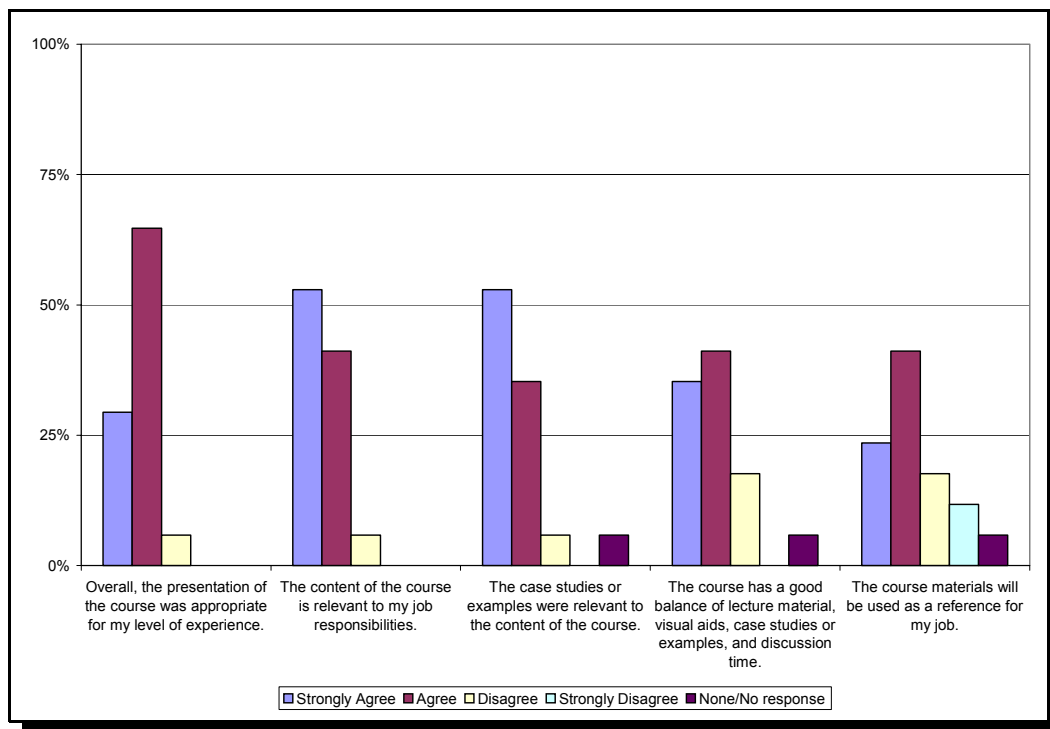
- Could be a full day course (*Two responses*)

