

Guidance on the Use of Focus Groups for Evaluation of Public Involvement Programs at Contaminated Sites

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Report Prepared by:

Susan L. Santos, Stentor Danielson, and Caron Chess



Social and Environmental Research Institute

278 Main Street, Suite 404

Greenfield, MA 01301

(413) 773-9955

www.seri-us.org

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About this guidance document

This report provides guidance for using focus groups to:

- evaluate public involvement during remediation of contaminated sites;
- conduct both formative and summative evaluations; and
- conduct both process and outcome evaluations.

Why evaluate public involvement?

On June 6, 2003, EPA issued its new Public Involvement Policy.¹ The Policy's overall goal is for excellent public involvement to become an integral part of EPA's culture, thus supporting more effective Agency actions. The Policy outlines seven steps to effective involvement, including evaluation.

Evaluations of public involvement help improve how we define, measure, and conduct public involvement programs. Evaluating how well an involvement activity or process worked can help you make those processes more effective for EPA and participants.

Specifically evaluation helps to identify:

- 1) needs and expectations for remediation or public involvement from public involvement participants;
- 2) strengths and weaknesses of EPA involvement activities;
- 3) ideas or suggestions for improvement of EPA involvement activities from people who participate in them;
- 4) barriers to achieving improved public involvement processes and activities;
- 5) changes in what and how we measure the success of public involvement activities and processes; and
- 6) common performance measures that can be used to fulfill requirements of the Government Performance and Results Act of 1993.

When to evaluate?

Evaluation is often thought of as something to do at the end of a project to gauge whether goals were met or whether the community involvement process was "successful." This is called *summative evaluation*. Summative evaluations help to validate the effort and can be particularly important for transferring "lessons learned" to new sites.

Evaluations can also be done during a project. If the results of evaluation done during a project are used to revise the community involvement process or the project itself, then this is called *formative evaluation*. Formative evaluation gives you feedback throughout your process so that you can make changes and improve as you go along. This feedback can be used during all phases of work at sites requiring remediation by agency staff and stakeholders to improve public involvement efforts and positively influence clean-up efforts.

What to evaluate?

You can evaluate the results of a public involvement process, including things such as: participant satisfaction with outcomes, level of understanding about remediation actions, trust in EPA, etc. This is often referred to as *outcome evaluation*.

Evaluations may also explore how public involvement activities take place, including things such as: who is involved in a process, adequacy of meeting notifications, access to EPA staff, fairness of the facilitator, etc. This is often referred to as *process evaluation*.

¹ www.epa.gov/publicinvolvement/pdf/policy2003.pdf

Background to Guidance Document

This guidance is informed by the results of an EPA sponsored research project, which assessed *the comparative strengths and limitations of three practical and proven techniques to evaluate community involvement processes and community satisfaction with progress toward Superfund clean-up objectives*. The Social and Environmental Research Institute (SERI), along with researchers from the University of Medicine and Dentistry of New Jersey School of Public Health and Rutgers University, was awarded a cooperative agreement to conduct this research in two case studies: 1) the Ciba-Geigy Superfund site in Toms River, New Jersey, and 2) the Waukegan Harbor Area of Concern in Waukegan, Illinois (Cooperative Agreement 831219-01-3). The guidance provided here is also based on reviews of evaluation-related literature and prior evaluation-related research by the investigators.

Additional materials produced as part of this project may be found at:
www.seri-us.org/projects/superfund.html

Introduction

What is a Focus Group?

A focus group is a carefully guided group discussion intended to generate a rich understanding of participants' experiences and beliefs. They are essentially group in-depth interviews with 8 to 12 individuals who are brought together at a location convenient and comfortable to them to discuss a particular topic under the direction of a trained moderator. Focus groups are an important way to listen to people, to learn about their views and concerns, or to explore topics of interest. The information generated in the focus group is the opinions expressed by group members in their own words. Participants in a focus group may have limited information on the specific topic or question to be explored or they may be quite familiar with the topic and issue. Focus groups can also be a useful tool when the subject matter is sensitive -- such as concerns over health or disagreements that might occur in the cleanup of hazardous waste sites.

Focus groups have a long history of use for purposes of program evaluation as well as commercial applications. A list of additional resources for conducting focus groups is provided in Appendix A.

Reasons for Using Focus Groups

Focus group methodology has been around for a long time. As early as the 1930s, there was concern that traditional quantitative and qualitative methods of getting information – such as surveys and interviews – could generate findings unintentionally biased by the researchers' preconceived ideas about those they were interested in hearing from or simply by oversight or omission. For example, the language in a survey question is assumed to be understandable to respondents; it may not be. Similarly, the choices for answers are assumed to encompass all the options a respondent may need to express his or her views; they may not. Survey research also often overlooks how firmly people feel about a view. In an individual interview, the potential exists for respondents to avoid expressing more negative opinions in an attempt to “please” the interviewer. Similarly, the interviewer must take care not to “lead” the interviewee.

In response to such concerns, social scientists began exploring strategies whereby the person leading the research or evaluation effort would have a less directive and dominating role. The non-directive nature of group therapy was adapted for research and evaluation purposes to shift the focus from the interviewer to the participants and provide an opportunity to look at *why* people feel as they do, *what* might influence their ideas, and *how* they come to believe something, in much greater depth than survey research typically can (See Table 1).

Table 1: Uses of focus groups

	Academic Research	Product Marketing	Evaluation Research	Quality Improvement
Problem Identification	Generating Research Questions	Generating New Product Ideas	Needs Assessment	Identifying Opportunities
Planning	Research Design	Developing New Products	Program Development (such as in developing a Community Involvement Plan)	Planning Interventions
Implementation	Data Collection	Monitoring Customer Response	Process Evaluation	Implementing Interventions
Assessment	Data Analysis	Refining Product or Marketing	Outcome (Summative) Evaluation	Assessment Redesign

Adapted from Morgan, D. L. 1998. *The Focus Group Guidebook*, Sage, Thousand Oaks California.

Strengths and Limitations

The strengths of focus groups lend them to certain uses. Focus groups have been used to examine attitudes and opinions relevant to health behavior and environmental risk communication, and for gathering feedback from participants about program needs such as developing a community involvement program (formative evaluation), for providing feedback on ongoing efforts for involvement or clean-up, or for appreciating “what worked” and what didn’t work (summative program evaluation).

Strengths

There are a number of key strengths of using focus groups for evaluation purposes. These may include:

- exploration and discovery among different groups (e.g. those who live close to a Superfund site and those who live further away; involved and uninvolved participants; different demographic groups, etc);
- exploration of complex topics or behavior and motivations (e.g. Why are some residents concerned over health risks at a site and others are not? ; Why do some members of the community participate in a clean-up process for years and years while others claim a lack of knowledge?, etc);
- discussion to generate new ideas and topics while providing structure;
- greater insight into why certain opinions are held and provides context and depth;
- obtaining a story in participants’ own words;
- specific suggestions for program improvement; and/or
- reducing the amount of bias introduced by the interviewer because participants are talking to each other in addition to the interviewer/moderator.

The community involvement and site clean-up process happen in a social context. Focus group methodology recognizes that people listen and learn from one another and that an individual's views are often shaped by his or her interactions. Focus groups also allow for more in-depth probing about why people hold the opinions they do. The data collected in a focus group has what researchers term "high face validity" because the results are easily understood and seen as believable to those using the methodology or reading the results.

This guidance document draws on the example from the focus groups the authors conducted at the Ciba-Geigy Superfund site and Waukegan Harbor Area of Concern. Participants in those focus groups noted several specific advantages to the use of focus groups for getting "feedback" and evaluating a program.

Box 1: Focus group participants in their own words

One of the key advantages of the focus group approach is that participants are able to explain their views in their own words. They may offer stories or suggestions to illustrate their views. For example, participants in the Ciba-Geigy "Highly Involved" group were asked what the relationship between EPA and Ciba should look like. One individual said:

They should be totally separate. ... I'll give you an example. I worked in [another] industry, and we had ... federal inspectors. We were not allowed to associate with them. They could not get a cup of coffee from us, anything. After work, they were not allowed to associate with us. And that's the way it should be on that site too.

In the Latino focus group in Waukegan, one participant talked of posting warnings about fish advisories:

But they don't want to put the signs because the people from here know and the people from outside don't know. A lot of people come here to fish and they live from that - they don't have money to buy meat and so they go to fish every day and they sell the fish on the Southside. They get money from this and a lot of people are eating it, you know. This is happening every day.

Specifically:

- Because focus groups impose the least structure on people's responses, participants viewed them as less susceptible to manipulation than other approaches (e.g. surveys or Q method), and thus they generate more credible information;
- They allow participants to share their views in a natural, conversational way;
- They can be more easily implemented by an agency because they do not require OMB approval (as would be the case for a survey);
- They can be a learning experience for participants as well as a way to express their views; and
- Members of groups not already involved in the program, such as the Latino community in Waukegan, may be easier to reach through focus groups than other evaluation methods.

Limitations

While focus groups have a number of strengths there are limitations:

- Focus groups require a skilled moderator;
- Multiple groups are usually needed to ensure you hear the full range of views;
- Social pressure to agree with others may limit the expression of dissenting views. This may be particularly true in sites where community involvement efforts have been ongoing for a long period of time or views have become entrenched among different stakeholder groups. However, this limitation may be overcome by having such participants in different groups; and

- They do not ensure a representative cross-section of the community as may be obtained with a well-designed survey.

Participants in our Ciba-Geigy and Waukegan Harbor studies also pointed out several additional limitations:

- The conversation could be less productive if there is a high degree of distrust or animosity between participants;
- Certain key stakeholder groups (e.g.. elected officials) may be reluctant to participate; and
- Focus groups with people who have been highly involved in the site clean-up process may not produce much new information because their positions are already known.

