

**OAK RIDGE RESERVATION HEALTH EFFECTS  
SUBCOMMITTEE (ORRHES)**

**CENTERS FOR DISEASE CONTROL AND PREVENTION  
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY**

**Detailed Proceedings of the March 22, 2005, ORRHES meeting**

**Call to Order/ Opening Remarks**

The Oak Ridge Reservation Health Effects Subcommittee (ORRHES) convened on March 22, 2005, in the Alpine Room at Oak Ridge Mall at 333 East Main Street, Oak Ridge, Tennessee. Chairperson Kowetha Davidson called the meeting to order at 12:15 p.m.

**Introduction of Subcommittee Members**

Kowetha Davidson asked all attendees to introduce themselves. The attendees present during the meeting were:

Kowetha Davidson, ORRHES Chair  
Marilyn Horton, Designated Federal Official (DFO) for ORRHES  
Tony Malinauskas, ORRHES member  
David Johnson, ORRHES member  
Susan Kaplan, ORRHES member  
Jeff Hill, ORRHES member  
Bob Craig, ORRHES member  
James Lewis, ORRHES member  
Pete Malmquist, ORRHES member  
Herman Cember, ORRHES member  
Charles Washington, ORRHES member  
Karen Galloway, ORRHES member  
George Gartseff, ORRHES member  
Peggy Adkins, ORRHES member  
Barbara Sonnenburg, ORRHES member  
Don Box, ORRHES member  
Lynn Roberson, public member  
Luther Gibson, public member  
Jon Richards, U.S. Environmental Protection Agency (U.S. EPA) Region IV liaison  
Chudi Nwangwa, Tennessee Department of Environment and Conservation (TDEC) liaison  
Brenda Vowell, Tennessee Department of Health (TDOH) liaison  
Tim Joseph, U.S. Department of Energy (DOE)  
Bill Cibulas, ATSDR  
Jack Hanley, ATSDR  
Bill Taylor, ATSDR  
Janna Telfer, ATSDR  
Susan Robinson, ATSDR  
Trent LeCoultre, ATSDR  
Sandy Isaacs, ATSDR  
Burt Cooper, ATSDR

1 Bob Safay, ATSDR  
2 Amy Adkins, TA Consulting, Inc.  
3 Ellen Rogers, *The Oak Ridger*  
4 John Wilhelmi, ERG  
5 Liz Bertelsen, ERG  
6  
7  
8

## 9 **Announcements, Agenda Review, and Correspondence**

### 11 **Announcements**

12 Kowetha Davidson announced that Bill Cibulas and Jack Hanley were named as the ATSDR co-  
13 project managers. Dr. Davidson asked if Dr. Cibulas and Mr. Hanley could sit at the front of the  
14 room. Following no objections, Dr. Cibulas and Mr. Hanley moved to sit next to the Chair.  
15  
16

### 17 **Agenda Review**

18 Kowetha Davidson reviewed highlights of the agenda for the meeting.

- 19 • Status of Action Items.
  - 20 • Status of Public Health Assessments (PHAs).
  - 21 • Presentation/Discussion: the Toxic Substances Control Act (TSCA) Incinerator PHA –  
22 Public Comment Release.
  - 23 • Presentation/Discussion: Launch of ATSDR’s New Web Site for Activities Related to the  
24 Oak Ridge Reservation (ORR).
  - 25 • Presentation/Discussion: the Division of Health Assessment and Consultation (DHAC)  
26 Proposed Plan for Collecting Information About the ORR Community.
  - 27 • Presentation/Discussion: Community/Physician Health Education.
  - 28 • Work Group Reports.
  - 29 • View ATSDR Video on the Y-12 Uranium PHA.
- 30

### 31 **Correspondence**

32 Kowetha Davidson said that there had been two letters drafted since the last ORRHES meeting  
33 on September 14, 2004. One was a letter from ATSDR to Barbara Sonnenburg in response to a  
34 question she posed during the executive session on November 30, 2004. ORRHES members  
35 were provided with a copy of the letter during today’s meeting. In addition, ORRHES members  
36 should have received a letter explaining that Bill Cibulas and Jack Hanley were named as co-  
37 project managers for ATSDR activities in Oak Ridge.  
38  
39

## 40 **Motion: Approval of September 14, 2004, ORRHES Meeting Minutes**

41  
42  
43  
44 Bob Craig made the motion to approve the September 14, 2004, ORRHES meeting minutes.  
45 David Johnson seconded the motion. The minutes were unanimously approved.  
46

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45

**Status of Action items**

Marilyn Horton directed the group's attention to the handout containing the ORRHES ATSDR recommendations and action items. She noted that there were no regular action items from the September 14, 2004, ORRHES meeting. However, she stated that the long-awaited Public Health Assessment Guidance Manual (PHAGM) was now available on CD, and had been provided to all of the subcommittee members today. Ms. Horton mentioned that people could also request a hard copy version of the PHAGM and Bill Taylor had some hard copies in the ATSDR Oak Ridge Field Office. James Lewis requested the manual in a hard copy version.

**Status of the Draft TSCA Incinerator PHA**

Marilyn Horton explained that all ORRHES members should have received both a hard copy and CD version of the Draft TSCA Incinerator PHA – Public Comment Version. She said that this was sent out to members 2 weeks in advance of today's meeting. She noted that the public comment period began today (March 22) and would run through May 6, 2005. She added that subcommittee members had been provided with a copy of a newspaper article printed in *The Oak Ridger* on March 18, 2005, entitled "Health Assessment of TSCA Incinerator Releasing on Tuesday."

**Discussion of the November 30, 2004, Executive Session**

James Lewis asked if there would be any segment of the agenda to discuss the executive session held with Barry Lawson on November 30, 2004. He wondered if they would deal with these aspects or if the topics were "considered a dead issue." He believed that some "outstanding" issues remained and wondered how and if they would be addressed.

Marilyn Horton replied that the executive session would not be part of today's agenda. Ms. Horton explained that she had sent out Barry Lawson's summary report of the session. On multiple occasions, she had asked the ORRHES members to provide any questions that ATSDR could directly respond to regarding the session. However, Ms. Horton received no questions. She noted that Bill Cibulas, in a letter to Kowetha Davidson, responded to the issues brought up during the session. She said that one issue from the meeting regarded replacing Jerry Pereira as the project manager, and as a result, Bill Cibulas named himself and Jack Hanley as the co-project managers. In addition, Ms. Horton stated that the two-thirds majority vote was addressed in the letter and "ATSDR was committed to looking at all recommendations ORRHES makes."

1 James Lewis said that the interaction between ORRHES and ATSDR was not addressed nor  
2 discussed. He was not saying he necessarily wanted this handled during today's meeting, but he  
3 wanted it to be dealt with at sometime. Marilyn Horton suggested that Mr. Lewis bring this issue  
4 up during new business. Mr. Lewis would think about doing so, but wanted it noted that this  
5 issue was not addressed.  
6

7 Bill Cibulas appreciated James Lewis's comments on the executive session. Dr. Cibulas said that  
8 there were some positive outcomes from the session (e.g., working out issues related to the  
9 PHAs), but believed that no one's expectations were completely met. He noted that a strong  
10 message was heard that there needed to be follow up on community concerns, and he had the  
11 sense from some of the ORRHES members that ATSDR was not doing this. Since this session,  
12 Dr. Cibulas said that ATSDR staff has had numerous conversations on how to ensure that the  
13 agency hears from the community. In addition, he explained that ATSDR is working to fill in the  
14 gaps from the needs assessment (described in detail during the meeting). He looked forward to  
15 obtaining the list of any additional issues requiring follow up and stated that ATSDR would try  
16 to address further issues that are identified.  
17

### **Agency Reorganization**

22 Bill Cibulas sent the group greetings from Henry Falk and Tom Sinks. He explained that many  
23 changes have taken place at ATSDR and the Centers for Disease Control and Prevention (CDC)  
24 since the last ORRHES meeting. He noted that Dr. Falk was now the Director of the  
25 Coordinating Center for Environmental Health and Injury Prevention as part of the restructuring  
26 and reorganization within CDC. He added that the National Center for Environmental Health  
27 (NCEH)/ATSDR was now one of the CDC's centers that reports to the Coordinating Center.  
28 Also, Dr. Sinks has been asked to serve as the Acting Director of NCEH/ATSDR for a 120-day-  
29 period, and Dr. Cibulas noted that Dr. Sinks is "very engaged in activities at the ORR" and is  
30 looking forward to a meeting update.  
31

### **Status of Public Health Assessments**

37 Bill Cibulas referred the group to an overhead (attendees received as a handout) that detailed all  
38 of the upcoming PHAs and the estimated data validation draft (DVD) release dates for each  
39 PHA. Dr. Cibulas noted that he has tried to share his "strong commitment" in making sure that  
40 the work at Oak Ridge remains one of the highest priorities at ATSDR. He explained that there  
41 are eight remaining PHAs and one summary document that will be prepared at the end. He  
42 pointed out that ATSDR had an "ambitious schedule," and still remained on target for six of the  
43 eight PHAs. ATSDR did not, however, meet the schedule for polychlorinated biphenyls (PCBs)  
44 and mercury (both estimated to have DVDs released in February 2005). Dr. Cibulas next  
45 presented a more detailed slide of the status of the ORR PHAs (attendees received as a handout).  
46 Dr. Cibulas felt that PCBs and mercury were the more interesting PHAs because exposure

1 investigations in the 1990s showed that there have been some exposures to PCBs and mercury  
2 via fish and possibly other exposure pathways.

3  
4 Bill Cibulas noted that Jo Freedman, a senior toxicologist at ATSDR who had been preparing the  
5 PCBs PHA, retired from the agency with little notice. As a result, Jack Hanley has assumed the  
6 responsibility of finishing the PCBs PHA. Dr. Cibulas explained that they are learning more  
7 about subtle health effects associated with low-level exposure and about background levels of  
8 PCBs. He noted that Dr. Friedman's information is currently under review to ensure that it  
9 correlates with the most recent knowledge of PCBs. Mr. Hanley was working with Ken Orloff,  
10 also an ATSDR toxicologist, to ensure that the information contained in the PHA was up-to-date  
11 with the existing science. Dr. Cibulas said that a DVD of this PHA was scheduled for release in  
12 April 2005. He assured the group that this PHA was a priority.

13  
14 Bill Cibulas explained that Bill Taylor, also a senior toxicologist within ATSDR, was the lead  
15 author on the Mercury PHA. He noted that Dr. Taylor was still receiving new data and was  
16 continuing his review of TDOH's Oak Ridge Dose Reconstruction. Dr. Cibulas believed that a  
17 DVD release of this PHA would most likely occur in May or June 2005. He added that this PHA  
18 remains a high priority for both Dr. Taylor and the agency.