Using Lines of Evidence at Contaminated Sediment Sites

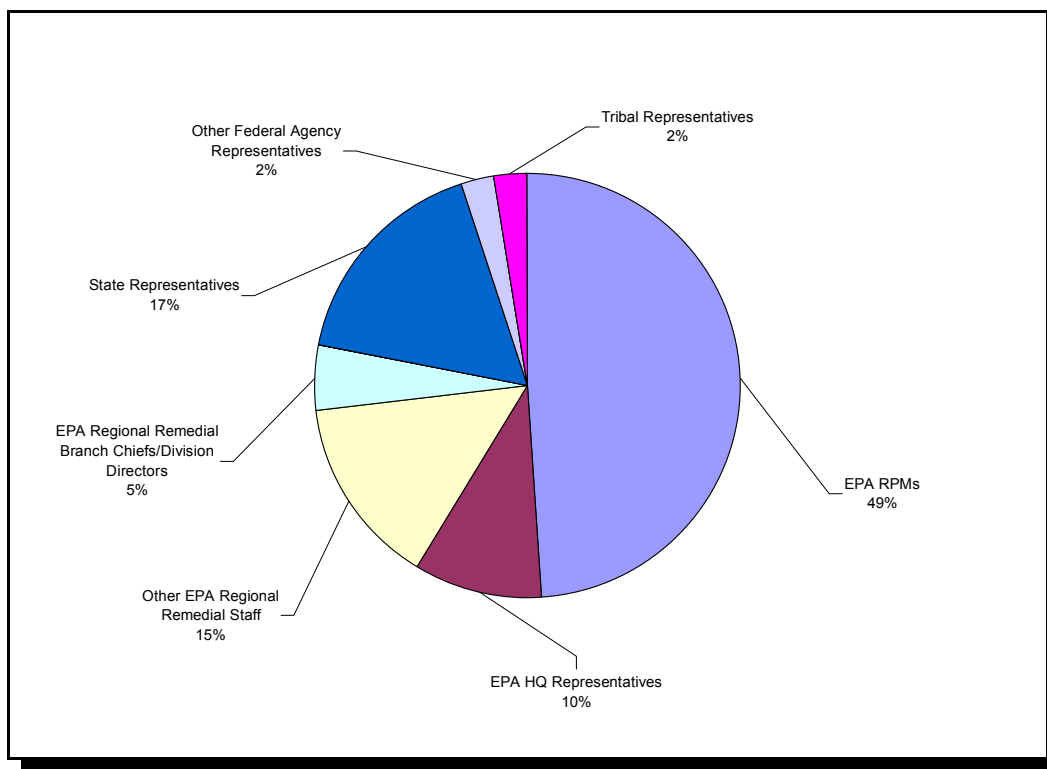
This workshop presented and discussed the Sediment Monitoring And Remedial Tools (SMART) fact sheets. OSRTI currently is producing a series of SMART fact sheets for RPMs relating to ecological risk assessment and monitoring at contaminated sediment sites. The first three fact sheets address how to collect and interpret benthic, sediment toxicity, and tissue biota data for sediment sites. The fourth fact sheet discusses a lines of evidence approach for contaminated sediment sites and draws on information presented in the first three SMART fact sheets. In this context, lines of evidence are different types of information that indicate the potential ecological risk posed by contaminated sediments, such as the results of sediment toxicity tests, exceedances of sediment quality guidelines, and results of benthic community surveys. Participants expected to: (1) Learn what lines of evidence are and identify some common problems and predicaments that may occur when using multiple lines of evidence (for example, what do you do if your toxicity data is bad but the chemistry is fine), (2) Hear about a real life site where lines of evidence have been used, and (3) See how actual site data submitted by RPMs are analyzed and how this data can be used to make a remedial decision for a contaminated sediment site.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
48	41	17	A-



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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COMMENTS RELATED TO COURSE CONTENT

- Not clear when these techniques should be interpreted. During RI/FS or screening?
- Too technical. Not enough application to actual cleanups (*Two responses*)
- Information provided was new and useful
- All information provided was good. However, concentrating on one segment of the talk and going into details would have been better and more useful
- More hands-on training would be helpful
- Discussion of lower budget projects would be helpful too, especially for sites that never score out clearly as high risk
- Very good take home messages
- The topic is extremely useful. Tone down the amount of information presented, so that the principals of the TRIAD approach are more understandable
- Excellent course
- Add more discussion time

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Dave Mount did a good job of bringing practical experience to interpreting many conflicting lines of evidence
- Great discussion of new techniques
- Excellent presentation by David Mount

- Too much information. Instructor seemed more concerned about making it through all the slides
- Speakers did an excellent job of conveying information over different levels of expertise and supporting one another. Presentations were well coordinated, so that the next speaker often explained or discussed further what the previous speaker had touched upon

COMMENTS RELATED TO CASE STUDIES

- Good case studies (*Two responses*)
- Need more case studies (*Three responses*)
- Great site-specific examples
- Case studies should explain how conflicting data were resolved

COMMENTS RELATED TO REFERENCE MATERIALS

- Too many slides on one page and handout print is too small to read. In addition, color slides do not print out well (*Nine responses*)