How to Conduct a Focus Group

The basic steps involved in the use of focus groups to obtain feedback or for evaluation purposes are:

1. Determine objectives
2. Determine types of people you need to hear from (number and composition of groups)
3. Develop discussion guide
4. Recruit participants
5. Arrange logistics
6. Conduct groups
7. Code transcripts
8. Analyze findings
9. Report findings and make program improvements

Step 1: Determine Objectives

Focus group methodology can be applied for a variety of purposes and at different levels of rigor depending on the purpose and eventual use of the results.

First, you need to decide if you are doing formative evaluation (where the goal is to develop a new program or plan such as a community involvement plan) or a summative evaluation (of a program that has been ongoing for a period of time). Decide what information you need to assess your program/activity and decide how you want the results to be useful for program or policy improvement or other purposes. Thinking ahead of time how you might use the data can better help you target the questions and level of effort more appropriately.

Possible objectives for conducting focus groups as part of formative evaluation effort may include:

- Determining community information needs, questions and concerns about a site remediation effort;
- Determining the current awareness and knowledge levels of various stakeholder groups;
- Identifying where stakeholders get information and who is considered reliable or trusted as a source of information;
- Identifying preferences for communication including timing and preferred channels of communication; and/or

- Identifying preferences for clean-up or reuse.

For summative evaluation they may include:

- Assessing satisfaction with the community involvement process;
- Learning whether proposed remedies are acceptable to members of the community;
- Generating ideas for improving participation and/or remediation; and/or
- Exploring the community's values and needs regarding reuse and redevelopment.

Before going to the next step, you should consult with key stakeholders. It is important to find out concerns about the evaluation process or outcomes from the outset. Without buy-in the data you collect may not be seen as valid or useful. In addition, discussing evaluation goals and specific issues may help you decide what issues need to be covered in the focus group.

Unfortunately, the results of some evaluations do not influence programs for a variety of reasons. *Participatory evaluation*, which involves key stakeholders to varying extents during the entire evaluation process, is advocated by some evaluators. Advocates of participatory evaluation argue that involving participants in the evaluation increases likelihood of results having an impact.

As you would expect, participatory evaluation is vigorously opposed by others in the evaluation field who see it as less objective and likely to bias the results. For example, a participatory evaluation might fail to cover critical topics that are uncomfortable to some participants. Decision makers and others may see participatory evaluation as less “scientific” and therefore less credible.

It is also possible to take a middle route (as we did in the research upon which this guide is based). In a middle route, evaluations involve key stakeholders in an evaluation advisory group to give you input on the goals of the evaluation (Step 1); potential participants (but not the number and composition of focus groups) (Step 2); potential issues to include in the guide (Step 3); and the evaluation results (Step 9). As with community involvement, it is useful to be clear what input you want during the process and how you might use that feedback.

Step 2: Determine Type(s) of People You Need to Hear From

Depending on the particular site, there may be many different “types” of stakeholders you need to hear from. First, there may be people who have been involved or actively expressed concerns about the remediation and community involvement process. There may also be segments of the community that have not been engaged and it may be important to understand why this is so. Often, the community and important stakeholders are determined at the start of a Superfund or other environmental remediation process for purposes of developing a community involvement plan. If so, you may want to look at that plan to help decide whom you need to hear from to get a range of feedback or information on program effectiveness. Sometimes, agency officials rely on more passive means of feedback to determine programs' effectiveness or whether improvements need to be made. However, the agency may then only hear from people who are willing to offer feedback without being asked. They may not reflect the overall population near a site or even specific segments of a population. While it may be easy to identify the active or more vocal participants, it may also be important to get a snapshot of the broader community as well, including those who have not often been involved. Box 2 provides an example of how relevant stakeholders were defined in two examples.

Box 2: Deciding what groups you need

For the Ciba-Geigy case study, we decided to look at three specific groups that seemed important players in the Superfund process:

- *Officials* – representatives from EPA, NJ Department of Environmental Protection, county government, and local government (in theory including both appointed and elected officials, though the latter did not actually participate);
- *Highly Involved Individuals* – individuals who had been especially prominent in the public involvement process, including leaders of local organizations that had played an important role; and
- *General Public* – people who had been at least peripherally involved in some way (e.g. attending a public meeting or being on the site mailing list) but had not taken on a (official or informal) leadership role.

At Waukegan Harbor, our first two focus groups were similar to those at Ciba-Geigy. However, our third group was changed to reflect the specific outreach concerns expressed by the key players and area demographics:

- *Officials* – representatives from US EPA, Illinois EPA, county government, and local government;
- *Highly Involved Individuals* – citizens who had been especially prominent in the public involvement process, including leaders of local organizations that had played an important role. Included in this were members of the Waukegan Harbor Community Advisory Group, an organization that has played a leading role in decision-making about the harbor cleanup; and;
- *Latino Community* – members of Waukegan’s large Latino population. These individuals may have had limited or no involvement in the cleanup or reuse. Various key stakeholders had expressed specific concerns about engaging the Latino community. It was thought to be extremely important then to capture this segment of the populations’ views and perspectives to provide meaningful feedback and direction for moving forward with clean-up and redevelopment efforts.

Identifying the different types of people you are interested in hearing and their potential perspectives is the first step in deciding how many focus groups you’ll need to conduct. Ideally, each focus group should only target one “type” of stakeholder, so that participants can elaborate their shared perspective. In an ideal situation – where resources are not constrained and the population is large enough – it would be good to have at least two groups for each stakeholder group of interest. This is not to try and get a “representative sample,” as focus groups are a qualitative tool. Rather, multiple groups are helpful to try and achieve what is referred to as “saturation” – having sufficiently explored the full range of perspectives of any particular group.

There are several ways to identify the groups that you might bring together for a focus group for evaluating Superfund or other contaminated site clean-up efforts. One is to look at the different levels of involvement or types of stakeholders in the site. For example, you would distinguish members of activist organizations or community advisory groups, the general public, those who worked at the site, etc. You may also divide groups based on their opinions, such as those who support EPA’s or another lead agencies current work at the site versus those who oppose it. You may also make geographical distinctions, holding different focus groups for different neighborhoods or for people living at different distances from the site. It is also important to consider area demographics in deciding whom to get feedback from – for example, are there environmental justice populations to consider? Focus groups need not be differentiated on all of these criteria. You will need to use judgment, background knowledge of the site, and input from other who know the situation to decide which approach to segmentation is most likely to

produce relatively homogeneous groups while covering all of the important viewpoints. Additionally, resources may dictate the number of groups you can have.

Because of group dynamics, the optimal number of participants for a focus group ranges from 8-12. Groups of less than 6 people may not generate as much meaningful information because of the dynamics of smaller groups. The need for at least 6 participants may limit your ability to hold certain focus groups, as you are drawing from a limited pool of people who share certain characteristics or match a certain description.

As a general rule, 3-4 focus groups should be sufficient to cover the range of topics and views for exploring Superfund or other contaminated sites, although the larger the geographic reach of the area, the more groups you may want to consider. The decision about the total number of groups depends on how many discrete perspectives may exist and whether combining individuals with different perspectives in one group might be problematic. You may decide that the participants within a group should be more homogeneous to facilitate the group discussion and avoid any conflicts that are known to exist. For example, combining activist groups with elected officials may not result in open dialogue. On the other hand, holding too many groups may not produce enough new and important information to be worth the time and resources it takes. Background knowledge of the site is therefore important for identifying the best set of groups.

As you define your groups of interest, pay attention to whether different arrangements may need to be made for different groups. For example, focus groups for particular demographic groups, such as an Asian or Latino community members, may need to be in the group's dominant language rather than in English to ensure that all members of the community are able to participate comfortably and fully. Groups for officials and agency staff are best held during the workday, while those that target the general public should be held in the evening to make it easier for participants to attend. You may need to pay particular attention to the location in order to ensure that participants feel that they are on neutral or safe ground. For hard to reach populations it may be important to think about providing child care or transportation to facilitate attendance. In short, setting up focus groups requires the same sensitivity as your public involvement program.

If you are constrained by the number of groups you can hold, another alternative is to supplement the focus groups with some individual interviews to catch perspectives not obtained in the focus groups. This strategy is useful when there is a perspective or category of people that is important but not large enough to warrant a focus group. You may also wish to do supplementary interviews when there are some stakeholders, such as elected officials or representatives of the PRP, who are unwilling to attend a focus group. The downside of this is that you do not obtain the essence of a focus group – the interaction of the participants and how their discussion builds as a result of the group interaction.

Step 3: Develop Discussion Guide

The next step in the focus group process is to develop a discussion guide. The discussion guide is really the key to how the group conversation will flow and the information you can obtain. Just as the recruiting and screening must assure that the "right" people are in the focus group, a comprehensive and well-structured discussion guide is essential for facilitating an interactive session that nets valuable information. The guide spells out the topics that will be covered and provides a logical flow of questions that are initially broad and open-ended to reduce the likelihood of biasing answers. Responses are then followed by probes to elicit more detail. The

guide must also organize the time in a fashion that makes the focus group comfortable and interesting for participants. It is important to remember, however, that the guide is *not a script*. A skilled moderator will use it as a guide, exploring or further probing the comments participants make and manage the dynamics of a group as necessary.

Once you have completed step 1 (defining your objectives), you will have a consistent set of overarching questions for all of your focus groups. However, differences in participants' experience, knowledge, and concerns (about the cleanup or community involvement process or the evaluation) may necessitate somewhat different guides (See Box 3). For example, the discussion guide for the general public (or another group that had not been previously involved) might open with a more general discussion about environmental issues affecting the community to see what concerns come up before you discuss the site.

Box 3: Tailoring your discussion guide

In the Waukegan Harbor case study, the Latino focus group began by asking participants "what comes to mind when you think about the lakefront?" because this population was expected to have less familiarity with the specifics of the Area of Concern cleanup process. The guide was also careful to ensure that the use of terminology would be understood by all participants and not limited to the regulatory jargon such as "Area of Concern" that often accompanies a clean-up process.