19  
20 Bill Cibulas asked the ORRHES members to work with ATSDR to ensure that these PHAs are  
21 the best possible documents. He noted that the Exposure Evaluation Work Group (EEWG) and  
22 the ORRHES will have a significant amount of material to review over the next year. He added  
23 that the off-site groundwater PHA was shared with the EEWG the previous evening and the  
24 TSCA Incinerator PHA – Public Comment Release was disseminated to the public today. He  
25 stated that the group had his and Jack Hanley's commitment to keep these documents on  
26 schedule and to work with ORRHES to the fullest extent possible.

27  
28 Bob Craig asked if the Iodine 131 PHA had been released. Jack Hanley replied that this PHA  
29 was already out for DVD (when it is circulated through the designated agencies), and the  
30 document was currently undergoing internal review. Mr. Hanley said that they could move  
31 forward and present this PHA to the EEWG following this internal review.

32  
33 Bob Craig asked why the White Oak Creek (WOC) PHA was back as a DVD. Jack Hanley  
34 explained that last year the EPA's Office of Radiation and Indoor Air (ORIA) had wanted to  
35 become involved, and therefore the document was sent back through data validation to give  
36 ORIA an opportunity to review the document. Mr. Hanley noted that some changes and edits  
37 have been made, and said that this should be the next PHA released for public comment.

38  
39 James Lewis believed that the new process of reviewing the PHAs could have impacted the  
40 opportunity for some people to review the document at various stages. He said that certain noted  
41 scientists and others needed time to review these documents if ATSDR wanted community input.  
42 He wanted to see a time table before the document was released and circulated. Mr. Lewis was  
43 surprised that the TSCA PHA was available. He thought that copies of certain information had to  
44 be available earlier so people had ample time to review materials.

1 Bill Cibulas responded to James Lewis. Dr. Cibulas explained that the schedule was recently  
2 revised regarding when ORRHES can review the PHAs, which is now during the public  
3 comment period. He said that PHAs normally have a public comment period between 30 and 90  
4 days, but it generally spans 45 days. If ATSDR had advance knowledge that there was a large  
5 interest in a PHA or that a topic was controversial, Dr. Cibulas said that ATSDR could increase  
6 the initial public comment period. He encouraged ORRHES to work with ATSDR on particular  
7 PHAs and to notify the agency if more time is needed. Dr. Cibulas added that if a good rationale  
8 existed for extending a public comment period, then the agency could certainly consider  
9 extending the period. Mr. Lewis appreciated Dr. Cibulas's comments because some of the PHAs  
10 deal with issues that are of greater interest. He did not believe that these PHAs were shared  
11 openly enough with the public (e.g., iodine).

12  
13 Bill Cibulas was unsure why some people might not have known that the TSCA Incinerator PHA  
14 was being released today for public comment. Marilyn Horton explained that the PHA was sent 2  
15 weeks ago to ORRHES members and that they needed to let her know if the document was not  
16 received. James Lewis apologized because he was referring more to products that are presented  
17 at the work group meetings. He thought that these materials (e.g., summary documents) needed  
18 to be provided to work group members with more advanced notice to allow people ample time to  
19 review them.

20  
21 Because the DVD was still internal, Charles Washington wanted another column added for when  
22 the document was sent out to the public. Bill Cibulas confirmed that Mr. Washington wanted the  
23 schedule on the first slide expanded to incorporate more of the schedule from the second slide.

24  
25 Tony Malinauskas asked if the TSCA Incinerator PHA had been submitted to EPA for its review.  
26 Bill Cibulas said that EPA reviewed the document during the data validation phase. Dr. Cibulas  
27 noted that any comments received from EPA Region IV, EPA ORIA, TDEC, and TDOH would  
28 have been received during this period. Dr. Malinauskas asked if these comments had been  
29 addressed. Dr. Cibulas said that the agencies' comments are all addressed before the document is  
30 released for public comment.

31  
32 Jeff Hill requested that the schedule table include the final summary PHA.

33  
34  
35 **Presentation/Discussion: TSCA Incinerator PHA – Public Comment Release**

36  
37 Kowetha Davidson introduced John Wilhelmi, the presenter for this discussion. She said that Mr.  
38 Wilhelmi is a chemical engineer who specializes in evaluating air quality impacts from industrial  
39 emission sources. His professional career began as an air modeling specialist for a private  
40 consulting firm. For the last 10 years, he has continued this work as an environmental scientist at  
41 ERG. Dr. Davidson noted that Mr. Wilhelmi is a chemical engineer for ERG—he is not an  
42 employee of ATSDR. She added that Mr. Wilhelmi has also presented at some of the work group  
43 meetings.

44  
45 John Wilhelmi presented the information on the TSCA Incinerator PHA through a PowerPoint  
46 presentation. Meeting attendees were provided with copies of these slides.

1  
2 The outline for John Wilhelmi's presentation included:

- 3 • Objectives of the PHA
- 4 • Approach and background information
- 5 • A scientific analysis of the air exposure pathway
  - 6 o Emissions
  - 7 o Fate and transport
  - 8 o Ambient air monitoring
- 9 • How community concerns are addressed
- 10 • Recommendations made to ensure that the incinerator continues to operate safely

11  
12 According to John Wilhelmi, there were three objectives of the PHA:

- 13 • To evaluate the public health implications of off-site exposure to contamination released by
- 14 the TSCA Incinerator (1991 to present; the time frame in which the incinerator has operated)
- 15 • To respond to specific community concerns
- 16 • To make recommendations to ensure that the incinerator continues to operate safely

17  
18 John Wilhelmi stated that the main conclusion of the PHA is that the TSCA Incinerator does not  
19 pose a public health hazard.

20  
21 John Wilhelmi explained the approach that was taken to prepare the PHA. This included:

- 22 • Identifying community concerns
- 23 • Conducting a site visit
- 24 • Obtaining and interpreting site records
- 25 • Considering relevant publications and guidance
  - 26 o ATSDR: *Public Health Reviews of Hazardous Waste Thermal Treatment Technologies:*
  - 27 *A Guidance Manual for Public Health Assessors*
  - 28 o EPA: *Human Health Risk Assessment Protocol for Hazardous Waste Combustion*
  - 29 *Facilities* (draft)
  - 30 o National Research Council (NRC): *Waste Incineration and Public Health*

31  
32 John Wilhelmi read the following quote from ATSDR (2000), "Thermal treatment technologies  
33 [including incinerators] are inherently neither safe nor unsafe; whether they are safe depends on  
34 how they are designed and operated." Mr. Wilhelmi described this as the "guiding principle in  
35 developing the PHA" because he had to evaluate the data and available information in order to  
36 determine whether the incinerator was designed and operated safely.

37  
38 John Wilhelmi presented a map to show the location of the incinerator and surrounding areas. He  
39 noted that the incinerator is located in the northeast corner of the East Tennessee Technology  
40 Park (ETTP), formerly known as K-25. He said that the nearest residents live about 1.5 miles due  
41 north of the incinerator, on the opposite side of Black Oak Ridge. There are also residents living  
42 southwest and northeast of the incinerator, but these areas are more than 2 miles from the  
43 incinerator.

44  
45 John Wilhelmi presented a figure to show the design of the TSCA Incinerator. First, he explained  
46 the process for organic wastes, which are either fed into the incinerator as liquids or solids. They



1 are almost completely destroyed either in the rotary kiln (primary combustion chamber) or in the  
2 afterburner (secondary combustion chamber). At the end of the combustion process, Mr.  
3 Wilhelmi said that the organic wastes are virtually gone, and the off-gases are cleaned by air  
4 pollution controls prior to being vented through the stack to the atmosphere.

5  
6 Herman Cember asked what the organics were converted to when burned. John Wilhelmi said  
7 that at this point, mostly relatively benign molecules remain (e.g., carbon dioxide and water) and  
8 by-products of combustion. Mr. Wilhelmi stated that the environmental regulations require that  
9 99.99% of organic wastes be destroyed or removed, and 99.9999% of PCBs be removed or  
10 destroyed. He demonstrated this through a visual aide that had characteristics similar to PCBs. If  
11 he had 150 55-gallon drums (about 150,000 pounds) of PCBs and fed this into the incinerator,  
12 then the small amount in his jar would represent the amount of PCBs that would remain. He said  
13 that 150,000 pounds is slightly less than the incinerator has treated over its history, and the  
14 substance in the jar showed the amount that would have escaped untreated into the atmosphere.

15  
16 Charles Washington asked if this was irrespective of the waste being in solid or liquid form. John  
17 Wilhelmi said that this was correct.

18  
19 John Wilhelmi concluded the discussion on organics by saying that these are largely destroyed,  
20 though there are some trace amounts of by-products emitted.

21  
22 Susan Kaplan asked about metals. John Wilhelmi said that metals and radionuclides fed into the  
23 incinerator are not destroyed in either combustion chamber. They are largely collected in  
24 residuals, including ash, wastewater, and sludge, from air pollution controls. He noted that the  
25 efficiency of the collection varies based on the constituents entered into the incinerator, but that  
26 trace amounts of metals and radionuclides are emitted.

27  
28 John Wilhelmi summarized that the incinerator basically destroys most of the wastes, and  
29 primarily non-hazardous emissions remain. Metals and radionuclides are mostly sequestered in  
30 residuals and will not be emitted in the air; however, some trace amounts are released via the  
31 stack gases.

32  
33 Charles Washington asked about the temperatures in the afterburner. John Wilhelmi replied that  
34 the afterburner generally operates at 2200°F when burning PCBs.

35  
36 John Wilhelmi evaluated two types of air emissions: routine emissions coming out of the stack  
37 gas and non-routine emissions that occur during infrequent episodes or process upsets when the  
38 thermal relief vent is opened. Mr. Wilhelmi believed that non-routine emissions had occurred 18  
39 times since the incinerator began operations, which he considered a “fairly good track record.”  
40 Mr. Wilhelmi said that the significance of the openings during these non-routine events is that  
41 the gases from the incinerator are vented directly to the atmosphere. During these upsets, the  
42 gases do not pass through air pollution controls because the temperature cannot be controlled,  
43 and could consequently destroy the air pollution controls. He noted that episodic and routine  
44 releases from the main stack were evaluated in the TSCA Incinerator PHA.

1 Barbara Sonnenburg asked if there was a way to measure the radionuclides being released from  
2 the stack. John Wilhelmi responded that this is done, but not in “real time.” He did not believe  
3 that instantaneous measurements could be collected. Ms. Sonnenburg asked if these were  
4 measured more than once a year. Mr. Wilhelmi explained that samples were collected weekly,  
5 and that these were used in DOE’s modeling studies and considered in the PHA. He thought a  
6 problem existed when there are shorter sampling durations because there are higher detection  
7 limits. Therefore, detections are more difficult to identify. He said that a significant amount of air  
8 has to be collected in order to detect these contaminants. He noted that shorter duration samples  
9 could be collected, but the likelihood of detecting something is reduced.