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

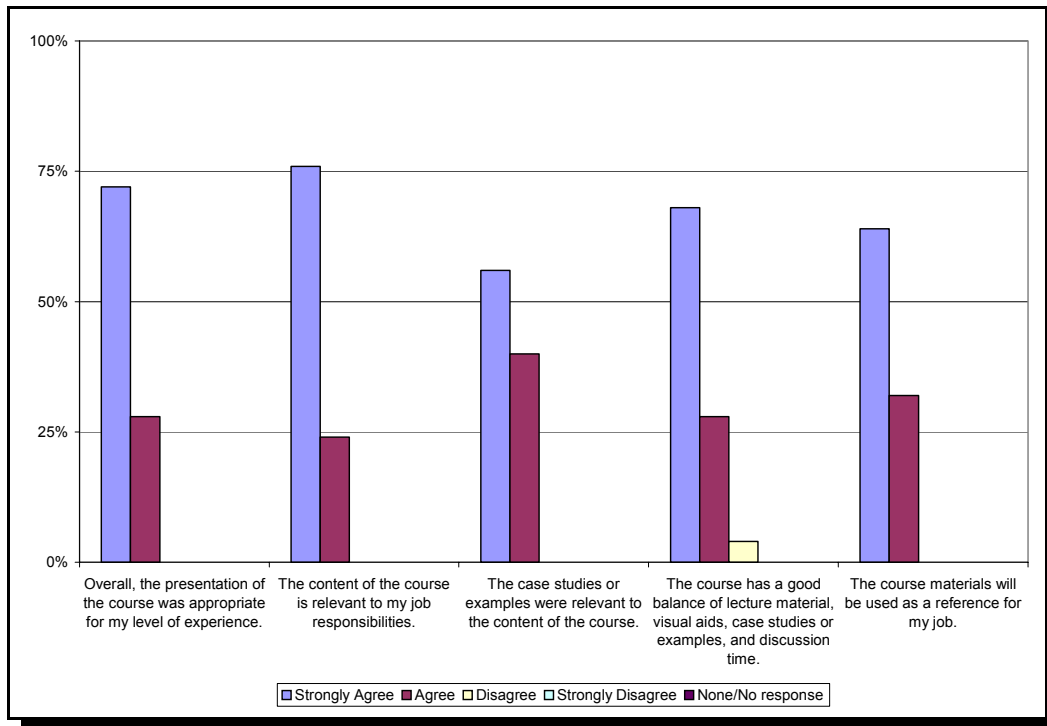
- Omit: The last segment - was basic equilibrium partitioning
- Add: Actual establishment of remediation goals based on ecorisk and designing cleanup
- How these principles translate or apply to receptors higher in the food chain, such as
- fishing-eating birds
- How concentrations determined in study affected final cleanup criteria
- Information on what test studies were found to be most useful for certain types of sites