The following steps can help to ensure you have a well-structured discussion guide:

Step 1: Brainstorm the Questions and Issues

The first step in developing a discussion guide is to brainstorm the questions and issues that are pertinent, i.e. what you want to know from the participants. For example, how familiar are they with the topic of interest? What have they heard recently? Where did they hear whatever they have heard? How do they feel? Do they have concerns? Is there information they would like to have? How much? Via what sources? The answers to any question may be at the top of their mind or may only surface after careful probing. Again, the type of questions will depend on whether you are doing more formative or summative evaluation and how you intend to use the data. Record all the questions so that you have the ideas in one place, including information gathered from any background interviews (see Box 4) or review of background information. If you have too many questions, you will need to prioritize. Go back to your goals and see what information you most need. The primary author of the discussion guide needs to order and frame the questions. Be aware that the list of questions from the

Box 4: Gathering background information

In using focus group methodology to conduct two summative evaluations that occurred at different points in the Superfund and general site clean-up process, development of the discussion guide began with a series of between 9 - 13 interviews. Because we were unfamiliar with the sites we needed this many interviews to appreciate the range of concerns. If you are knowledgeable about a site you may need fewer. The identification of stakeholders to interview was made in consultation with EPA and snowball sampling (that is, asking each interviewee for suggestions of other key people we ought to talk to). The interview guide was prepared through brainstorming our goals, similar to the process we suggest for focus groups in Step 3.

Background information can also come from other sources. There may be transcripts of past meetings, information from previous studies, or newspaper reports describing the site and the concerns associated with it.

background interviews or the brainstorming *is not* the discussion guide. A focus group discussion guide has a specific flow and various techniques built within it to facilitate discussion.

Step 2: Draft a Guide

To help you get the best information possible for your evaluation a good discussion guide should include the following components:

A. Put participants at ease: In general, a focus group discussion guide will start out with an introduction and a welcome designed to put people at ease and to develop a comfortable rapport among participants and the moderator. Next, the moderator provides the “ground rules” that guide the discussion. Participants are then asked to provide a brief, basic introduction about themselves – one that is not too revealing but that lets people “hear themselves” in the group. In this section the moderator:

- Introduces herself/himself and describes background;
- Explains the purpose of the group;
- Provides briefly the rationale for the specific grouping of people (e.g. we wanted to hear from some people who lived near the site but had not been involved in EPA’s activities);
- Describes what will happen (e.g., moderator will ask questions, have people read materials, view a videotape, etc.); and
- Outlines features and guidelines for the discussion (presence of recording devices, need to speak up for tape, etc.)

Typical timing: about 5 minutes

B. Develop context and background for discussion: Introduce a general topic relevant to the key issues but relatively easy for participants to discuss and not emotionally charged. For example, one common approach is to ask participants to talk about things they associate with the word “environment” to help them recognize that they can indeed contribute to the discussion and to help set the stage for understanding “where they are coming from” when more specific questions are presented later in the discussion. Participants at some sites might find this question irrelevant to their interests so you need to think about posing a broad question that will appeal to the group you are interesting in learning from. Another opener for community groups is to ask about issues that have received the most attention locally or what comes to mind when they hear the name of the site. It may be helpful to have an easel with a large pad of paper so that participants’ ideas can be written down for the group’s reference. This technique helps stimulate discussion and helps people to feel that their contribution matters.

Typical timing: about 10 minutes

C. Introduce specific questions and materials: This is the heart of the focus group for conducting evaluations. The moderator introduces successively more specific – but always open-ended – key questions to learn about participants’ awareness, beliefs, and behavior related to certain issues. The goal is to generate group discussion and reactions to the topics. Remember it is the group dynamics that differentiate focus group data from that of a one-on-one interview. These key questions should be limited to 4-5 to allow sufficient time to probe the participants’ views and to get in-depth information as to the participants’ feelings and thoughts. This is where a focus group really differs from traditional surveys where participants are “forced” to respond according to pre-established response categories. Further, in a survey it may be unclear whether or not your participants fully understand the question. In a focus group, you get immediate feedback because you hear the participants’ views and questions in their own words.

The questions are worded to avoid suggesting that a particular answer is right or wrong. For example, a skilled moderator will never say, "Wouldn't you think that this is a good idea?" The guide designates topics and key questions along with follow-up "probes" to potential participant comments, but, again, it is *not* a script. Sample categories of questions for both a formative or summative evaluation might include:

- Sources of information about the site, if any;
- Perceptions and feelings about what participants have heard;
- Questions or concerns about the site investigation and clean-up process;
- Information needs, including format and frequency of provision of information;
- Concerns about the agencies and other parties involved in the clean-up process;
- Experiences with or thoughts about specific community involvement activities;
- Preferences for clean-up including the technologies used or level of clean-up achieved;
- Preferences for site reuse; and
- Preferences for engaging and involving people.

Typical timing: 45 - 60 minutes

D. Summary of advice and comments: Here, questions facilitate summary and wrap-up.

Typical timing: 10 minutes

E. False close opportunity: If feasible the guide should include time for the moderator to step out for a minute to check in with any observers that might be present during the focus group to see if they have one or two questions to add. However, care should be taken not to have more than one or two people at most sit in the room and "observe" the focus group. If not explained to participants the presence of people in the room may make participants feel uneasy and restrict conversation. An observer might be appropriate for purposes of taking a back-up set of notes or when doing groups with non-English speaking participants or other groups led by a different moderator. In any case, the person's presence should be explained to the participants.

F. Real closure: End the focus group by thanking everyone for their time and their input. This is also a good time to "debrief" people to see what they thought of the focus group and answer any questions they may have at this point. This way everyone will leave feeling that they had a positive experience.

Step 3: Revise, as Necessary, Over the Course of the Groups

Ideally, a series of focus groups is scheduled over a period of time that allows for adjustments in both recruiting and in the discussion guide. The findings from the first one or two groups may reveal information that calls for a different approach to certain lines of questioning. Or, the findings may suggest topics that should be explored to see whether or not there is consistency across groups. Expect that it will be appropriate to alter the guide at least slightly after each group. A sample discussion guide, from our Ciba-Geigy case, is presented in Appendix B.

Step 4: Recruit Participants

Recruitment for the focus groups should vary depending on the types of people who will be asked to attend (Box 5). Getting people to show up can be one of the most challenging aspects of the focus group process. However, with proper planning and a good list of those you are interested in hearing from, you can recruit people without too much difficulty.

There are a number of ways to identify participants for a focus group. Participants in groups that draw on a small set of potential members (typically groups made up of

people in leadership roles, such as a group with officials involved in a Superfund site or a group of citizens highly involved in a site clean-up process) can be found by asking key stakeholders for the names of other people who match a certain description. A good list might already exist in a Community Involvement Plan if there is a recent one.

You need a different process to solicit participants for focus groups of uninvolved people. You can draw from a more general listing of community members, such as the site mailing list or the phone directory. Each source has its advantages, so consider what your goals are in holding the focus group. For example, people on an existing site mailing list will probably be better informed about, and more interested in, the site. But for that very reason they may be less representative of the local population. If one of your goals for the evaluation is to get more people involved (for example, by getting more people to attend public meetings), your focus should involve a wider cross-section of the public to better understand why people living near the site do not get more involved.

Once you have identified a list of potential participants, take a random sample of names and contact them by phone. A phone call allows you to answer a person's questions and get a commitment to attend. You may consider doing a mailing giving some information about the study before or after calling. In our cases a number of people we contacted expressed interest but said that they never say "yes" to anything over the phone, while others were suspicious of the caller's motives. Phone calls can be made from 7-9 pm on weekdays, in order to minimize the chance of interrupting people at dinner or calling while they are either asleep or at work. People involved with the site on a professional basis can be contacted at work. It is usually not helpful to leave messages on answering machines or voice mail. There are also market research firms that can be used to recruit a particular population, but recognize this will mean additional resources.

Box 5: How many people should you recruit?

It is important to "overbook" focus groups, by asking a few more people to attend than you need. For example, invite 14 participants so that even with "no-shows" you will have 10-12 participants. Inevitably, a few people will have conflicts at the last minute and be unable to attend. At Waukegan Harbor, we failed to overbook two of our groups, and we ended up having only 6 people participating in the discussion at each of them.

It is not unusual to have to contact three to five times as many people as you want before you will successfully fill a focus group. For example, of the 33 people contacted to be part of the General Public group at the Ciba-Geigy site, 13 people said "no," for a variety of reasons – uninterested, unwilling to commit over the phone, unavailable at that time, etc. Eight numbers were either wrong or disconnected (more recently listed Superfund sites would be likely to have a lower proportion of bad numbers, as their mailing lists would be fresher). In contrast, for a group of easily identified stakeholders like those who are highly involved, you may get higher response rates.

Certain populations may require collaboration with key community members, rather than a cold-calling approach. For example, in reaching out to certain demographic or ethnic groups you may need to identify a local person who can act as an intermediary and can identify the population of interest as well as assist with recruitment (see Box 6).

While recruiting it is important to keep a running summary of who has been recruited and their key characteristics. This is often called a "bridge sheet." This enables you to see at a glance whom else is still needed to fill a group or where it may be necessary to relax or revise certain criteria to assure that enough people are recruited for the group.

Box 6: Using a local liaison for recruitment

For the Latino focus group conducted as part of the evaluation for Waukegan Harbor we had no way of obtaining a list of all Latinos in the city. We also were concerned, as outsiders, about building trust with this community. We, therefore, identified as a liaison a local Latina leader who had already been highly involved with the cleanup. She used the Latino community's existing social networks (such as social clubs) to identify a group of potential participants, then passed their names and contact information on to us so that we could contact them with more information and reminders. She also appeared at the beginning of the focus group meeting to greet people and put them at ease. Using a community liaison like this can be immensely helpful in locating and reaching out to certain populations. However, it's important to be sure that the liaison is clear about the nature of the focus group and the approach to recruitment. In our Waukegan case study, we were forced to cancel our initial Latino focus group because of miscommunication that led to an attendance of only two. After clarifying the process and the division of responsibility between the local liaison and the research team we were able to hold an extremely successful Latino focus group with 15 participants.