10  
11 Barbara Sonnenburg asked if measurements were collected below in the scrubbers and other  
12 places where radionuclides go in the incinerator. John Wilhelmi said that the most relevant  
13 measurement is of the emissions that are coming out of the stack. Ms. Sonnenburg realized this,  
14 but thought that if it was known approximately what goes into the incinerator, then  
15 measurements could be collected for what is released out of the bottom to determine what is  
16 coming out of the top. Mr. Wilhelmi did not believe that the measurements conducted here were  
17 done with the purpose of characterizing what goes out of the top because this is already in the  
18 measurements from the stack. He said that DOE has to measure in these residuals to know how  
19 to manage the waste. He addressed the original question, which asked if there were  
20 measurements of the radionuclides that are going out of the stack. Mr. Wilhelmi said that there  
21 are and have been these measurements throughout the incinerator’s operational history.

22  
23 John Wilhelmi made three points about the incinerator’s background. First, he noted that the date  
24 of construction and permitting of the incinerator were pertinent to this evaluation. He said that  
25 the incinerator was designed, constructed, and permitted within the past 20 years during the time  
26 when fairly extensive environmental regulations have been in place. These aspects of the  
27 incinerator gave Mr. Wilhelmi assurances that things were operated safely. Second, the  
28 incinerator has been extensively studied throughout its history. Finally, Mr. Wilhelmi presented a  
29 graph showing the amount of waste treated at the incinerator during 1991-2002. The graph  
30 depicted an increase in the amount of waste treated in the mid-1990s, and a significant decrease  
31 since this time. Mr. Wilhelmi pointed out that the amount of waste treated today is about 5% of  
32 what environmental regulations indicate this incinerator can safely treat.

33  
34 John Wilhelmi presented an illustration to demonstrate how the PHA’s evaluation of the air  
35 exposure pathway considered emissions (i.e., what is coming out of the stack), the fate and  
36 transport (i.e., how emissions move through the air, react in air, and deposit from air), and the air  
37 sampling and monitoring (i.e., measurements of what it is in air). Mr. Wilhelmi explained that  
38 the air exposure pathway was evaluated because the PHA focuses on the route by which  
39 contaminants from the incinerator would most likely reach areas where people live.

40  
41 Through an evaluation of the available data and guidance documents, John Wilhelmi identified  
42 eight groups of contaminants to evaluate in the PHA. The contaminants included:

- 43 • Volatile organic compounds (VOCs)
- 44 • PCBs
- 45 • Particulate matter (PM)
- 46 • Acidic gases

- 1 • Dioxins and furans
- 2 • Polycyclic aromatic hydrocarbons (PAHs)
- 3 • Radionuclides
- 4 • Metals

5  
6 John Wilhelmi explained that VOCs and PCBs are organic constituents largely destroyed in the  
7 incinerator. He said that PM, acidic gases, dioxins and furans, and PAHs are formed as  
8 combustion by-products in most incinerators. He added that radionuclides and metals are waste  
9 constituents that the incinerator can capture, but it cannot destroy them.

10  
11 John Wilhelmi explained that there are stack emissions and fugitive emissions. To evaluate  
12 emissions, Mr. Wilhelmi analyzed various sources of emissions data. These data include trial  
13 burns (1988, 1989, and 2001), which are conducted to evaluate the effectiveness of the  
14 incinerator. He also evaluated performance tests (1988, 1990, 1995, and 2000), which are  
15 performed to demonstrate the incinerator's compliance with state emission limits. In addition,  
16 Mr. Wilhelmi reviewed continuous emissions sampling and monitoring data, which are  
17 conducted for oxygen, carbon monoxide, carbon dioxide, radionuclides, metals, and PM. He  
18 noted that there is a large volume of data available.

19  
20 John Wilhelmi presented a brief summary on emissions. He noted that the strengths included  
21 having information available on every contaminant group evaluated and data that characterize  
22 the incinerator's performance. He said that Appendix A of the PHA includes extensive detail on  
23 the sampling methods for people who want more information. He also noted the limitations  
24 pertaining to emissions, including that no information exists on the actual exposures (because  
25 people are not exposed at the stack) and available data do not characterize emissions during  
26 episodic events.

27  
28 John Wilhelmi explained that fate and transport are usually characterized through dispersion  
29 modeling studies. He said that meteorological data are continuously collected at multiple sites at  
30 ETPP. He noted that the main studies used for the dispersion modeling analyses included the  
31 Governor of Tennessee's Independent Panel Report and multiple DOE studies. The DOE studies  
32 were conducted primarily to verify compliance with National Emissions Standards for  
33 Hazardous Air Pollutants (NESHAPs).

34  
35 John Wilhelmi summarized the fate and transport discussion. He noted that the strengths of fate  
36 and transport data include reasonable accounts of air quality impacts, which are most important  
37 at locations and times where no samples are available. These data also help provide information  
38 on air sampling programs (e.g., equipment location). Ideally, he said that you want to measure  
39 where air quality impacts are expected to be the greatest. He stated two limitations with fate and  
40 transport data: a) no information is available on episodic events and b) modeling studies only  
41 provide estimates on air quality impacts—not direct measurements.

42  
43 John Wilhelmi next discussed air sampling and monitoring. He explained that air sampling  
44 consists of discrete measurements at different times, whereas monitoring comprises more routine  
45 measurements collected at set frequencies. Many studies have been conducted on various  
46 constituents that include:

- 1 • DOE: PM, PCBs, metals, dioxins and furans, and radionuclides
- 2 • EPA: radionuclides
- 3 • TDEC: metals and radionuclides
- 4 • Tennessee Valley Authority (TVA): nitrogen dioxide, ozone, and sulfur dioxide

5  
6 John Wilhelmi found it beneficial that there was redundancy among some of the measurements  
7 for different studies. For example, he pointed out that both DOE and EPA measured  
8 radionuclides and at relatively close locations, which provides an opportunity to compare the  
9 measurements in order to gauge their accuracy. He added that DOE and TDEC measure metals at  
10 co-located locations. Mr. Wilhelmi presented a figure to show each agency's monitoring and  
11 sampling locations.

12  
13 Barbara Sonnenburg believed that the air generally flows to the north and east. John Wilhelmi  
14 replied that this was correct; the air largely flows along the axis of the valleys in a northeast to  
15 southwest direction and vice versa. Ms. Sonnenburg questioned why such a large number of  
16 stations are located to the northwest and southwest, but only one lies to the east. Mr. Wilhelmi  
17 clarified that these stations are not used exclusively to monitor the air quality impacts of the  
18 incinerator; they are also used to monitor other activities at ETTP. He added that he was  
19 comforted by the fact that the air mass must first pass where monitors are located before reaching  
20 the location of any residents. He recognized that the coverage was not perfect, but he was  
21 comforted knowing that the emissions will pass through monitoring stations before going in any  
22 directions toward residential areas.

23  
24 Barbara Sonnenburg asked if John Wilhelmi was comforted even with only one monitoring  
25 station to the east. Mr. Wilhelmi clarified whether Ms. Sonnenburg wanted to know why there  
26 were not more stations. She said that this was her question. Mr. Wilhelmi explained that  
27 modeling studies show that these monitoring stations are already located in areas that would  
28 receive the largest impact. He continued that it was a plausible argument that measuring in  
29 locations expected to receive lower impacts would not necessarily be needed.

30  
31 Barbara Sonnenburg referred to the power plant in Kingston, Tennessee, where the air goes up  
32 for a long time and then filters down. She asked if emissions from the incinerator could possibly  
33 go up over the stations and then down into residential areas. John Wilhelmi thought that this was  
34 a good question and speculated that this could happen at times. He noted that modeling was  
35 conducted over a year before these monitoring stations were put in place to establish where the  
36 greatest impacts would be expected to occur, and as a result, stations were installed in areas  
37 where the greatest air quality impacts were anticipated. Regarding Ms. Sonnenburg's comment  
38 on the Kingston Power Plant, Mr. Wilhelmi said that comparisons could be difficult because the  
39 power plant stacks are so tall and modeling conducted to place these stations considers the stack  
40 height of the incinerator and metrological conditions.

41  
42 Barbara Sonnenburg wanted to know if the emissions could rise and go over the stations. John  
43 Wilhelmi said that the stations were not capturing emissions every second of each day, and that  
44 the emissions would go over at times. However, on average over the course of a year, Mr.  
45 Wilhelmi stated that these monitoring stations are located where the maximum ground level  
46 impacts are expected to occur. Bob Craig added that the stacks in Kingston are extremely tall and

1 that the emissions from the TSCA Incinerator appeared to go straight out for the most part. He  
2 also made the point that the emissions were heavily modeled and monitoring stations were  
3 placed in areas found to have the highest concentrations. Ms. Sonnenburg said that Dr. Craig's  
4 comments were reassuring. Mr. Wilhelmi believed that the stacks at the incinerator are about 100  
5 feet tall.

6  
7 Kowetha Davidson stated that more dilution would occur as you move further away from the  
8 source. Therefore, concentrations will continue to decrease because of the effect of dilution.  
9 Charles Washington replied, "Dilution is not a solution." John Wilhelmi noted that both of these  
10 comments were correct. Mr. Washington had some knowledge of these monitoring stations  
11 because he helped build them. He detailed that the fallout of emissions that occurs depends on  
12 the particular contaminant. For instance, PM will fallout in one location and VOCs could fallout  
13 in a different place. In addition, he said that some radionuclides will be liquefied and some will  
14 be gases when they come out depending on what happens to them inside the chamber. He added  
15 that it would also depend on what is present in the air because other compounds could be formed.

16  
17 John Wilhelmi said that when something is released from the stack, it will go in different  
18 directions. He noted that it is not realistic to be able to monitor everywhere, and therefore,  
19 decisions have been made for monitoring locations based on extensive modeling on points of  
20 maximum impact areas. He added that dilution will also play a role as you move further away  
21 from the source.

22  
23 James Lewis asked about Question B2 on page 68 of the PHA. Mr. Lewis thought that the PHA  
24 needed to show the magnitude coming out of the stack and noted that the page indicates that a  
25 small amount (i.e., 83 pounds) is coming out. He asked for an estimate of the maximum amount  
26 released from the TSCA Incinerator compared to TVA. John Wilhelmi explained that Mr. Lewis  
27 was referring to a portion of the document that compared incinerator releases to other area  
28 sources, most notably to the local power plants. Mr. Wilhelmi said that a dramatic difference is  
29 seen, but that there is also a different quality in pollutants and the types of pollutants that  
30 dominate the difference. Mr. Wilhelmi was unsure of the maximum amount from the TSCA  
31 Incinerator off the top of his head, but noted that this is discussed in the PHA. However, he said  
32 that most of the comparisons were for smaller periods of time (e.g., pounds per day and shorter  
33 averaging times). He could figure out the numbers over a longer period of time if this was  
34 recommended. Mr. Lewis believed that this would be helpful and applauded Mr. Wilhelmi for  
35 adding this requested information into the PHA.