Using Your Emotional Intelligence Edge

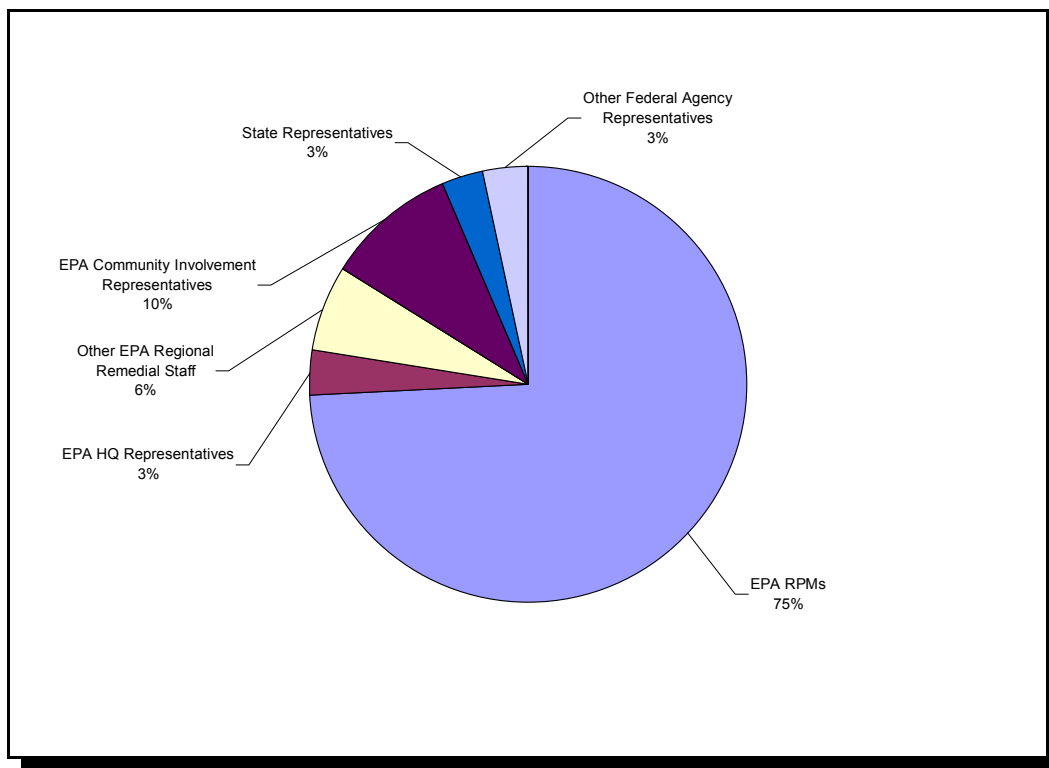
In this 3.5-hour workshop, participants learned about emotional intelligence (EI) and its effect on relating to other people and managing their work. This workshop consisted of lectures and participatory activities during which participants learned about tools and techniques to help increase their own EI. EI is a measurement of abilities that integrates effective and cognitive skills but that is distinct from traditional measurements of intelligence. EI suggests that emotional needs, drives, and the true values of a person guide all overt behaviors.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
27	31	25	A



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



Summarized below is written information provided on the evaluation forms. Similar observations have been combined and paraphrased. Those comments that were submitted by a single respondent and where not subject to paraphrasing, are presented verbatim.

COMMENTS RELATED TO COURSE CONTENT

- Useful to anyone, good basic introduction to the subject
- Abstract covered all basic topics and points of Emotional Intelligence (*Two responses*)
- Great class! Thanks! (*Three responses*)
- These skills are important to anyone in any setting (work, personal, etc.). The exercises really made me introspect
- This class was excellent! I could use the information in all aspects of my life. I am looking forward to reading the book
- This course would be helpful in regions with team building etc
- The content is essential in how we deal internally and externally within the Agency. We must continue to improve in our communications with each other
- I was skeptical at first, but was pleasantly surprised and learned many new things!

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- Would like to have handouts of the things listed on the flip chart, so that I do not have to copy everything, and therefore do not miss what is being said (*Four responses*)
- Good use of videos, illustrative examples, and class interaction (*Three responses*)
- The personal interaction of the instructor made the course special (*Two responses*)
- Very well done! (*Four responses*)

- A wonderful course and a wonderful instructor. Sharon is an energetic, enthusiastic and measured individual. She is articulate and communicated the concepts of the course very clearly and gave real world examples of applying the concepts (*Seven responses*)
- Situational group activity and more interactive exercises would be better (*Three responses*)
- The presenter effectively used examples to illustrate the concepts, but her presentation of the concepts themselves was ineffective. She jumped from one concept to the next without breaking, and she sped quickly from one to the next before you could grasp the abstract concept
- The exercises in book are good, but I wish we could have language which reflect statements RPM say
- It would be appreciated if the instructor could point to the book when referring to the material because when trying to take notes, I lose attention with what is being taught
- You need to come to Region 2! We need your help.

COMMENTS RELATED TO COURSE LENGTH

- Make this an all-day course, so as to allow more time, and avoid rushing (*Three responses*)
- How can we make this an all week course with examples of working with other agencies and programs?