A key to successful recruitment is to have a good telephone recruitment script (See Appendix C for the phone script from the Ciba-Geigy case.) The script for the phone call should outline the purpose and sponsorship of the study, explain what the person is being asked to do, request their participation, and ask several screening questions to ensure that the group has a diversity of participants. When recruiting for the groups it is helpful to speak in a conversational tone, using the script as a guide to the information that needs to be conveyed, as strict script-reading is associated in many people's minds with telemarketers. Stress to potential members of groups for people with lower levels of involvement that you are interested in the opinions of people who had had only very limited involvement with the site. Otherwise some people may be concerned that they do not know enough about the site to be useful members of a focus group. Similarly, if you are using a local liaison to help you recruit prepare a written script for the liaison person to ensure that potential participants all understand the purpose of the group. The liaison must also explain the process of recruitment so that a potential participant does not invite other people without checking with the liaison.

The recruitment script should also mention any incentive you plan to offer to participants. An incentive is very helpful in getting people to agree to attend because it shows that you value their time and effort. Typical incentives can include a small honorarium (\$30 given to individuals or to their organization) and refreshments. If you have limited resources or if your agency has prohibitions against paying participants you may need to be creative, such as offering tickets to an event, entry in a raffle, or a nice meal (instead of just snacks).

The recruitment script should identify anyone to exclude from participation in the focus group in advance. For example, depending on the site, you may need to exclude current or former employees of a Potentially Responsible Party (PRP) or anyone who has been employed as part of the site investigation or remediation effort. Similarly, think carefully about including or

excluding elected officials. Avoid having more than one person from a household (e.g., a husband and wife) at the same focus group. Ideally participants in a focus group should not know each other because you do not want people to feel constrained from being open. This may not be possible for groups drawn from a small population of prominent and actively involved stakeholders. In recruiting participants for any single group try to get a mix of ages, lengths of residence, degrees of involvement, gender, and ethnicity and race. Some of these characteristics will be more important to balance than others, depending on the area's demographics.

If focus groups are to be combined with another assessment method (e.g., Q Method, surveys) it is helpful to schedule the focus groups first so that interested people who can't make the focus group can be offered a chance to take part in the other method. Despite the best efforts to get people to commit to attending there will always be a few who do not make it. Because of this attrition it is important – particularly for groups made up of people with less prior involvement – to “over” recruit, selecting at least 14 participants to account for possible no shows to arrive at the desired 10 – 12 range.

A letter confirming the purpose of the group and the date, time, and location (including directions, parking information, transportation information and other logistical details) should be sent within a few days of recruitment to all who have agreed to participate. Include a phone number and firm plea to call if plans change. People need to see a letterhead that assures them that the focus group will happen. It is also important to make a reminder call a day or two before the focus group to ensure that people are still coming.

Step 5: Arrange Logistics

There are a number of logistics that must be considered when conducting a focus group. A typical group might need the following:

- Consent forms. The form should briefly explain the purpose and content of the focus group and explain participants' rights – in particular, their right to confidentiality and their right to withdraw from the focus group at any time with no penalty. Provide two copies of the consent form, so that the organizer can keep one and the participant can have the other for later reference.
- Pens or pencils.
- An easel with a large pad of paper, and markers.
- Tape recorder and tapes or a digital recorder, and an omni-directional microphone. Make sure that either the recorder is plugged in or that extra batteries are available.
- Refreshments. They help participants feel at ease. A morning focus group should have coffee, water, donuts, and muffins. A focus group held later in the day should have coffee, water, soda, and light snacks such as cookies and fruit. If holding a group around a mealtime light sandwiches may be appropriate. Avoid very crunchy foods because they make an inordinate amount of noise on the recording. Be sure to also have cups, plates, and napkins.
- Name tents. Print each participant's first name only on a name tent or on a sheet of heavy card and fold it over, or else get pre-made name tents. This helps the moderator to call on people, while preserving some anonymity. No names should be used in the final reports in order to protect participants' confidentiality.
- Incentives. If you are offering a monetary incentive make sure that you have envelopes with the checks or cash in them, as well as receipts, that participants can sign to acknowledge that they have received the incentive.

Focus groups should be held in a small, comfortable setting, such as a conference room, that is easy to locate (see Box 7). Select a location that will be seen as neutral or welcoming ground (this may require different locations for different groups). For example, an EPA office is likely to be a bad location. Sometimes you may need to have more than one site to provide a convenient and comfortable location for each group. Community rooms at libraries or similar locations can be a good choice but occasionally you may need to rent a room at a hotel. The room should be arranged to have one large “conference” style table that can seat 14 people comfortably around it and one table on the side large enough to hold refreshments and supplies (spare tapes, forms, etc.). If you have anyone there to take notes or observe they should sit at a side table so that they are unobtrusive.

Box 7: Focus group locations

For the Ciba-Geigy case study, the focus group was held in a meeting room at the Ocean County Health Department office. In Waukegan, our Officials and Highly Involved groups met in a conference room at the Ramada Inn, while the Latino group was held at the school district’s “Welcome Center” – a location convenient for this population. Other locations that were considered, and which may be appropriate in other cases, include the town hall, the public library, or a local college or school. Book a venue early in the planning, or you may not get it.

The layout and circumstances in each facility may influence what time you feel is best for arriving. For the person taking primary responsibility for the logistics arriving an hour ahead of the first group is usually adequate. Notetakers or observers can arrive a half hour ahead.

Setup tasks include:

- Place a consent form and a pen at each seat;
- Arrange the name tents at each seat so that they can be clearly seen by the moderator;
- Set out refreshments;
- Set up the easel; and
- Set up the recording equipment; the recorder should be near the moderator and the microphone should be near the center of the table. Do a test to make sure that it clearly picks up a person speaking at normal volume from each seat.

Step 6: Moderate Groups

The heart and soul of the focus group is the group discussion. While the discussion guide is crucial for framing the questions to be asked and providing a structure to the discussion, effective moderating is key to ensuring that the discussion is productive and enjoyable for participants and results in obtaining meaningful information.

A good experienced moderator can make the task look easy. However, moderating requires a certain set of skills, and not everyone who has led a group discussion or facilitated a business meeting would make a good moderator (Box 8).

Box 8: Using an outside moderator

If you decide to use another moderator for some of your groups there are a few things to remember. For example, in the Waukegan case study we wanted to hold a focus group in Spanish. We found someone who had some limited experience doing one-on-one interviews and was bi-lingual in Spanish. To prepare the experienced moderator of the other groups reviewed the focus group discussion guide in detail with the other moderator. They reviewed the overall purpose of the focus groups and what the key topics areas were in order of priority. They also brainstormed other possible new questions and probes that might be relevant for the Latino participants. Another important aspect of preparing the new moderator was to describe potential dynamics requiring the moderator to make an intervention. For example, what to do if one person starts to monopolize the conversation or how to engage those participants who seem reluctant to talk. It was also important to have the new moderator verbally review the discussion guide several times. Finally, the new moderator came and observed the other two focus groups and participated in a debriefing about what was learned and how the groups flowed.

A good moderator:

- Establishes a warm, friendly environment and communicates genuine interest in what the participants have to say. For the focus group, she or he must relate to the participants. In some cases this may mean dressing more informally and speaking more casually than she or he would in a traditional business setting.
- Puts participants at ease, and shows positive regard for all participants – managing to draw out the quietest and keep an "expert" or overbearing individual from controlling or intimidating the group. The moderator's job is to make participants feel they are in an open, safe environment and that their opinions count.
- Recalls what various participants said early on in the discussion and refers to it when relevant later.
- Is sensitive to the body language and facial expressions of the participants for clues about their moods and needs.
- Can anticipate issues will come up that may require departing from the guide to accommodate discussion about important, but unanticipated, topics.
- Recognizes that the moderator's job is to listen to what people have to say and to obtain information about how the participants view things – not to persuade them to a particular point of view or correct impressions that he or she knows to be false or inaccurate.
- Poses questions objectively so that participants do not respond positively or negatively to their perceptions of the moderator's views. You also want to avoid people looking to the moderator for approval.
- Ideally, is reasonably well-versed in the subject matter to guide judgment about important areas to probe. However, do not confuse subject expertise with moderating expertise. A skilled moderator can do better with unfamiliar subject matter than a subject matter expert will do without moderating experience.
- Can make smooth transitions to new topics to assure that key issues will be covered within the allotted time.
- Remembers that she or he has a discussion guide, but doesn't let it rule the discussion.

The moderator lets participants know all views are welcome and that having differing views is fine. The moderator "mirrors" respectful regard for all participants. Someone who is too familiar to participants or is perceived as having a clear position on the issues being discussed is probably not a good choice to moderate. Someone who is perceived as neutral and has good facilitation skills may be better qualified. Individuals who have experience in facilitation, interviewing, and group dynamics have potential to be good moderators but should work with

the lead moderator going over the structure of the guide; reviewing possible differences in interpretation of questions and understanding their role in the group – to moderate and not participate – and to create a safe environment for all.

Step 7: Code Transcripts and Analyze Data

Focus groups provide important data and like any other form of data, whether it's site characterization data or a questionnaire completed by community members, it can be analyzed. There are a number of different techniques that can be used to analyze focus group data depending on your purpose for conducting them, how you hope to use the data, and available resources. For purposes of evaluation, we suggest a method that can be readily used by agency staff or other interested parties without significant investment in time, software, or previous training.

A critical aspect of the analysis of focus group data is the ability to separate your own point of view from what is being said by the focus group participants. Openness to new ideas and concepts is a critical part of the analysis process. However, it is also important that the process be systematic or the results may not be accurate. If the process is not systematic you are likely to selectively remember statements that support or undercut your perspective or are memorable for other reasons, such as vividness. These statements, while important, may not represent what other members of the focus group said. Therefore, while it is tempting to go on "impressions" as to what you recall from the group itself or perhaps summary notes taken by someone during the group those impressions are a bit more like questions than answers: "I remember when the mayor praised the last public meeting. What did others say about public meetings?" In addition, if the process is systematic you can better explain your analysis to others. This may reduce distrust or skepticism.