36  
37 Don Box said that page 68 of the PHA mentions the number of pounds coming from the power  
38 plant. Mr. Box thought that the general public would be unaware of the radionuclides coming out  
39 of the plant and thought it might help to show this. He noted that the small amounts from the  
40 TSCA Incinerator really do not compare with the large amounts from the steam plants.

41  
42 John Wilhelmi encouraged the group to read more of page 68. He tried to frame the comparisons  
43 in a meaningful way, but also used caution because comparing emissions rates can be misleading  
44 when comparing emissions from high and low stacks. He had looked at local sources because  
45 ultimately the air that people breathe is impacted by all local sources—not solely the TSCA  
46 Incinerator.

1  
2 Herman Cember referred to where 83 pounds was compared to almost 6,000,000 pounds. He  
3 said that the fraction of emissions from each one per cubic meter of air would be important in the  
4 site of interest instead of the total pounds emitted. John Wilhelmi said that Dr. Cember made a  
5 good point. He added that this was also why he pulled together the emission, fate and transport,  
6 and monitoring and sampling data because it completes the picture. He stated that emissions data  
7 alone could steer a conclusion in the wrong direction.

8  
9 John Wilhelmi reported the notable findings from the PHA. He said that most contaminants were  
10 found at levels below health-based comparison values (CVs), which indicates that air  
11 concentrations are safe. This also reflects the contribution of local sources. He explained that  
12 arsenic, cadmium, and chromium were the only substances that required a further in-depth health  
13 evaluation. Based on his experience, Mr. Wilhelmi said that these contaminants were not unique  
14 to this site; he has found these at almost all sites where he has evaluated ambient air monitoring.  
15 He conducted a toxicological evaluation on these metals and found that the measured levels were  
16 not of health concern. Mr. Wilhelmi also noted that the results appear to be of known and high  
17 quality data. In addition, sampling has occurred during episodic release events, when one would  
18 expect emissions (at least over a short time) to be highest.

19  
20 Charles Washington asked about the accumulation of fallout in relation to people who were born  
21 here, grew up here, and still live here. John Wilhelmi said that the incinerator only began  
22 operating in 1991, so the exposure is limited for these individuals. Mr. Washington asked if Mr.  
23 Wilhelmi was also referring to steam plants. Mr. Wilhelmi did not know the specific information  
24 on steam plants because the document focused on the health impacts from the incinerator. He  
25 explained that he considered other sources because he has to interpret the samples collected, but  
26 he did not know the history of the steam plant. He noted, however, that the health-based CVs  
27 have lifetime exposure programmed into them.

28  
29 Herman Cember asked if you could determine whether contamination came from the incinerator  
30 or other sources when the samples were collected. John Wilhelmi said that mostly you could not,  
31 but in some instances with radionuclides you could. Mr. Wilhelmi stated that having multiple  
32 monitoring locations helps because you can look at spatial variations. For instance, there was  
33 virtually no spatial variation for arsenic, cadmium, and chromium, which implied to him that the  
34 incinerator is not the predominant source. If it was the predominant source, Mr. Wilhelmi said  
35 that you would see the highest concentrations in nearby downwind locations; however, this did  
36 not really occur for these substances. Mr. Wilhelmi continued that, in general, measurements in  
37 air do not have footprints. If contaminants are unique to the source, then you could feel confident  
38 that it came from there. Although, many contaminants measured came from a large number of  
39 emission sources. Mr. Wilhelmi said that it was important to note that the measurements below  
40 CVs, regardless of the source, were not unhealthy exposures.

41  
42 James Lewis did not want them to lost sight of Charles Washington's comments. He said that  
43 there might be some issues when you look back at other sources in the past, though Mr. Lewis  
44 did not believe that this was an issue for TSCA.

45 Barbara Sonnenburg asked whether there are any differences in the places measured on the sides  
46 of the incinerator, and if you could measure radionuclides going toward or away form the

1 incinerator because towards it might be from other sources. John Wilhelmi had not looked at this  
2 primarily because he used conservative health-based screening values and all measurements for  
3 radionuclides were below these values. Therefore, he did not try to determine where the  
4 radionuclides originated. He mentioned that the highest measurements in the network he  
5 evaluated were seen downwind of the incinerator, but these were still an order of magnitude  
6 below the CVs.

7  
8 Barbara Sonnenburg said that the levels could be lower this year, but asked if this number was  
9 added onto radionuclide exposure that people already received. She said that this could have  
10 accumulated and asked if this would have been significant. John Wilhelmi could look at this, but  
11 he did not look at exposure prior to 1991. Kowetha Davidson noted that they needed to consider  
12 if any of these constituents accumulate in the body because very few of these substances will  
13 stay in the body. Mr. Wilhelmi believed that Appendix C in the PHA presented comparisons of  
14 measurements collected in areas immediately downwind of the incinerator to Knoxville and  
15 Nashville; he recalled the differences being negligible.

16  
17 John Wilhelmi summarized the monitoring and sampling. He noted that Appendix A in the PHA  
18 contained detailed information on emissions, Appendix B presented information on modeling,  
19 and Appendix C had the monitoring methods (e.g., years monitored and comparisons to CVs).  
20 The monitoring and sampling showed that nearly every pollutant was below CVs, and that only  
21 arsenic, cadmium, and chromium required further evaluation. He detailed three strengths of the  
22 data: a) show more direct indicators of exposure, b) capture contributions from all sources (not  
23 just the incinerator), and c) provide excellent spatial and temporal coverage. Mr. Wilhelmi stated  
24 that these data contain no significant limitations.

25  
26 Herman Cember asked if you could take pollutants that elicit similar biological effects (e.g.,  
27 mercury, manganese, and lead all affect the central nervous system) and sum them together to  
28 determine if an adverse health effect would occur. John Wilhelmi said that ATSDR has a  
29 mixtures guideline for measurements, but he did not consider this because he looked more at the  
30 relative CVs. He added that the concentrations were considerably below the CVs with a fairly  
31 safe margin. Dr. Cember said that this is something that the public might ask about and that it  
32 should be addressed. Mr. Wilhelmi agreed.

33  
34 Bill Cibulas pointed out that ATSDR has a mixtures research program experienced in dealing  
35 with the issues of combined effects of contaminants. Dr. Cibulas said that generally if a  
36 contaminant is well below the guidance values, then combined effects will probably not be seen.  
37 When you reach levels where health effects begin to be seen from single chemicals, however, Dr.  
38 Cibulas said that additive or synergistic effects might start to be visible. Herman Cember  
39 believed that this was something that the public might ask and therefore the issue should be  
40 clarified and addressed. Dr. Cibulas agreed. John Wilhelmi stated that this would be included  
41 among the public comments before the final version of the document is released.

42  
43 John Wilhelmi next presented a synthesis slide to show the eight contaminants for which  
44 emissions, fate and transport, and air sampling or monitoring data are available. These data are  
45 available for all of the contaminants, except for air sampling or monitoring data for VOCs, acidic

1 gases, and PAHs. Mr. Wilhelmi would not consider these to be “critical gaps,” and believed that  
2 this was an “incredibly complete” compilation of data.

3  
4 John Wilhelmi read the following conclusions:

- 5 • The TSCA Incinerator releases trace levels of contaminants into the environment, but in  
6 amounts far below levels associated with health effects.
- 7 • Regional air quality in the Knoxville area is sometimes poor. This does not result from a  
8 single source, but from industrial and mobile sources over a broad area.
  - 9 o Mr. Wilhelmi noted that these air quality problems are not unique to Knoxville; they  
10 occur in many parts of the country and occur mainly due to ozone and fine particulates.
- 11 • An opportunity exists to verify the quality of DOE’s ambient air monitoring for metals.

12  
13 James Lewis asked if John Wilhelmi found few data gaps. Mr. Wilhelmi said that he speaks in  
14 terms of “critical data gaps,” and he did not believe there were any for contaminants in air.

15  
16 Barbara Sonnenburg asked if agencies collected data with their own equipment or evaluated the  
17 data collected by DOE. She wondered if the agencies assumed these data were correct. John  
18 Wilhelmi knew that DOE and TDEC have side-by-side stations for ambient monitoring of metals  
19 in air.

20  
21 Barbara Sonnenburg explained that she had served on the Air Pollution Control Board for 14  
22 years. During her time there, she had continuously asked how they knew the quantity of  
23 radionuclides burned and what might go up the stack. According to Ms. Sonnenburg, the board  
24 said that the only way to know was to measure what comes into the incinerator by reading  
25 shipping documents. Ms. Sonnenburg stated that they assumed what they were told was correct,  
26 which she believed was inefficient. She thought that the current process sounded more advanced  
27 than in the past. Mr. Wilhelmi said that there is continuous sampling of radionuclides coming off  
28 the stack gases. He was unsure of the origin of the information Ms. Sonnenburg had heard.

29  
30 Herman Cember said that he was previously a member of the Illinois Department of Nuclear  
31 Safety, which had a completely independent system for measuring what was coming out of  
32 reactors, and DOE also had measurements. Dr. Cember said that these measurements were  
33 always in agreement. Barbara Sonnenburg said that these comments were reassuring. John  
34 Wilhelmi added that the PHA includes a table showing side-by-side DOE and EPA radionuclide  
35 measurements collected off site, and noted that there is “excellent agreement.”

36  
37 Jon Richards was a former EPA Permit Inspector before TDEC took over the TSCA monitoring  
38 program. In this position, he said he conducted several inspections on a regular basis. He stated  
39 that EPA had required that DOE monitor at the stack and model assuming that the pollution  
40 control equipment was not functioning. He noted that DOE modeled what was coming out. Mr.  
41 Richards stated that EPA also conducted its own sampling of soil around the incinerator.

42  
43 John Wilhelmi thanked the ORRHES members for their comments. He showed a figure that  
44 detailed the supporting lines of evidence for the PHA’s main conclusion. The figure had five  
45 pillars, which would be included in the PHA’s executive summary. Mr. Wilhelmi believed that  
46 these multiple, independent lines of evidence supported the main conclusions in the PHA.



1  
2 Herman Cember said that the information in the PHA was “technically fine,” but that it needed  
3 to be shaped more for the public. He referred to question A.2. in the PHA that said, “Are the  
4 workers at the incinerator at risk from their occupational exposures?” Dr. Cember believed that a  
5 “yes or no answer” needed to be provided first, and then information to support the answer could  
6 be added. Kowetha Davidson explained that the document will be sent through the EEWG for  
7 further review, the work group would then provide comments and recommendations to  
8 ORRHES, and the subcommittee would submit a recommendation to ATSDR. Dr. Davidson  
9 asked that Dr. Cember provide his comments to the EEWG so they would be incorporated into  
10 the comments from the work group.

11  
12 John Wilhelmi said that a fact sheet geared to explain the PHA findings to the public would be  
13 released when the final document is released. Kowetha Davidson noted that different people  
14 would look at the document in different ways, and that they wanted to bring the different views  
15 together.