GENERAL COMMENTS

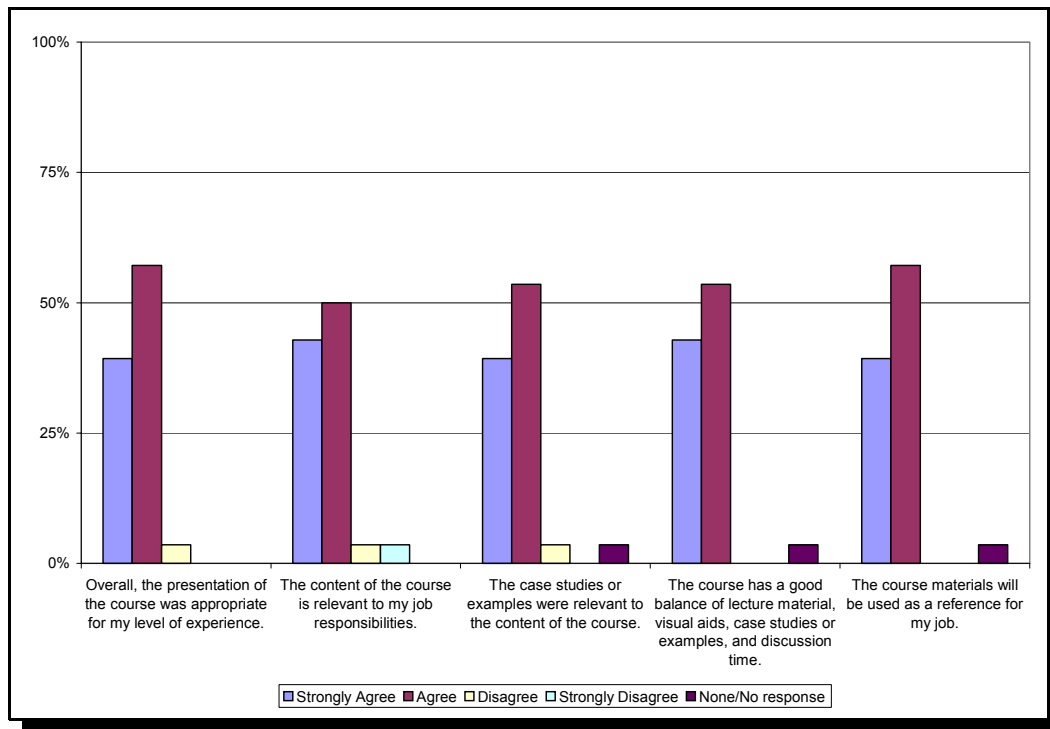
- The course has implication for improving workplace function and productivity
- Definitely, this is one of the best courses that I have taken so far. I support this kind of training for NARPM
- Would be a great idea to provide this training with management
- Would recommend this course for supervisors and division directors (*Four responses*)
- Should be a mandatory course, just like we are required to take contract management and HAZWOPER training