The first step to analyzing the focus group data is to transcribe the tapes following each group so they can be coded. If a focus group is conducted in another language but will be analyzed in English then the transcript will also need to be translated. Tapes can be sent to professional transcribers such as might be used for recording and transcribing public meetings and hearings. Transcription can also be done in-house. If you are doing it yourself, expect to spend about eight hours transcribing a two-hour focus group. It is not necessary to record every "um" and repeated word, but be careful to get all of the participants' actual words. Once you have transcribed the tape you should listen to the entire tape again while checking the accuracy of your transcription. Having someone other than the original transcriber do an additional double-check can improve the accuracy of the transcription. If you choose to do your own transcriptions it is very helpful to invest in a transcribing tape recorder, which has a foot pedal that can be used to easily stop and start the tape while leaving your hands free to type. Similar pedals are also available for computers, if your recording is digital.

Developing a Coding Scheme

Most analysis of focus group data involves some form of coding (Box 9). Coding is the process of attaching a label to sections of text so that comparison and interpretations can be made. For example, the focus group discussion guide asks a series of open-ended questions that enable participants to respond in any number of ways. Two participants might respond with totally different words and perspectives – or, they might use different words but intend the same thing. The goal of analysis, and the purpose of coding, is to compare these various answers. Are the words used similar, related, or unrelated? What is the context for the response? What is the

intensity of the response? How specific is someone's response? Do participants provide explicit examples or further elaborate on a statement when probed by the moderator?

Coding is an important but labor-intensive process. Expect to spend 4-5 hours to code the transcript of a 2-hour focus group.

First, you will develop a coding list, that is, labels for the content of the transcript. There are a number of ways to develop a code list depending on your ultimate purpose for conducting the focus groups and analyzing the text. For use in evaluation, one approach is to first, jot down a list of "key words" that pertain to your evaluation of the community involvement and remediation process. These can be readily drawn from the major topic headers in the focus group discussion guide. It is helpful if the moderator can anticipate the words on the code list and incorporate them into questions, which will help when looking for relevant text during the coding process.

Next, using some of the notes or the "impressions" you have following each focus group, you should do a quick read through of the transcripts and identify any other key words that seem to consistently come up – such as "drums" or "monitoring" or "cancer" or "lack of trust", etc. These key words underpin the questions your discussion guide asked such as: How do people feel about monitoring? Do they understand and trust the results?, What is important in redevelopment?, etc.

Each code should include a set of keywords, important terms that are often used by people discussing the topic in question. A broader term, such as "community involvement," may not bring up all of the relevant comments if that broader term is not specifically used in the focus group. So it can be useful to also create more specific keywords (e.g., "website" or "tour") to associate with a code (Box 10).

Next, you need to give the codes a simple definition or explanation so that anyone going through and reading the text of the transcripts would be able to identify the text that would be "tagged" or labeled using the specific code(s) in a systematic fashion that could be replicated. A definition is needed so that it is clear what is meant to be covered or included by any single code label.

Box 9: Developing a coding scheme

We recommend starting with a smaller number of more general codes, and then breaking some of those up into more specific codes only where the analysis shows a need for more detail. This was the procedure followed for the Waukegan case study. At the Ciba-Geigy site we used an alternative method in which we began with a large set of 22 specific codes and later aggregated them into seven more general codes. This approach can be time-consuming and will not necessarily provide better information. The decision may be made based on the total number of groups you have and comfort level of the person doing the coding.

To get you started on coding for evaluation of a community involvement process consider the following general codes:

1. General awareness/concerns:
2. Purpose(s)/goals:
3. Methods to inform/involve:
4. Comments on the various "participants":
5. Satisfaction with the involvement process:
6. Satisfaction with clean-up activities and preferences:
7. Suggestions for improvement:

Appendix D presents the "code book" we used to do the initial, more specific coding of the Ciba-Geigy transcripts. The Waukegan focus group analysis used the same 7 code groups as above with the inclusion of one additional code – preferences for re-use/revitalization.

For a basic, practical analysis of this type of focus group, use no more than 10-12 codes. Otherwise, the task of coding becomes unwieldy. After analyzing the material at this level you may find that one code has a large amount of material, references complex discussions, or covers an issue where you are interested in very detailed feedback. If so, you may find it useful to go back and break that category into several sub-codes to perform a more detailed analysis.

How to Code

The process described here is a relatively simple analysis. Academics use software programs that take time to learn but make it easier to do more nuanced analysis to answer more complex questions (e.g., do those participants who oppose our monitoring program like site tours?). However, specialized software is not necessary to code and analyze focus groups. Coding of focus group transcripts essentially involves removing chunks of text from the transcript and grouping them together with the labels or codes you develop. This process can be done using a word processor to search the text for each code, finding all of the relevant pieces of text, and copy-pasting them into separate documents. Alternatively, you can do a manual code whereby you read the text and physically bracket segments with appropriate code words. You can then “cut and paste” these segments into separate documents for each code and subsequently re-read and analyze them for grouping into themes or findings. In either approach, after the initial coding you should do a final read through to look for exceptions or instances in groups and between groups where a theme may not apply.

During the process of coding, it may become apparent that some codes are not effective. For example, a code may bring up hardly any references to an idea that was definitely discussed at the focus group. Skim over the transcript to see if you can identify any terminological differences – for example, if participants always used the word “remediation,” a code that says “clean-up” would not be effective. In such a case it is necessary to modify the code book while coding is going on. After such a modification, re-check all of the transcripts using the new code.

Box 10: Coding using Word’s “Find” feature

If coding is to be done using a simple word processing program such as MS Word, the easiest way to code is by using the “Find” feature in a word processing program (located in the Edit menu of MS Word) to search for each of the code words. When searching for acronyms like “EPA” or “DEP,” make sure to have the find function match the case (in MS Word’s Find box, click the More button, then select Match Case), or you’ll get words that have that string of letters in them (e.g. “separate”). Be sure to turn Match Case off when searching other words – otherwise a search for “agency” would miss “Agency,” and vice versa. Make sure to search for variations of code words (e.g. “agency” and “agencies” – sometimes truncated forms, in this case “agenc,” can be used to pick up multiple variations). This includes expanding abbreviations (e.g. search for “Ocean County Citizens for Clean Water” in addition to “OCCCW.” For longer names, search only the first few words, in case a speaker didn’t get the whole thing out – e.g. “Ocean County Citizens.”)

The Find feature will scroll the transcript to the relevant section and highlight the keyword. Read at least several lines forward and backward from the highlighted word in order to understand what is being said. A coded section of text should express a single thought about the topic of the code. Include the moderator’s questions or bracketed explanations if necessary to clarify what is being referred to – occasionally the quote from the participant may be merely a “yes” or “no” to an idea offered by the moderator. The transcript should have line numbers inserted (in MS Word, go to File > Page Setup > Layout tab > Line Numbers). When you paste a section of text into the coded document, make a note of what line numbers it came from. This will make it easier if you need to go back and re-read the quote in context.

Instead of using the Find feature, some people may prefer to read over the whole transcript, allocating each line or paragraph to its proper code. While this hand-coding is more thorough and may be easier for quick readers or be appropriate in cases of extreme terminological variety, a skilled moderator and a well-designed code book should make it unnecessary for a simple analysis such as one you are doing (Box 11).

Coding qualitative material like a focus group runs the risk of being subjective. Ideally, your coding should have internal validity – that is, any person analyzing the data independently would come up with roughly the same coding. One step to improve validity is to have clear and explicit definitions of all your codes. Another important safeguard is to have more than one person code each transcript. These coders can then compare their results, and clarify any ambiguities in the coding that led to discrepancies.

Step 8: Analyze Findings

Once the text has been grouped into codes the next step is to read through the coded text to identify the key points or themes – the important points raised by participants, potential findings of your evaluation or issues that will help you to formulate a plan for moving forward, etc. Often, in reading participants' comments in response to a particular question you may find striking similarities or identify key differences. These things are important to capture as themes. When noting a theme it is important to identify or "flag" a chunk of text or different quote(s) that seem to illustrate the point. Because one of the major advantages of a focus group is to allow participants to explain their views in their own words and offer specific illustrations and suggestions be sure to include such quotes in your analysis (Box 12). At the same time, try to avoid drawing all of your examples from just a few participants so that the words of the more articulate people do not get undue emphasis. Pay attention to instances where a particular point may not be supported by others in the group. Don't assume that silence from others means agreement.

This same process of sorting and analyzing the coded text should be conducted separately for each group.

After analyzing each focus group separately, you should compare the findings between different groups (Box 13). The codes provide a convenient structure for comparing the views of different groups. Pay attention to differences and similarities in the desires of different types of stakeholders. This type of information is extremely important for purpose of evaluation.

Box 11: Testing the effectiveness of "Find"

We conducted a small experiment to test the effectiveness of the Find feature compared with hand-coding. We selected a systematic sample of ten pages (out of 54) from the Ciba-Geigy case "Officials" focus group and coded them with our code words above using Find. Then, we hand-coded the same ten pages. Of the 34 sections of text coded by hand, 29 were also located by Find – and in several cases, Find only failed because the text that included the code word was on an adjacent page (e.g., in the moderator's question at the bottom of the previous page), which would not be an issue when coding the entire transcript. We concluded that the small loss of accuracy that resulted from relying on Find was outweighed by the ease of the operation, and so we recommend using this function.

Box 12: Using quotes to illustrate your findings

When we looked at the text from the Officials group at the Ciba-Geigy site that had been coded under “purpose(s)/goals,” we found that everyone seemed to be saying the same thing. We summarized that viewpoint by saying the Officials thought community involvement’s goal should be “to educate; to establish communications that ‘flows both ways’; and to establish trust and acceptance so that the public is comfortable with the actions taken at the site.”

In the report on our Waukegan case study, we used three quotes from three different people to illustrate the theme of how the members of the Latino group thought that they could become more involved. Using several quotes allows the varying perspectives of different individuals to add depth and detail to the point:

Meetings like this [focus group] one, even without getting paid – this is a dynamic way to create an environment that I don’t yet think exists in all of the many other groups. The Anglo Saxon groups that dedicate themselves to this – we don’t have awareness of all of this because it hasn’t all reached our communities.