16  
17 Herman Cember suggested that they have an elementary school teacher (i.e., English teacher or  
18 social studies teacher) read the PHA and provide comments in order to ensure that the document  
19 is understandable for the public.

20  
21 Susan Kaplan said that ATSDR had “skirted issues” with regards to EPA’s comments on the Y-  
22 12 PHA. She believed it was important for them to see EPA’s comments and how ATSDR  
23 addressed them. She knew that this was part of the data validation process, but noted that this  
24 version of the document was not available to the public. Jack Hanley explained that ATSDR  
25 received no comments from EPA Region IV or EPA’s ORIA on the TSCA Incinerator DVD  
26 PHA. The agencies were planning to provide their comments during the public comment period.  
27 Ms. Kaplan said that, as a general rule, she would like ORRHES to receive the comments from  
28 EPA’s ORIA. She had ORIA’s comments from the Y-12 PHA, but did not believe that they had  
29 been provided to ORRHES and she thought they should be for future PHAs. Mr. Hanley  
30 explained that the detailed comments on the Y-12 PHA from EPA Region IV and ORIA, as well  
31 as ATSDR’s responses, had been handed out to all ORRHES members. In addition, all of the  
32 comments and responses were available to the public.

33  
34 James Lewis directed his comments to Bill Cibulas. He said that ATSDR presented a fact sheet  
35 for this PHA to the Community Concerns and Communications Work Group (CCCWG). He  
36 believed that these types of documents should be reviewed internally before being sent to the  
37 work group. He thought that more problems would be created for the public if ATSDR continued  
38 to produce documents that leave more questions than answers. He had found it interesting and  
39 unique that EPA had worked with a literacy group at CDC to prepare documents to discuss  
40 asthma with the public. Mr. Lewis added, “We’ve been here 4 ½ years screaming about the same  
41 thing...so something needs to be done internally.” He suggested that people review the work  
42 group minutes to see Dick Gammage’s comments on the ATSDR-prepared fact sheet. He added  
43 that they needed to be reaching various audiences.

44  
45 Bill Cibulas responded to James Lewis. Dr. Cibulas understood the subcommittee’s desire to see  
46 the documents as soon as they are available. He said that the PHAs were not available until they

1 are released for public comment, but that ATSDR was bringing the document's contents to the  
2 EEWG as soon as possible. He explained that ATSDR has been served well by not releasing the  
3 documents until they have undergone final agency review and clearance (after the DVD process)  
4 and after the agency has signed off on the documents. He understood these concerns and thought  
5 that the issue went back to their conversation on the public comment period time frame. Dr.  
6 Cibulas also replied to the issue of readability. He noted that the PHA serves a number of  
7 audiences, including both technical and lay people, and that the documents normally "meet the  
8 mark." Dr. Cibulas pointed out that this was the reason why community and health education  
9 were important so that the agency could reach the target audience with health messages if  
10 identified as a need in the PHAs. He explained that it is difficult to develop products that fit all of  
11 their needs, but they want to develop products that disseminate health messages that are useful  
12 and appropriate for the target audience.

13  
14 James Lewis said he was not "attacking the entire document." He was also referring to  
15 responding to concerns, fact sheets, and other communication tools. He thought that ATSDR  
16 should put its focus into needed areas so that issues were appropriately addressed. He did not,  
17 however, think that this had been done.

18  
19 Barbara Sonnenburg emphasized Charles Washington's comments. She wanted the document to  
20 say that health problems would not result from the amounts accumulated over the years. John  
21 Wilhelmi said that the data tell them that health problems would not be expected. Ms.  
22 Sonnenburg asked if they could tell what accumulates over 15 years will not cause harm. Mr.  
23 Wilhelmi said that the CVs used to select the contaminants of concern (COCs) assume lifetime  
24 exposure. Ms. Sonnenburg wanted to ensure that this information was included in the PHA. Mr.  
25 Wilhelmi believed that it was in the PHA, but he would make sure it was incorporated if it was  
26 not already in the document.

27  
28 John Wilhelmi discussed the community concerns for the PHA. He had circulated a draft list at  
29 the EEWG in November 2004 before proceeding with the document. He explained that the  
30 community concerns were identified through ATSDR's community concerns database, TDEC's  
31 "Responses to 101 Questions," comments made during work group meetings, and a review of  
32 site documents. Mr. Wilhelmi organized the comments into four topics and addressed them in  
33 question and answer format in Section V of the PHA.

34  
35 John Wilhelmi detailed the three health-based recommendations made in the PHA:

- 36 • DOE, EPA, and TDEC should continue to operate their routine monitoring networks.
- 37 • TDEC should achieve lower detection limits in its metals monitoring network.
  - 38 o Mr. Wilhelmi explained that he had tried to conduct a comparison to gauge the accuracy
  - 39 of the measurements in order to independently validate the quality of the monitoring data;
  - 40 however, this could not be done because TDEC's methods are not sensitive enough.
- 41 • TDEC should continue to issue warnings on days with poor air quality, and residents should
- 42 heed these warnings.
  - 43 o Regular air quality is more specific to ozone and fine particulates.

44  
45 James Lewis questioned the use of the word "continue" and asked if there was any reason to  
46 suspect that these monitoring efforts would stop. John Wilhelmi had no doubt that these efforts

1 would continue. He had made the conclusion that occasionally air quality is poor. Therefore, this  
2 left in his mind that he should address this and that the public should know when poor air quality  
3 is an issue. Mr. Wilhelmi said that they are basically congratulating the agencies for what they  
4 have done and supporting their future efforts.

5  
6 John Wilhelmi also described the three communications-based recommendations in the PHA:

- 7 • TDEC should issue annual fact sheets that document the environmental status of the TSCA  
8 Incinerator (e.g., findings of monitoring, how many inspections occurred, and whether the  
9 amount of waste treated increased or decreased).
- 10 • After lowering detection limits, TDEC should compare its metals monitoring data to DOE's  
11 metals monitoring data.
- 12 • Both DOE and TDEC should improve the annual reporting of their environmental monitoring  
13 networks.

14  
15 James Lewis asked if the recording data did not compare to DOE. John Wilhelmi replied that  
16 DOE uses more sensitive methods than TDEC. As a result, TDEC has many non-detects and it is  
17 not possible to see whether these are consistent with DOE's measurements. Mr. Wilhelmi  
18 explained that it would be preferred for TDEC to add more sensitive methods so that there could  
19 be a side-by-side comparison as they have for DOE and EPA with the radionuclide data. Bob  
20 Craig asked whether TDEC's methods are protective of public health; Mr. Wilhelmi said that  
21 they are protective of public health. He continued that TDEC would be able to detect a very large  
22 increase in the amount of metals being emitted, whereas DOE's more sensitive methods can  
23 detect finer nuances.

24  
25 Tony Malinauskas asked if ATSDR would issue a four-page easily understood summary  
26 document for the public that outlines the results on all of the PHAs. Dr. Malinauskas said that the  
27 PHA was for the technical community. Herman Cember noted that he was referring to the  
28 community concerns and questions in the PHA, which he felt should be addressed so that the  
29 community can receive answers. Dr. Malinauskas agreed with Dr. Cember.

30  
31 James Lewis said that they had originally discussed having a 10-page summary, but that they  
32 would not be having a 10-page summary for this PHA. Jack Hanley said that when the Y-12  
33 PHA was released to ORRHES, ATSDR worked with the subcommittee during the DVD to  
34 create summary documents for the general public. ATSDR had planned to follow this same  
35 procedure for the TSCA Incinerator PHA, but the work group did not have the PHA to review  
36 when the summary was discussed and was unable to provide specific comments. Mr. Hanley  
37 explained that they would develop future four-page summary documents with the CCCWG  
38 during the public comment period. Mr. Hanley added that the CCCWG would receive a revised  
39 copy of the four-page summary document.

40  
41 Jeff Hill thought it would be valuable to have a draft four-page summary available at the  
42 ORRHES meeting when the next PHA is released. Jack Hanley said that they had prepared a  
43 four-page summary document, which was shared with the CCCWG. However, the CCCWG  
44 found the summary document to be too general and that it left more questions than it answered.  
45 Mr. Hanley had needed more specific details and information to revise the document, and noted  
46 that they are currently updating the document based on the CCCWG's comments. Now that

1 ORRHES has the PHA, ATSDR would approach the CCCWG again to tweak and make  
2 additional edits (as needed) to the summary document.

3  
4 Jeff Hill asked if ORRHES would see the draft summary document before it is released. Jack  
5 Hanley said that they could have another meeting and noted that it would be beneficial for  
6 ORRHES to review it. Kowetha Davidson suggested discussing the document at the next  
7 ORRHES meeting when they vote on the comments for the TSCA Incinerator PHA. Mr. Hill  
8 thought that they needed to consider the number of PHAs remaining and that it was taking two  
9 work group meetings to review the product. He believed that the process was taking longer than  
10 needed. Mr. Hanley stated that when they share the draft PHA with the ORRHES members, they  
11 could also share the draft summary document. Mr. Hill wanted to have at least one version of the  
12 summary document reviewed by the work group prior to being brought to ORRHES. Mr. Hanley  
13 replied that they would work with work group members to figure out the most effective process.  
14

### **Presentation/Discussion: New ATSDR Web Site for the ORRHES**

15  
16  
17  
18  
19 Susan Robinson (ATSDR) provided the ORRHES members with a folder containing handouts  
20 for the presentation. She thanked the ORRHES members who contributed their time and  
21 thoughts for the Web site redesign and the ATSDR team members who worked on the redesign,  
22 including the NCEH/ATSDR Office of Communication and the Oak Ridge Reservation Site  
23 Team. Ms. Robinson noted that it was requested for ATSDR to redesign the site to better meet  
24 the information needs of the community and to better support the communication and  
25 educational goals of reaching multiple audiences.  
26

27 Susan Robinson referred to Oak Ridge Reservation Web Site Creative Brief handout that she had  
28 provided, which summarized the ideas about what the new site will accomplish. Ms. Robinson  
29 identified the goals of the new site: a) assist the ORR community in understanding findings of  
30 the PHAs, b) build capacity in the community to respond to issues related to the PHAs,  
31 c) increase community's interest and participation in providing input on PHAs, and d) collect  
32 and address community's needs and concerns.  
33

34 Susan Robinson explained that the process has taken a phased approach. Phase 1, which was  
35 now completed, included the initial "migration" of old content into the new formats. Ms.  
36 Robinson noted that this was a straight conversion from the old to new site, but it has been  
37 completely updated. Phase 2 includes site enhancements based on input from the former  
38 Communications and Outreach Work Group (COWG), now the CCCWG. She referred to the  
39 project status handout, which showed the deliverables and the time line.  
40

41 Susan Robinson wanted to walk through the new site with the group. She referred to a handout  
42 that showed the old and new home page side-by-side so that the ORRHES members could see  
43 how it has changed. After a brief introduction on the history of the ORR, the home page also  
44 includes a block that allows visitors to select public-friendly resources and a block for education  
45 and training.  
46

1 Bob Craig referred to the picture on the home page that only shows the Y-12 Plant. In relation to  
2 health effects, Dr. Craig thought that the size of the ORR was important to show. He wanted to  
3 see a picture that had all of the three plants in relation to the city of Oak Ridge. Susan Robinson  
4 thought that this was a good idea and asked Dr. Craig where she could find such a picture. Tim  
5 Joseph said that he could locate a picture. Ms. Robinson asked Dr. Joseph to e-mail her the  
6 picture at [sjr2@cdc.gov](mailto:sjr2@cdc.gov).