Wastewater Treatment Fundamentals for RPMs

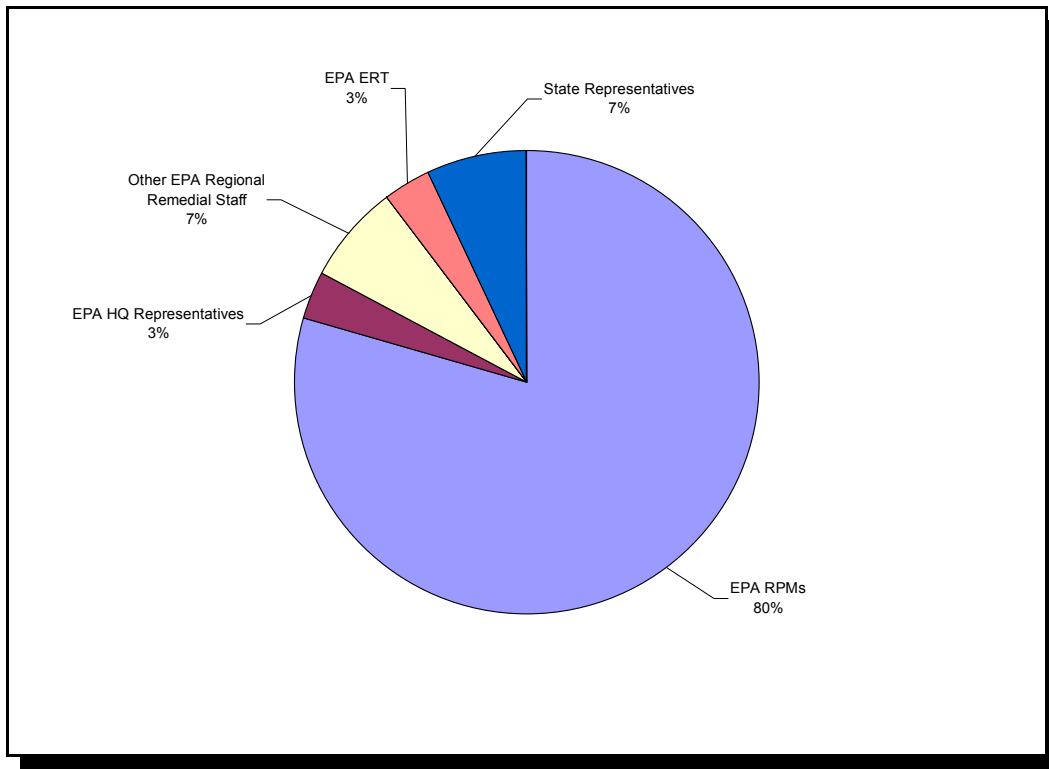
This workshop was designed for RPMs with no or limited experience in providing wastewater treatment oversight during a remedial response. The workshop focused on the types of wastewater that an RPM might encounter; it did not address storm water or sanitary wastewater. The workshop provided a basic overview of the regulatory issues associated with wastewater treatment and the regulations that influence treatment methodology. By taking this workshop, RPMs gained an understanding of the important components of wastewater treatment. The workshop also identified regulatory issues associated with wastewater treatment, treated water discharge, and residual waste management. RPMs were able to review the types of wastewater treatment available and learn the sequence of steps in the development of a wastewater treatment system; these steps included making decisions about residual waste management, equipment selection, the order of equipment in the treatment system, and system sizing. The workshop also allowed RPMs to examine the capabilities and limitations of conventional wastewater treatment equipment components.

The table and bar graph below illustrate information about how participants evaluated this course.

OVERVIEW OF COMMENTS RECEIVED			
Number of Participants Who Preregistered	Number of Participants Who Signed Course Roster	Number of Evaluation Forms Submitted	Average Grade
33	29	28	B+



The pie chart below illustrates the percentages of students for the course by job title. EPA RPMs and Other EPA Regional Remedial Support staff represented over 50 percent of the attendees.



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COMMENTS RELATED TO COURSE CONTENT

- May want to consider a morning introductory course followed by an advanced course in the afternoon
- Course provides general knowledge in an area that RPMs are not quite familiar with
- Should provide examples of Superfund sites using wastewater treatment procedures
- Good overview (*Three responses*)
- Good fundamental course (*Three responses*)
- Would have been helpful if instructor had compared capital versus O&M costs for alternatives. This is a key factor when designing system since states are interested in minimizing O&M costs
- I really liked the process flow development scenario

COMMENTS RELATED TO INSTRUCTIONAL METHODS

- A video could be used to show some of the processes
- Instructor assumed that we knew a lot about the topic although this was an introductory course. Second half was much better
- RPM should teach this course
- Instructor gave definitions without explanations in slides, and then did not adequately cover them in his explanation

COMMENTS RELATED TO CASE STUDIES

- Need real site case studies
- More case studies are needed

COMMENTS RELATED TO COURSE LENGTH

- Ran out of time
- Should be a one-day training course. Too much material to absorb in 3 hours (*Four responses*)

GENERAL COMMENTS

- Pump sizing and configuration is very important to wastewater treatment systems, so it was appropriate for this class, but it may warrant a separate course

ATTENDEES SUGGESTIONS FOR FUTURE OFFERINGS OF THIS COURSE

- Add:
- Cost comparison for capital and O&M costs for alternatives (*Six responses*)
 - Biological treatment processes
 - Information about pump rates