I, like others, belong to a social club and we know a lot of people. I think that we should get together and pass on this information that we now have and to get those people to do the same thing.

We have to unite in order to do something better. That way we can communicate and say that you all are doing this to contribute to the betterment of the environment. It is necessary to have contact with people who are already doing it and that want to better it.

Box 13: Showing contrasting views

At the Ciba-Geigy site members of the Officials group saw the close relationship between EPA and the PRP as positive, while the Highly Involved and General Public groups were concerned that it created a conflict of interest. In contrast, all groups pointed to public apathy as a problem.

In Waukegan members of the Officials and Involved focus groups spoke about attempts to engage the Latino community whereas the Latino community participants talked about not having any such attempts made and, importantly, a feeling that [city] officials did not take any steps to communicate with the Latino population. Similarly, members of the Highly Involved and Latino group had many different perspectives on re-use than did the officials.

Step 9: Report Findings and Make Program Improvements

Once you have analyzed the focus groups, it is time to make use of what you have learned. How do you make sense out of all the information? How do you know what’s important? What goes into a report? Here are some guidelines for thinking it through.

The first step is to make sure that everyone involved with the site – in particular, those who participated in the focus groups – is informed of the results of the focus groups (Box 14). This includes EPA personnel (Site Manager, Community Involvement Coordinator, etc.), local government officials, community groups, and the general public. Concise and clearly written reports are important, with more detailed analysis available for those who want to know more.

Be sure to explain not only the results (e.g., “the general public wants more public meetings”), but also the methods you used in carrying out the project. This helps to reassure people that the evaluation was conducted in a credible manner. Good communication of the results, and an open dialogue about what they imply, will help to enhance “buy-in” from various participants which in turn will streamline the process of implementing program changes.

Results of your focus groups will likely have identified both strengths and shortcomings in the current community involvement and site clean-up process that are important to capture so that future modifications or program improvements can be made or at least considered. In some cases participants will have made specific suggestions (e.g., a specific factsheet that they would like EPA to hand out or creation of a website). Other times it will require more creativity to figure out how a concern could be addressed, such as finding out one segment of the population is still not aware of the site clean-up effort even after years of community involvement. Information on participants' perceptions of the site can be useful in identifying the source of discontent. At the same time, be sure that addressing one concern does not undercut a feature of the process that participants cited as a strength. At times, different people may have conflicting preferences so that everyone can't be satisfied at once.

Box 14: Sharing your findings

At our case study sites, we used several methods to share our findings with stakeholders. We began with a small meeting with key stakeholders who had participated in the focus groups. We provided draft write-ups of our focus group analysis (as well as the survey and Q analyses) prior to the meeting, then we discussed the presentation of the results and the strengths and weaknesses of our methodology with these key players.

Collecting information using focus group methodology can provide useful information for both developing a new program, correcting one mid-course or simply reflecting what has been accomplished as part of an ongoing process. In some instances you may find yourself confirming what you thought you already knew. In other instances you may be uncomfortably dismayed or pleasantly surprised at what you learn. Regardless, you will have a wealth of information to guide your next steps. Remember, evaluation should help lead to change and can become an impetus to program improvement.

Appendix A: Additional Resources

Below are listed some additional sources that give advice on how to conduct focus groups.

Fetterman, S, J Kaftarian & A Wandersman (eds.) 1996. *Empowerment evaluation: Knowledge and tools for self-assessment and responsibility*. Sage.

Kruger, Richard A. 1988. *Focus Groups: A Practical Guide for Applied Research*. Sage.

Morgan, David L. & Richard A. Kruger 1998. *The Focus Group Kit* (6 volumes). Sage.

Morgan, David L. 1998. *The Focus Group Guidebook*. Sage.

Patton, Michael Quinn 1987. *How to Use Qualitative Methods in Evaluation*. Sage.

Stewart and Shamdasani 1990. *Focus Groups: Theory and Practice*. Sage.

Additional materials that can support evaluations are available from EPA, including:

- A brochure explaining why and how to evaluate (www.epa.gov/publicinvolvement/brochures/evaluate.pdf)
- Resources for using surveys to evaluate (www.epa.gov/publicinvolvement/feedback/index.html)

Also, there are a number of evaluation related documents regarding focus groups that are available at:

- www.epa.gov/evaluate/index.htm
- www.ehr.nsf.gov/EHR/REC/pubs/NSF97-153/START.HTM#TOC

Appendix B: Ciba-Geigy Discussion Guide

I. INTRODUCTION (5 Minutes)

Objectives:

- Put participants at ease
- Explain the purpose of the study
- Explain how focus groups work

A. Moderator welcomes participants:

Moderator will introduce herself, welcome participants, [invite them to enjoy refreshments if not served prior to group] and note that she is an investigator on the research team for this project.

B. Moderator explains purpose of discussion:

Moderator: Thank you for coming today/night. My name is Susan Santos. You've all heard a little bit about what our research project involves from the letter you received inviting you to participate in this discussion and also from the consent form we asked you to read and sign before the start of the group tonight. Our discussion is going to explore the topic of how community members are involved in the Superfund site [name specific site] cleanup process both in terms of the process for involvement and preferences for clean-up.

C. Moderator explains procedures:

Moderator: Before I ask you to tell me about who you are, I'll tell you a little about how a focus group like this works.

- < I'm going to ask questions to launch our discussion. But please don't feel that you have to wait for me to call on you: you are welcome to speak up anytime.
- < There are no right or wrong answers; we're interested in your candid opinions and ideas. If the person sitting next to you agrees with you that is fine and if they or someone else disagrees that is fine too. I want to make sure everyone here feels comfortable expressing their own opinions and that you understand those opinions are important to us.
- < As you can see by the stack of papers in front of me, we have a lot to cover. So please don't be offended if I interrupt you to move on so I can hear from everyone.
- < As you can see from the equipment here, I am recording our discussion. The recording will be used for our research and as you read in the consent form, access to the tapes and transcripts is restricted. For purposes of my being able to lead the discussion today/night, I have taken the liberty of using your first names only. In writing our report, we will not be using any names.
- < [As appropriate] You will also notice one of my colleagues [give name] working on this project will be observing and listening to our discussion tonight and taking notes. They will not be part of the discussion.

- ⟨ Because we are taping, I need you to speak up at least as loudly as I do. I will give you this hand signal (motions upwards) to indicate if you personally need to speak up. I will also give you this signal (motions a "T" signal with hands) if I must interrupt you to move on to someone else or to another topic.

D. Self-introductions of participants:

Moderator: I'd like to find out a little bit about you now. Tell me where you live, and a little bit about what keeps you busy these days.

Note: It is important to provide participants with an opportunity to "hear" themselves talking about something that does not particularly put them on the spot or make them feel that they are being tested. The moderator will not ask people what they do for a living. This can make people uncomfortable if both blue- and white-collar occupations are represented.

II. GENERAL AWARENESS (5 - 8 minutes)

Moderator: As you may recall from the letter you received inviting you to participate in this group, we want to talk about community involvement in the Superfund clean-up process at the [name site]. What comes to mind when I say the [name site] – note alternatively moderator will say “community involvement” in site clean-up issues? [pending the group]

Note: moderator will list issues mentioned on flip chart.

What can you tell me about the site? Or clean-up activities? [probe for specific concerns]

Has anyone ever tried to get more information about the site or been involved in any activities dealing with the site clean-up process?

Is anyone aware of any specific community groups involved in the site clean-up environmental or community health issues in this area? Does anyone here belong to any such groups?

III. VIEWS ABOUT THE COMMUNITY INVOLVEMENT PROCESS (30 - 40 min)

Objectives: Determine specific awareness of community relations activities
Determine pros/cons for activities and overall involvement process
Determine general (dis)satisfaction with process and those involved

A. Activities/Opportunities for Involvement:

Moderator: Before we talk more about some of the things you have mentioned, I'd like to talk a little more specifically about some of the information or activities that have existed/exist for community involvement?

What types of CI activities are people aware of? Has anyone participated in any activities (moderator will probe for the following: Public meetings? Public Availability Sessions? Technical Review meetings, site tours, comment on documents, etc). How did you find out about these activities/opportunities?

[referring to what has been said] Let's talk about the meetings that have been held - did they meet your needs? How? What were you hoping they would accomplish? [moderator will probe for process and outcomes] What was important to you about each activity? In what ways did [name activity] NOT meet your needs? Why? Could something have been done differently that might have improved it? [probe again for process and outcomes]

[Moderator will probe for several of the activities listed using same series of probes]

B. Objectives/Purpose of CI and Personal Involvement:

Moderator: As you may or may not be aware, EPA requires that sites being cleaned up as part of the Superfund process have a Community Involvement program some of the elements of which we have just been discussing. [calling on someone] What do you see as the purpose or objective of CI for this site? How about others of you? Do you think that the EPA/Ciba Geigy folks would agree with that? Why/Why not?

Have your expectations or needs related to CI ever changed? How/why? Did that ever get communicated to EPA/PRP/Other? If so, was there a corresponding change in the CI activities to meet them?

How would you characterize EPA's role in the site clean-up process? The Community Involvement process? What about Ciba Geigy?

What did you see as your role in the CI effort or site clean-up process? What about others of you would you say you have a similar or different role? Have these roles or your feelings about your role changed at all over time? How? Why?

Sometimes people at other sites such as the one we are discussing here – will talk about representing a group of individuals or a specific organization? What about all of you - who did you represent? [calling on someone] In what ways do you try and reflect the views of [name organization]? In what ways or how do you get back to this group about what you learn as a result of your involvement at this site? Do you think the process for CI is any different for an individual that represents just themselves or their family and an organization? How? Should it be?

IV. MEASURES OF “SUCCESS” AND SATISFACTION WITH OUTCOMES (30 min)

Moderator: We've talked a little about your expectations for community involvement at the site and earlier about some specific activities. Overall, do you think the CI effort at this site has been successful? In what ways? [moderator will probe for examples and follow up on process versus outcome related ones].