7  
8 Susan Robinson went through different portions of the Web site with the group. She pointed to  
9 the calendar of meetings listed under events on the front page. She noted that there was a drop  
10 down box that they could use to find minutes from various meetings. According to Ms.  
11 Robinson, the Web site has been updated with all of the minutes through December 2004  
12 (pending approval of any minutes that they could not obtain).

13  
14 Susan Robinson showed the next item under the home page called “Public Health Activities.”  
15 She said that this section includes overview text that could be changed. She pointed to where the  
16 current activities would be placed and noted that this will include public comment versions of the  
17 PHAs as they are released. In addition, past activities, other agencies’ public health activities,  
18 and resources on Oak Ridge Reservation health effects are available under this section. She  
19 noted that all finished products would be listed here when they are completed.

20  
21 Bob Craig asked if there would be a hyperlink to the actual documents; Susan Robinson said this  
22 was correct. Susan Kaplan asked about 1985 CDC worker studies that she was unable to locate  
23 on the Internet and wondered if these would be found on this portion of the Web site. She added  
24 that the studies had included urine and hair samples. Jack Hanley said that a summary of these  
25 studies is available in the Compendium of Public Health Activities, but that the full document is  
26 not on the site. Ms. Kaplan asked if the complete document could be made available on the site.  
27 Ms. Robinson said that they could look into this further. Mr. Hanley has the pilot study, but it is  
28 not in electronic format.

29  
30 Susan Robinson showed the group that “Public Participation” was the next item under public  
31 health activities. She explained that one of the goals has been to enable the public to provide  
32 more comments because this section was difficult to find on the old site. On the new site,  
33 however, providing public input is incorporated into its own section. Ms. Robinson showed the  
34 group that the community health concerns comment sheet is now in this section and the site  
35 enables people to send their comments directly from the page. She told the group that there is  
36 also a link to EPA’s National Priorities List (NPL) site as Susan Kaplan had requested. Ms.  
37 Robinson added that the contact names and links have been updated under the “contact us”  
38 section.

39  
40 Susan Robinson showed the group the next section named “Community Resources.” She  
41 explained that this is a new section and that the overview block is a place to incorporate general  
42 information that could be augmented during the second phase. She said that the CCCWG had  
43 mentioned having links to the presentation on thyroid cancer, which has been added, as well as  
44 additional information. Ms. Robinson noted that new presentations could be incorporated onto  
45 the site as they are completed. She stated that useful links from the old site have also been added  
46 under the community resources section.

1  
2 Jack Hanley asked if the presentation on the site included the overheads and transcripts. Susan  
3 Robinson said that these items could be included if they are available.

4  
5 Susan Robinson went to the next link named “ORRHES Subcommittee.” She pointed to the link  
6 for obtaining ORRHES and work group meeting minutes and explained that minutes could be  
7 accessed through this method or via the calendar as previously shown.

8  
9 James Lewis asked about formal recommendations and ATSDR’s responses. Susan Robinson  
10 said that there is not a place for these per say, but that she had provided directions in their  
11 handouts on how to search through the minutes using [www.google.com](http://www.google.com). Susan Kaplan  
12 questioned that there is no search engine on the site. Ms. Robinson explained that this is not  
13 available on the site yet because the person working on it left ATSDR, but noted that this is at  
14 the top of her priority list. In the meantime, however, people could use [www.google.com](http://www.google.com) to  
15 search the minutes.

16  
17 James Lewis thought that Ed Frome had raised a good point when he noted that (as a minimum)  
18 people should be able to find all formal recommendations and responses in one location. Mr.  
19 Lewis believed this would be helpful. Susan Robinson explained that Marilyn Horton had a list  
20 of all of the formal recommendations and responses, which could be added to the site.

21  
22 Susan Robinson continued reviewing the site with the group. She said that the wording was a  
23 straight conversion and that people might want to look at changing some of the text. She  
24 presented the “Contact Us” section, which contained ATSDR contact names, addresses, phone  
25 numbers, and e-mail addresses. “Site Map” is the next heading, which essentially outlines the  
26 form of the Web site so people can scroll up and down to see the resources available on the site  
27 (e.g., calendar of meetings).

28  
29 Susan Robinson referred the group to “Oak Ridge Current Activities” under the “Public Health  
30 Activities” section, which now reads the “Y-12 Uranium Web Page”. She said that this would be  
31 expanded as new studies are added (e.g., Iodine 131). She would like to have pictures for each of  
32 the main sections.

33  
34 Susan Robinson stated that phase 1 has been completed. She said that the initial “migration” of  
35 old content to new formats was finished. They have also: a) added all minutes for 2003 through  
36 2004, b) added “Community Resources” and “Public Participation” sections, and c) added/  
37 checked the new suggested links.

38  
39 Susan Robinson noted that they are now in Phase 2 of the process, which includes site  
40 enhancements. She discussed the CCCWG’s suggestions (listed below) that are now pending and  
41 asked the ORRHES to rank these in order of preference.

- 42
- 43 • Search engine for minutes only
  - 44 • Best ORRHES and work group presentations or links to other presentations (e.g., link to the  
45 Hanford Web site for a presentation on thyroid and iodine 131)
  - 46 • List of “top issues” that they hear through the Web site, via the database at the office, and  
through other channels

- 1 • Open-ended feedback or comment input box for any public member to send in comments
- 2 • Interactive map
- 3     o Show areas of projected contamination by year and community areas (show overlapping
- 4        exposures)
- 5 • Interactive map
- 6     o Provide links to additional information regarding possible health effects by types of
- 7        contaminants
- 8 • Add “Current Activities” section
- 9     o List of Oak Ridge PHAs in progress
- 10    o Add a “3-month look ahead” calendar
- 11 • Add time line to show the operating periods of the three main facilities (X-10, Y-12, and K-
- 12    25)
- 13 • Post 1997 articles from the *Nashville Tennessean*
- 14     o Not possible because of copyright and endorsement issues

15  
16 Susan Robinson noted that Jack Hanley has the time lines for the three main facilities and they  
17 can be incorporated into the site. She also stated that Mr. Hanley mentioned that the interactive  
18 map would not be completed until the PHAs are finished. Mr. Hanley asked if DOE had an  
19 interactive map link. Tim Joseph said that DOE has this link and that the site could link to it.

20  
21 Kowetha Davidson asked if the group should rank the items and turn them in during the meeting  
22 today. The ORRHES members agreed that this would be best.

23  
24 James Lewis said they are looking to interact with the public and believed it is important to have  
25 a tool that they are comfortable using. He thought that Susan Robinson had done an excellent job  
26 in the information she pulled from the work group and the community.

27  
28 Kowetha Davidson said that the CCCWG has been working on this issue and that additional  
29 recommendations should be taken to the work group. Based on the suggestions among the work  
30 group, the items could be taken back to ORRHES or ATSDR will act upon them. Dr. Davidson  
31 reminded the group that they have a very diverse group of people and that they needed to keep  
32 this in mind when looking at these suggestions. She wanted them to rank these items as a  
33 member of the community, instead of solely as a member of ORRHES.

34  
35 James Lewis asked Kowetha Davidson if she wanted public participation. She responded that she  
36 did and commented that they needed to keep in mind that these enhancements should be  
37 presented in a public-friendly manner. She pointed out that the ORRHES members are also  
38 representatives of the surrounding areas. She thought that if every ORRHES member invited  
39 someone from his or her community, they could possibly have twice as many attendees at the  
40 meetings as they do now.

41  
42 Susan Robinson suggested that the ORRHES members go through the Web site with a friend to  
43 see if he or she has any questions. If so, Ms. Robinson asked that the questions be sent to her.

44  
45 Herman Cember asked if there is any information on the “hit rate” of the site. Susan Robinson  
46 said that they have information on “unique visits,” but that these data are not indicative of the

1 potential of the channel because it has not been promoted. If the site is promoted in upcoming  
2 events, she stated that a spike in traffic would occur. She could provide this information to Dr.  
3 Cember if he wanted it.

4  
5 Bob Craig asked about the requirement to shut off the pop-up blockers because he was unable to  
6 get on the site. Susan Robinson replied that this was probably on the old remote usability site,  
7 but that these will be removed from the new site that is now face-to-face.

8  
9  
10 **Presentation/Discussion: DHAC Proposed Plan for Collecting Information**  
11 **About the ORR Community**  
12

13  
14 Bill Cibulas introduced this topic by saying that he has heard “loud and clearly” since his  
15 involvement that members of ORRHES and others feel that ATSDR has not done an adequate  
16 job of reaching out to the public and understanding their concerns. He noted that ATSDR is  
17 taking this issue seriously and shared the following recommendation that ATSDR received from  
18 ORRHES on February 3, 2004: “ATSDR adopt the Proposed Plan for Collecting Information  
19 about the ORR Community Suggested Timeline that is outlined as a process to fill the gaps that  
20 were left behind after the George Washington University study. This will be an opportunity for  
21 ORRHES members to sign up and participate themselves and/or identify individuals in the  
22 community who might be willing to help carry out the plan.”

23  
24 Bill Cibulas thought that it was “high time” to share this plan with ORRHES. He said that Jerry  
25 Pereira had informed the group that the responsibility of this plan had shifted from the Division  
26 of Health Education and Promotion (DHEP) to DHAC. Dr. Cibulas stated that ATSDR will  
27 address the concerns found during this follow-up process (hopefully within the appropriate  
28 PHAs). He noted that the overall goal and commitment of ATSDR is to ensure that the identified  
29 community concerns are addressed and answered.

30  
31 Jack Hanley explained that the Oak Ridge Site Team has worked over the last few months to try  
32 and identify ways to address the gaps from the needs assessment and the ORRHES  
33 recommendation. They have heard that the agency needs to reach beyond the work groups and  
34 ORRHES to obtain comments from the community and incorporate them into the PHAs. Mr.  
35 Hanley presented a handout to the group entitled “Collecting Information About Communities  
36 Surrounding the ORR.” He explained that DHEP had proposed four actions for collecting  
37 information, which have been modified to focus on how the information will help the agency  
38 address these issues.