[calling on someone] Can you give me an example of something that was particularly successful? How did you determine it was successful?

In what ways has the Community Involvement effort not been as successful? Are there things you would recommend be done differently going forward?

Moderator: At the start of our discussion today, some of you mentioned some of the concerns/questions you have had about this site. To what extent have your questions ad

concerns about the site and the site clean-up process been addressed? How were they addressed? [moderator will refer back to concerns listed at start of group or other site clean-up related issues mentioned during discussion]

Do you think they would have been addressed without the types of community involvement we have been talking about? Why/why not? Is there any specific aspect of the community involvement effort for this site that you feel has better helped to address the concerns you had over the site or clean-up issues? What specifically?

How do you feel about the remedies that have been chosen for the site? Why do you feel that way? Is there something else that you preferred? If so, what and why was it preferable? Did you express that opinion/preference to the EPA? [Ciba?] What was their response?

How much agreement/disagreement exists about the site clean-up process in general? What was the source of the conflict? Among whom? How was it resolved? Are there ways to improve how conflict gets involved going forward?

[Referring to earlier site clean-up decisions] Some of the clean-up remedies have been in place for some period of time now; have your preferences or feelings about the selected remedy changed at all over time? Why/why not?

To what extent do you feel the EPA/Ciba takes the community concerns into consideration when selecting cleanup remedies? Can you give me an example? Are there formal ways that they let you know how your input has been considered? How would you recommend that be done?

Let's talk about the site clean-up activities that still remain. What preferences do you have for clean-up? Have you been able to provide this input to the EPA/PRP? What has their reaction been? What's your reaction to that?

V. SUGGESTIONS FOR IMPROVING THE CI PROCESS (5 – 8 min)

Moderator: I'd like to talk a little about the ways to improve overall satisfaction and effectiveness in a community involvement process. Do you think it's important that Superfund sites have a structured program for community involvement? Based on your experiences at this site – what would be some of the ways the process might be improved? Are there specific things you think the EPA needs to do or should do? What about community members/other stakeholders? What about Ciba Geigy?

VI. CLOSE – (5 min)

Moderator: We're just about out of time and I want to thank you all for participating. As I said at the start of our discussion tonight – our research project involves looking at different tools or methods for getting feedback on community involvement processes and outcomes at Superfund sites. You've all just participated in one of those tools. What's your reaction to our discussion today/night? [probe] What was useful/interesting? Was time spent worthwhile? etc.

Appendix C: Waukegan Harbor Discussion Guide

Officials Focus Group Discussion Guide January 2007

I. INTRODUCTION (5 Minutes)

Objectives:

- Put participants at ease
- Explain the purpose of the study
- Explain how focus groups work

A. Moderator welcomes participants:

Moderator will introduce herself, welcome participants, [invite them to enjoy refreshments if not served prior to group] and note that she is an investigator on the research team for this project.

B. Moderator explains purpose of discussion:

Moderator: Thank you for coming today/night. My name is Susan Santos. You've all heard a little bit about what our research project involves [from the letter you received inviting you to participate in this discussion and/or conversations you may have had with one of the other members of the research team – and also from the consent form we asked you to read and sign before the start of the group today/night.

Our overall research study is looking at different tools that can provide feedback on the quality of Community Involvement efforts and clean-up decisions at contaminated sites. The premise of our research is that effective methods for providing feedback can improve the exchange of information and interactions among different stakeholders including agencies, responsible parties, and local citizens and that improvements to information exchange and stakeholder interactions may ultimately lead to better clean-up decisions.

Our discussion is going to explore the topic of community involvement in the clean-up and revitalization of the Waukegan Harbor Area of Concern and Waukegan River Watershed both in terms of the process for involvement and preferences for clean-up and reuse.

C. Moderator explains procedures:

Moderator: Before I ask you to tell me about who you are, I'll tell you a little about how a focus group like this works.

- I'm going to ask questions to launch our discussion. But please don't feel that you have to wait for me to call on you: you are welcome to speak up anytime.
- There are no right or wrong answers; we're interested in your candid opinions and ideas. [I recognize that some/many of you know one another and may even think you know each other's view] –but I want to stress that I really do want to hear your opinions. If the person sitting next to you agrees with you that is fine and if they or someone else disagrees that is fine too. I want to make sure everyone here feels comfortable

expressing their own opinions and that you understand those opinions are important to us.

- There is a lot I'd like to cover in our discussion today, so please don't be offended if I interrupt you to move on so I can hear from everyone or if I call on someone in particular that perhaps we haven't heard as much from.
- As you can see from the equipment here, I am recording our discussion. The recording will be used for our research and as you read in the consent form, access to the tapes and transcripts is restricted. For purposes of my being able to lead the discussion today/night, I have taken the liberty of using your first names only. In writing our report, we will not be using any names. I'd also ask that you protect the confidentiality of one another in the room,
- You will also notice one of my colleagues [give name] working on this project will be observing and listening to our discussion tonight and taking notes. He will not be part of the discussion.
- Because we are taping, I need you to speak up at least as loudly as I do. I will give you this hand signal (motions upwards) to indicate if you personally need to speak up. I will also give you this signal (motions a "T" signal with hands) if I must interrupt you to move on to someone else or to another topic.

D. Self-introductions of participants:

Moderator: To start, I'd like you to briefly tell me what you do and maybe one thing about your area of interest when it comes to the Waukegan Harbor AOC or Waukegan River Watershed.

II. GENERAL AWARENESS (5 - 10 minutes)

Moderator: As I said earlier, we want to talk about community involvement in the clean-up process at the Waukegan Harbor Area of Concern and Waukegan River Watershed. I'd first like to ask what are the different environmental problems/issues that need to be addressed in the Waukegan AOC and watershed? *[note to Caron – this is officials guide – we'll modify language around “environmental” for Latino group – in fact we want to explore that group's perception of concerns and issues which may look different than for traditional involved citizens – also yes – we have decided to focus on clean-up and reuse/revitalization form all the conversations and emails I recall]*

Note: moderator will list issues mentioned on flip chart. Differentiate past efforts on specific Superfund sites to overall AOC and current efforts. Differentiate watershed from harbor/AOC. Moderator may probe for “impairment of beneficial uses” versus concerns over health risks, re-use, “revitalization” etc.

- What can you tell me about the different things being done to address some of these concerns? [Probe for comments on separate clean-up initiatives, studies, etc]
- How have you heard/learned about these things {probe for sources, specific groups, individuals, agencies vs media, etc]

III. VIEWS ABOUT THE COMMUNITY INVOLVEMENT PROCESS (30 - 40 min)

Objectives: Determine specific awareness of community relations activities

Determine pros/cons for activities and overall involvement process

Determine general (dis)satisfaction with process and those involved

A. Activities/Opportunities for Involvement:

Moderator: Before we talk more about some of the things you have mentioned, I'd like to talk a little more specifically about some of the opportunities and ways that different stakeholder groups have been involved in the clean-up process [and decisions about re-use] for the AOC and watershed.

- What are some of the different opinions or concerns about the different clean-up initiatives that are occurring? [Probe for specific concerns differentiate clean-up from re-use issues]. Is that a concern you think is shared by other stakeholder groups? Which ones? Are you aware of those who might have a different perspective?
- What other organizations/groups are involved in the clean-up and revitalization?
- What types of opportunities/activities exist regarding the Waukegan Harbor Area of Concern and Waukegan River Watershed for people to learn about the various different clean-up [and re-use?] initiatives? [Moderator will list on flip chart]
- Do you think most people in the community are aware of these? Which ones would you say they are least/most aware of? Can you give me an example?
- Has anyone here participated in any of these activities [moderator will probe for the following]: Public meetings? Public Availability/Information Sessions? Citizen Advisory Group meetings, comment on documents, etc). How did you find out about these activities/opportunities? What are your thoughts on that as a way to involve the public? Are there other ways to engage the community that would be more effective?
- [referring to what has been said] Let's talk about the meetings that have been held – in what ways do you think this activity met the needs of the community? How? What were you hoping they would accomplish? [moderator will probe for process and outcomes] What was important to you about [each activity]?
- In what ways did [name activity] NOT meet your needs? [The community's needs? What about your agency's needs?] Are there some groups that you think this activity better served than others? What makes you say that?
- Are there some parts of the community that are not represented in the process or involved? Who? [note moderator will probe for Latino community and also probe as to participants understanding of this group]
- Could something be done differently that might to better include that group or get their involvement?

[Moderator will probe for several of the activities listed or that are part of the involvement plan using same series of probes - Ask about CAG, newsletters, etc.]

B. Objectives/Purpose of CI and Personal Involvement:

Moderator: As some of you know, there has been community involvement in discussions of the cleanup and revitalization of the Waukegan Harbor area (area of concern). What do you see as the purpose or objective of community involvement efforts for the Waukegan Harbor Area of Concern and Waukegan River Watershed? How about others of you? Do you think that the other agencies/official involved or other community members would agree with that? Why/Why not?

- Given the status of clean-up and restoration of the AOC and watershed - have your expectations or needs related to CI changed? In what ways? /why? Has there been any change in the CI activities to address those needs?
- I know just from those of you here today that a lot of different groups/agencies are involved in the AOC and watershed clean-up process. Is there one agency you see as having a lead role? Are there other agencies or entities you think should have been involved that are not? How can [referring to entity named] other agencies be effectively involved?
- How are the different agencies involved in the Community Involvement process? Is there anyone not involved that should be? What about the CAG? What do you see as their role?

IV. MEASURES OF “SUCCESS” AND SATISFACTION WITH OUTCOMES (30 min)

Moderator: We’ve talked a little about your expectations for community involvement at the site and earlier about some specific activities. Overall, do you think the CI effort for the AOC has been successful so far? In what ways? [Moderator will probe for examples and follow up on process versus outcome related ones].

- [calling on someone] Can you give me an example of something that was particularly successful? How did you determine it was successful?
- In what ways has the Community Involvement effort not been as successful? Are there things you would recommend be done differently going forward?