39  
40 Jack Hanley stated that the literature review, review of existing reports, and key resource  
41 interviews have been combined into three steps. The literature review would be conducted to  
42 identify specific concerns and issues (e.g., community health and environmental hazards).  
43 DHAC will review previous community surveys, newspaper articles, and reports (a handout was  
44 provided with the list of materials to be reviewed) to capture community health concerns and  
45 issues related to the ORR. The concerns will be identified and entered into ATSDR’s  
46 Community Concerns Database. Mr. Hanley explained how these would be extracted based on



1 key words related to particular PHAs and placed into the documents with corresponding  
2 responses. He said that the agency is now trying to reach beyond the work group and ORRHES  
3 meetings because they have heard numerous times that the database generally contains concerns  
4 from meeting minutes. They do have concerns from a few surveys conducted in Scarboro and  
5 comment sheets that have been sent in, but they would like to outreach to more people.

6  
7 Jack Hanley explained the next step in DHAC's plan for collecting information that included  
8 identifying health programs and medical resources. In addition, ATSDR will interview key  
9 representatives in TDOH, county health councils, health promotion programs, and screening  
10 programs. During these interviews, ATSDR will outline its activities and learn about the other  
11 agencies' activities to see how they can coordinate their efforts.

12  
13 Brenda Vowell told Jack Hanley that the list of representatives to be interviewed contained  
14 several errors and asked if she should note them for him. Mr. Hanley would appreciate it if Ms.  
15 Vowell could provide the errors to him so that these could be corrected.

16  
17 Jack Hanley continued speaking about the interviews with the key representatives, and provided  
18 an example of when the agency releases its Cancer Incidence Review. He said that because the  
19 review will be reporting cancer incidence in different counties, ATSDR would like to have  
20 partners come to the table when the findings are presented. He explained that if increases are  
21 seen in particular counties, ATSDR can work with these representatives to see if their agencies  
22 have activities that can be used for follow up, such as providing cancer prevention information  
23 and offering cancer screenings. Through this partnering, ATSDR hopes to direct people to one of  
24 these other programs when ATSDR is unable to help with a particular issue (e.g., cancer  
25 screening). Mr. Hanley added that DHEP also indicated that demographic information should be  
26 collected; however, this information is incorporated into the specific study areas in each PHA.

27  
28 David Johnson asked if the intention was for ATSDR to partner with these groups in  
29 "collaborative partnerships." Jack Hanley said that the agency would do this as appropriate. He  
30 explained that the purpose was for ATSDR to be able to direct people to appropriate programs  
31 available at the local level. Mr. Johnson asked if ATSDR would also be willing to work with  
32 these other agencies. Mr. Hanley responded that if ATSDR had something that could help the  
33 other agencies (e.g., findings of the Cancer Incidence Review), then this information would  
34 definitely be shared.

35  
36 Jack Hanley referred to focus groups listed under DHEP's proposed actions for collecting  
37 information. Mr. Hanley said that this had been a recommendation proposed in the initial needs  
38 assessment with a follow-up action. According to Mr. Hanley, no focus groups have been  
39 conducted thus far. He has heard from the work groups and ORRHES that the agency's  
40 perception of a focus group (i.e., about 12 people) differs from the subcommittee's view of a  
41 focus group (i.e., larger groups of people asking questions and documenting concerns and  
42 possibly providing answers). As a result, ATSDR is modifying its concept of a focus group to  
43 meet the needs of this community.

44  
45 Jack Hanley said that ATSDR would be holding community education sessions in Oak Ridge  
46 and Kingston, and directed the group to the draft flyer handout. He explained that the forums

1 would be open to the public and would cover topics on radiation, cancer, and birth defects.  
2 ATSDR had an expert, Dr. Robert Brent, coming to discuss and give a presentation on these  
3 topics. In addition, there would be time for public members to present their comments, concerns,  
4 and questions within a specified time period. Mr. Hanley said that Dr. Brent would answer all of  
5 the questions to the best of his abilities.

6  
7 Barbara Sonnenburg asked if Dr. Robert Brent is familiar with this particular area. Jack Hanley  
8 explained that Dr. Brent is an expert who was recommended by Herman Cember; Dr. Cember  
9 has heard Dr. Brent speak a number of times. Ms. Sonnenburg asked if Dr. Brent would be able  
10 to speak in general terms, but not specifically to their area. Mr. Hanley replied that Ms.  
11 Sonnenburg was correct, and explained that Dr. Brent will be able to help people have a better  
12 understanding of radiation, cancer, and birth defects.

13  
14 Jack Hanley said that Dr. Robert Brent would be able to answer people's questions directly, an  
15 aspect that worked well at the past presentation on thyroid cancer by Dr. Jerome Hershman. Mr.  
16 Hanley stated that the format for these community sessions would be modeled after Dr.  
17 Hershman's presentation, but ATSDR would be modifying its outreach efforts to contact many  
18 more public members than it has for past events.

19  
20 Susan Kaplan asked if chemicals would be covered in the presentations. Jack Hanley said that  
21 Dr. Robert Brent would be able to answer questions related to birth defects and chemicals if they  
22 arise. Mr. Hanley continued that there have been presentations on chemicals in ORRHES and  
23 work group meetings, but noted that the original needs assessment focus group identified  
24 radiation, cancer, and birth defects as high importance for the community. He added that the  
25 open forums would not only occur one time; additional topics could be covered in future public  
26 forums. Ms. Kaplan explained that the public is also very interested in chemicals, and if the  
27 forums only focus on radiation they will miss an opportunity to reach the broader public  
28 audience. Herman Cember said that Dr. Brent would be able to respond to questions on  
29 chemicals. Ms. Kaplan thought that ATSDR should include this in its promotional materials; Mr.  
30 Hanley thought that Ms. Kaplan brought up a good point.

31  
32 Kowetha Davidson asked Herman Cember if Dr. Robert Brent was an expert on specific  
33 chemicals because there are a number of chemicals related to cancer. Dr. Cember responded that  
34 Dr. Brent is an expert in embryology and the development of the embryo and fetus. Dr. Cember  
35 said that he can discuss the factors that affect the embryo and the fetus, any causes for  
36 interruption and damage, and the time that exposures take place. Dr. Cember noted that he has  
37 heard Dr. Brent speak several times and that he is "very understandable." Jack Hanley said that  
38 Dr. Brent is also an expert in radiation and health physics, and therefore can answer questions  
39 about cancer and radiation issues as well.

40  
41 James Lewis commented on the indication that ATSDR has heard their issues about addressing  
42 concerns. He read the following section from *Section 3.1.2 Community Health Concerns* of the  
43 PHAGM: "Understanding community health concerns related to a site or environmental release  
44 is an important component of the public health assessment process and ATSDR's overall  
45 mission. Community health concerns, therefore, need to be investigated and understood to the  
46 greatest extent practical. It is important to gather this information early in the process."

1  
2 James Lewis next read a title from an article in the *Nashville Tennessean* from October 26, 1997,  
3 entitled, “Study the People Not the Poisons Sick Oak Ridge Residents Urge Officials.” Mr.  
4 Lewis said the outstanding issues have still not been addressed even after the efforts in Scarboro  
5 and the concerns raised by the residents there. He stated that ATSDR should read these articles  
6 because they contain information that the agency should use to guide its efforts for developing  
7 responses that reach the needs of the public. He noted that the article discusses various chemicals  
8 and how they relate to cancer. He stated that this article has been published and is the knowledge  
9 within the community. He believed that ATSDR should be reviewing these types of articles to  
10 adjust the agency’s products in order to meet the needs of the community. He thought that they  
11 could move forward if these types of things were factored into ATSDR’s efforts.

12  
13 Jack Hanley told James Lewis that he had brought up a number of good issues. James Lewis  
14 replied that Dr. Robert Brent needed to be familiar with these issues when speaking with the  
15 community. Mr. Lewis thought that ATSDR should show that it has heard these concerns  
16 because it will be the “driving effort on how you close the gap.” Mr. Hanley continued to reply  
17 to Mr. Lewis’s comments. Regarding the community concerns citation from the PHAGM, Mr.  
18 Hanley said that the key is to address the community concerns, which is one of the main  
19 purposes of ATSDR. Mr. Hanley added that this is also the reason why ATSDR created the  
20 community concerns database in Oak Ridge to capture the community’s concerns; he noted that  
21 ATSDR had never developed this type of database before. Mr. Hanley explained that through  
22 work group and ORRHES meetings, ATSDR learned that it has not been reaching the broader  
23 audience. As a result, the agency is making modifications to reach the broader public. In addition  
24 to obtaining people’s concerns, ATSDR will also be providing answers to individuals by placing  
25 concerns and corresponding responses in the appropriate PHAs.

26  
27 Regarding the Y-12 concerns expressed by James Lewis, Jack Hanley said that the Y-12 PHA  
28 included key concerns extracted from the Oak Ridge Environmental Justice Committee,  
29 ATSDR’s Community Concerns Database, CDC’s door-to-door survey, and the Scarboro  
30 Community Assessment Report by the Joint Center for Political and Economic Studies. Mr.  
31 Hanley noted that these key concerns, as well as corresponding responses, were provided in the  
32 PHA. Mr. Hanley agreed that the PHA is a large document, but it includes an index to the areas  
33 where concerns are detailed and answered. Mr. Hanley thought they could work on how to  
34 communicate the agency’s responses to concerns, and stated that they needed to find an effective  
35 method for directing people to these areas of the PHAs.

36  
37 Bill Cibulas spoke to the issue about studying people instead of the toxics. Dr. Cibulas explained  
38 that epidemiology is a difficult science and practice to effectively use and show cause and effect.  
39 He said that when they review literature and look at exposures to low-level effects, there is a  
40 scarcity of literature that demonstrates any cause and effect. He explained that through the PHA  
41 process, a health assessor makes recommendations based on the knowledge of health effects  
42 associated with the COCs and exposures. Dr. Cibulas believed that the PHA is the appropriate  
43 place to make recommendations on the need to further study any particular population. He stated  
44 that when ATSDR can make a case that there are significant exposures and adequate knowledge  
45 of substances, which suggest that a biologically plausible link exists between that substance and

1 a health effect, DHAC would refer this to ATSDR's Division of Health Studies because it is  
2 experienced with working to identify whether links exist between health effects and exposures.

3  
4 Bill Cibulas continued that it is unlikely that they could link low-level exposure with health  
5 effects. He said that the PHA is a necessary step before studying people. He stated that they  
6 might not be doing an adequate job in their recommendations and conclusions to demonstrate  
7 why it is not sensible to conduct a health study. James Lewis appreciated Dr. Cibulas's  
8 comments. Mr. Lewis said that many people felt as though millions of dollars were spent on the  
9 Oak Ridge Dose Reconstruction, and that this argument should have been made up-front to the  
10 community so that disconnects do not result. He noted that "timing is everything" and that  
11 disconnects will not occur if everything is presented in an organized and easily understood  
12 format. To not lose the trust of the community, he thought they needed to look at the sequence of  
13 activities and disseminating messages to the public before making a health call.