Moderator: [Pending what has been said] At the start of our discussion today, some of you mentioned some of the concerns/questions [you/community members] have had about the Waukegan Area of Concern and watershed. To what extent have these questions and concerns about the site clean-up/restoration process been addressed? How were they addressed? [Moderator will refer back to concerns listed at start of group] Are there different concerns about re-use?

- Is there any specific aspect of the community involvement effort for this site that you feel has/will better help to address concerns over site restoration or re-use issues? What specifically?
- What would you like to see happen regarding revitalization of the Waukegan AOC?

Moderator: [pending what has already been discussed] Now I'd like to specifically talk about clean-up activities that are being proposed or have been implemented for the area. How do you feel about the remedies that have been chosen or are being discussed? [Probe about various clean-up actions e.g. dredging; clean-up of specific Superfund sites, other] Is there something else that you preferred? If so, what and why was it preferable? Have you expressed that to another agency before? Who? What was their response?

[How much of the focus should be on clean-up versus revitalization of the area – Note to Caron – we will focus on both is my understanding and the guide is structured to get at both]

- How much agreement/disagreement exists about the site clean-up process in general? Have there been any “conflicts”? Among whom? How was it resolved? Are there ways to improve how conflict gets resolved going forward?
- [Referring to earlier site clean-up decisions] Some of the clean-up remedies have been in place for some period of time now; have your/the community's preferences or feelings about the selected remedy changed at all over time? Why/why not?
- To what extent do you feel the different agencies involved [refer back to earlier discussion e.g. USEPA, IEPA, City, County, Army Corps, etc] take the community concerns into consideration when selecting cleanup remedies or making decisions about reuse/revitalization? Can you give me an example? Are there formal ways that [they] let community members or other stakeholders know how their input has been considered? How would you recommend that be done in the future?
- Let's talk about the site clean-up activities that still remain. What preferences do you have for clean-up? Have any of you been able to provide this input? Who do you provide it to? What has their reaction been? To what extent are clean-up decisions explicitly or implicitly tied to reuse issues? Do you think that is clear to the community? Does that need to be a part of the community involvement process?

V. SUGGESTIONS FOR IMPROVING THE CI PROCESS (5 – 8 min)

Moderator: I'd like to talk a little about the ways to improve overall satisfaction and effectiveness in a community involvement process. Do you think it's important that sites like the Waukegan Harbor Area of Concern and Waukegan River Watershed have a structured program for community involvement?

- Based on your experiences at this site – what would be some of the ways the process might be improved?
- Are there specific things you think [the responsible agencies] need to do or should do? What about community members/other stakeholders?

VI. CLOSE – (5 min)

Moderator: We're just about out of time and I want to thank you all for participating. As I said at the start of our discussion tonight – our research project involves looking at different tools or methods for getting feedback on community involvement processes and outcomes at contaminated sites. You've all just participated in one of those tools. Before you leave I'm going to ask you to do one last thing for me – we'd like you to fill out this very brief questionnaire about

your experience tonight. You don't need to put your names on it unless you'd like to. When you're done you can just leave it here for me.

Again, thank you all for participating today. The information you have provided will be very useful to us as we look at ways to provide feedback on the community involvement process and how people express their preferences for clean-up remedies.

Appendix D: Ciba-Geigy Recruitment Phone Script

Hello. My name is _____, and I'm calling on behalf of a research team from the Social and Environmental Research Institute and the University of Medicine and Dentistry of New Jersey along with Rutgers University. We're conducting a study about community participation in the clean-up of the Ciba-Geigy Superfund Site in Toms River.

Our study involves looking at different ways to get useful feedback on the community involvement and clean-up process at two Superfund sites and the Ciba-Geigy site is one of them. One of tools we are using to get people's input and feedback is to hold several discussion groups or so-called focus groups with different members of the community about their experiences and opinions regarding the site. We got your name from a list of people who had been involved with the Ciba-Geigy site at one point in time or who had received information about the site and we hope that you are willing to participate in our study.

The focus group discussion will last about 2 hours and will involve talking with around 8-12 other community members about people's opinions about the clean-up and community involvement process at the Ciba-Geigy site. An experienced moderator will lead the discussion and you do not need to do anything to prepare. It will be held on August 5 in Toms River, probably at the Municipal Building although that hasn't been finalized yet. There will be refreshments, and everyone that participates will receive a \$30 honorarium to thank you for your time.

Are you generally interested? If no you can end the call right now...

Now, let me ask you a few additional questions. We're trying to get a mix of different types of people to be in the focus group.

First, are you, or have you been in the past, part of any community organization or government agency/department that has been involved in planning of clean-up of the site? [if yes find out which one and how involved]

And second, tell me about how long you've been involved in activities associated with planning the clean-up of the site.

Third, what is your age?

Fourth, how long have you lived in the area?

Fifth, have you had any work involvement with the site such as being an employee of Ciba or consulting firms, etc.

[If screening questions don't work out: I'm sorry, but it looks like we've already got a lot of people (from group X/with Y history of involvement/we are not asking people that have worked for the site, etc.), so it looks like we probably won't be able to have you participate. In addition to the focus groups, as part of our study we will be sending out a survey and asking people to do a card-sorting exercise. Would you be interested in participating in our study this way? If yes, then we may be getting in touch with you to help us in one of those ways. Thanks for your time, and have a good evening]

Now, I'd like to check on your availability. As I said, the focus group will last not more than a couple hours. We'd like to hold it on Thursday, August 5, from 7:30 to 9:30. [Would holding it earlier – say starting at 6 or 7 – be better for you?]

We'll get in touch with you within the next week once we finalize the time and location for the focus group. Thank you for your help, and we look forward to speaking with you. Have a good evening.

Appendix E: Ciba-Geigy Codebook

Code	Definition	Example
Suggestion	Suggestions people made to improve the process/CI effort	I would say [hold meetings] quarterly. The kind of public meetings at a more, you know, monthly pace, or weekly, whatever, it would kist – if there's not enough new information or things coming out, so depending on the state of where you're at in whatever cleanup kind of demands, you know, that makes its own demands.
Purpose/goal	Statements about the purpose or goals of community involvement.	I would say [the purpose of community involvement is] to explain it in common language, um, what are actually the causes, what could possibly be the ramifications of what they do
EPA/Agency/DEP	Comments about EPA or DEP	... basically the EPA and, and different governmental agencies are basically a responsorial type agencies, where if it wasn't for the people, and the pressure put on them, they would have never responded and never had the meetings.
Local, county officials/ politicians	Comments about local government officials	If it's going to be the politicians, a lot of times they don't want to hear something going wrong in the community under their watch, whatever that may be.
Ciba/company	Comments about Ciba-Geigy	And it's still a complete turnoff that the Ciba hires the people who clean-up the site.
Community groups/ OCCCW/ TEACH/ CACCCC	Comments about the community groups that were involved with the site	The advantage that OCCCW has is that several of us are scientists.

Community/ public/neighbors	Comments about the general public	... you've been going to these meetings for years, and somebody who just moved into the community gets up there, and now wants a total explanation of everything that happened. A lot of the, the speakers will, will, out of courtesy try to address that, address their question, but the thing is that it's frustrating for the people sitting there that want the new information brought out.
Media/ newspaper/ press	Comments about the media	Jean Mikle from the Press covered it, She's done a pretty good job.
Community involvement/ methods to inform/ educate/education	General statements about community involvement as a whole, or about specific activities that don't have their own codes	Well, EPA has different ways of notifying the community. One is through the, uh, newspapers, and another one is through the mailing list.
Input/advice/comment	Comments about the community's input about the project	EPA had to solicit information from the community about, about the remediation process. And you know, you have a chance for written input and stuff like that.
Information/inform	Comments about the quality or quantity of information or education available to the public	In plain language, because it really is – we educated ourselves. And we had to really understand, you know, what, what the different acronyms meant, and that, because they're throwing them out all the time.
Public meetings/ availability sessions	Comments about public meetings and public availability sessions	The informational is extremely informal, people can come and go as they please. They've got displays around, and they're, the EPA people are there to answer any questions that someone might have, especially for the new people in the area.
Website	Comments about the EPA/Ciba or TEACH websites	I don't think too many people, too many people visit that [EPA] website.
Tour	Comments about site tours and observation deck	I'll tell you what a big problem with the, the tours on site, was the fact that they wouldn't let us take pictures.
TAG/grant	Comments about financial assistance to community groups, particularly the TAG grant	... it was a very difficult process, a lot of paperwork, a lot of income contributions that I had to account for. It was – the book for it was about three or four, uh inches thick, just the -- to apply for it.

CAG/Community Advisory Group	Comments about the possibility of having a community advisory group	It would depend on who the, um, people were who were chosen for that group. If the people are politically motivated, it may not be a good group.
Site (note other possible words, e.g pipeline, health concerns)	Perceptions/concerns about the site	You can put down there "bureaucracy." [as something that comes to mind when he hears "Ciba-Geigy site"]
Preferences	Community and agency preferences for the cleanup	The bioremediation as opposed to incineration is a win situation.
Drums/ landfill	Comments about the drums on the site	[I don't like] The fact they're not removing all the drums. They're waiting for – the drums that they're leaving there isn't part of the Superfund site.
Monitoring	Comments about efforts to monitor the cleanup	I wanted real-time, uh, website air monitoring data.
Development/ land use	Comments about how the site will be used after the remediation is done	I understand that the state's interested in some of the land that's available. Um, people that want to build <inaudible> are interested. West Dover would like a small piece of it for, uh, easy access to the back of the school.
Emotion	References to the role emotions have played or should play in the process	... somebody said you can't be emotional about this, but that's the problem. I'm a grandparent. Yes, I lost a grandson. But my daughter would not be able to attend this meeting. And I think that the parents who lost children, I think if they could, they should attend to give the emotional issue, and say "I don't want this to happen to another child."
Cancer	Comments about cancer	... they had a big blowup of, you know, 1000 people showing up, you know, at the one school because children were being affected by cancer. (HI 943-945)