14  
15 Kowetha Davidson said that they have discussed (on several occasions) that they would need to  
16 have a PHA that shows an exposure, a linkage, and a pathway to continue to look at specific  
17 health effects associated with those contaminants. If no link is identified, then Dr. Davidson  
18 stated it would be "misleading to the public to imply that there is a link" between exposures,  
19 contaminants, and health effects.

20  
21 To demonstrate how the PHA process has directed further evaluation, Jack Hanley noted how  
22 biological sampling was conducted in the Oak Ridge area in the early 1980s when information  
23 suggested that mercury was in the floodplain. As a result, CDC conducted a pilot study to  
24 evaluate whether people were being exposed to mercury (of all the contaminants that passed  
25 through Watts Bar). Mr. Hanley noted that DOE, EPA, TDEC, and ATSDR conducted separate  
26 analyses and all identified people who consumed large quantities of certain fish as those likely to  
27 have an increased risk of developing health effects. ATSDR then followed up with an exposure  
28 investigation, which was directed by previous studies suggesting to look for people who  
29 consumed a significant quantity of fish; ATSDR looked specifically for PCBs.

30  
31 Peggy Adkins commented on the list of representatives to be interviewed. She had about 20  
32 agencies that she thought needed to be added to the list, such as the March of Dimes, mental  
33 health organizations for each community, birth defects registries, and special education  
34 departments from area schools. Jack Hanley noted that the birth defects registry was not fully  
35 developed at this time. He explained that the purpose of interviewing these representatives was  
36 to identify resources and programs that are available within these communities so ATSDR can  
37 direct people with questions to these other agencies.

38  
39 Peggy Adkins thought if ATSDR is collecting information about communities surrounding the  
40 ORR, then it would be good to know this type of information to assess how these communities  
41 compare to other areas. Jack Hanley explained that they will be comparing data for the eight  
42 counties to the state of Tennessee in the Cancer Incidence Review. He said that ATSDR could  
43 provide information on these counties to these agencies and then could forward people to these  
44 programs depending on their needs and available local resources.

1 Peggy Adkins asked about specific diseases (e.g., lupus and multiple sclerosis). Mr. Hanley  
2 replied that for the community education sessions, ATSDR wants to reach out to other  
3 organizations, such as those on her list. Mr. Hanley suggested that ATSDR add these  
4 organizations to its mailing list so that they could be invited to the public forums. Mr. Hanley  
5 said that Dr. Robert Brent can give these agencies his thoughts on their questions and concerns  
6 that fall within his areas of expertise.

7  
8 Karen Galloway thanked ATSDR for “finally” planning community outreach efforts as she  
9 believed this was an important step. She said that people needed the opportunity to ask questions  
10 and receive answers from an expert.

11  
12 Jack Hanley said that the key is to outreach and meet various groups. He stated that ATSDR will  
13 take input from ORRHES to ensure that the word reaches the public. He noted that the handout  
14 flyer is only a draft document for the public forums. Also, the flyer would be used to reach  
15 groups to obtain their concerns and inform them of the sessions. He added that if questions are  
16 not answered during the sessions, then they could hopefully be answered in appropriate PHAs.

17  
18 Barbara Sonnenburg asked when the Cancer Incidence Review would be released. Jack Hanley  
19 had spoken with Dee Williamson before coming to Oak Ridge. He explained that Ms.  
20 Williamson had obtained data from the state and had to go back to validate some of the data for a  
21 few counties. However, there was turnover at the state agency, and Ms. Williamson’s contact had  
22 left. She has now identified and been in contact with a state representative who is in the process  
23 of checking and validating the data. Ms. Sonnenburg asked if they could receive the report for  
24 the counties that do not need additional data validation. Mr. Hanley said that this would not be  
25 possible because the document still had to undergo internal review once the data issues were  
26 resolved with the state. In response, Ms. Sonnenburg said that it would “be about another year.”  
27 Mr. Hanley reassured her that it would not take this long.

28  
29 James Lewis thought people needed a map that shows the areas of contamination so that people  
30 could relate this to where they live. He said that people want to know about health effects in their  
31 communities. He added that people want to know, “What happened to me?” “What did I  
32 receive?” and “What are the health issues in that community?” Jack Hanley responded that they  
33 might be able to fold this into the summary document once they have completed all of the PHAs.  
34 However, Mr. Hanley explained that this type of map could not be created until the areas have all  
35 been identified in the various PHAs. Mr. Lewis thought that since the toxins have been studied  
36 rather extensively that they should have a good idea of where they are and capture that in a map.

37  
38 Kowetha Davidson thought that John Wilhelmi discussed the areas potentially impacted by the  
39 TSCA Incinerator and explained the links that have been made for sources and potentially  
40 impacted areas. Dr. Davidson noted that this was also done in the Y-12 and White Oak Creek  
41 PHAs. In addition, LT Trent LeCoultre showed the areas potentially impacted by groundwater at  
42 the previous night’s EEWG meeting. She added that they are obtaining information regarding  
43 impacted areas by contamination via discussions in the PHAs.

1  
2  
3 Marilyn Horton directed the group to the handout for the “Public Outreach Plan for Community  
4 Education Sessions on April 18 and 19, 2005.” She said that they wanted the subcommittee’s  
5 feedback on this plan and referred back to the sample flyer that they previously discussed. Ms.  
6 Horton noted that Susan Kaplan had made a great comment about including chemicals in the  
7 flyer and she stated that they needed to work on the wording to reach a broader audience.  
8 Regarding the flyers, Ms. Horton explained that ATSDR wanted to go beyond its normal efforts  
9 to reach the community because they have heard that comments are normally only collected from  
10 the work group and ORRHES meeting minutes. She added that Jeff Hill had provided a good  
11 contact for BWX Technologies, Inc. (BWXT) to identify current and former workers.  
12

13 Marilyn Horton explained that ATSDR had already conducted research for this outreach plan.  
14 Over 800 physicians and 52 cancer centers in the area have been identified that could be targeted  
15 with outreach efforts. She said that Don Box has offered to outreach to his church. In addition,  
16 ATSDR already has a mailing list with about 300 people as well as an extensive e-mail list. The  
17 flyer will also be e-mailed to people on the ORRHES and Local Oversight Committee (LOC)  
18 normal mailing lists. ATSDR’s goal is to reach as many people as possible through these  
19 outreach efforts.  
20

21 From the handout, Marilyn Horton read the following objectives: a) inform the public about the  
22 community education sessions, b) gather questions and concerns, and c) provide a resource for  
23 additional information. She noted that they are asking people to send in their questions in  
24 advance of the sessions so that Dr. Robert Brent can frame his presentation around people’s  
25 issues and concerns. Ms. Horton explained that there will be someone present to take minutes at  
26 the public forums to capture and document people’s concerns.  
27

28 Pete Malmquist suggested a few things to reach a broader audience. He said that ATSDR could  
29 send materials to the Roane County Chamber of Commerce and the Oak Ridge Chamber of  
30 Commerce, which could probably send the information to their members. He noted that the  
31 Kingston City Council, and probably the Oak Ridge City Council, are on local cable; an ATSDR  
32 representative could provide the information during the public comment period and the word  
33 would spread quickly. However, Dr. Malmquist pointed out that they have to go out and talk to  
34 people for these efforts to work effectively.  
35

36 Tony Malinauskas suggested arranging media interviews with Knoxville’s top talk radio show  
37 with Hallerin Hilton Hill. He thought that Mr. Hill was receptive to things of this nature.  
38

39 James Lewis questioned the timing of these presentations. He wondered if there would be a  
40 disconnect by having these sessions before the Cancer Incidence Review is released. Jack Hanley  
41 responded that this was discussed in work group meetings and within ATSDR. Based on these  
42 discussions, it was decided that they should move forward to obtain concerns so that ATSDR can  
43 respond to them in the PHAs. Mr. Hanley believed that these sessions will help put issues  
44 regarding cancer, radiation, and birth defects in perspective prior to releasing the Cancer  
45 Incidence Review. If a need for follow-up is identified, then ATSDR hopes that the agencies  
46 they anticipate partnering with can help provide answers and guide any follow-up activities.

1  
2 Marilyn Horton pointed out that the Cancer Incidence Review and the Public Outreach Plan for  
3 the Community Education Sessions are two separate issues. She explained that the review  
4 compares the eight-county area to the state, whereas this outreach plan is specifically related to  
5 the educational sessions on birth defects, cancer, and radiation; they will also add chemicals.

6  
7 James Lewis thought it was a good approach to be upfront, but stated that ATSDR would need to  
8 be in a position to return with something similar once the Cancer Incidence Review is released.

9  
10 Kowetha Davidson had asked in a work group meeting if they should put off these sessions and  
11 no one responded. Based on this, according to Dr. Davidson there was no reason for ATSDR not  
12 to continue.

13  
14 Jack Hanley said that ATSDR will also videotape Dr. Robert Brent's presentation with his  
15 overheads and make a CD, which can be presented later if needed.

16  
17 James Lewis asked if Dr. Robert Brent had data on incidence for areas that he has studied  
18 because he needs to "relate to something real." Herman Cember said that Dr. Brent has these  
19 data.

20  
21 David Johnson recommended adding the Knoxville Academy of Medicine and local community  
22 colleges to the mailing list for the flyers.

23  
24 Marilyn Horton read the days and times of the education sessions to see if the ORRHES  
25 members had any suggestions or comments. She said that Dr. Robert Brent will be making a  
26 formal presentation, which will be filmed and could be provided later on a DVD to interested  
27 individuals. She said that Roane State has a room available that they had reserved in case the  
28 group preferred it to the Kingston Community Center. When she noted that the auditorium was  
29 booked all that week, Pete Malmquist replied that the community center would be better than a  
30 classroom.

31  
32 Jeff Hill said that the times were fine because people who want to attend will go to the sessions.

33  
34 George Gartseff suggested having a CCCWG meeting on March 29, 2005, to discuss any  
35 specific comments and procedural issues.

36  
37 Herman Cember asked if the flyer had already been distributed. Marilyn Horton replied that this  
38 was a draft flyer and had not been distributed yet.

39  
40 Marilyn Horton provided more details on the identified possible contacts for the flyers, including  
41 24 public officials; more than 1,200 churches; 52 community, recreation, and senior centers, 66  
42 environmental and health groups, and 51 retiree groups. She noted that they also have other civic  
43 groups and will incorporate the organizations listed on Peggy Adkins's list. For the physicians  
44 mentioned previously, Ms. Horton said that ATSDR will target those physicians in radiation,  
45 cancer, birth defects, and other specialties related to the topics of interest at the public forums.

1 James Lewis recommended contacting the “Dr. Bob program” because it reaches a broad  
2 audience and he is connected to physicians. Peggy Adkins said that there are shows on Channel  
3 10 at 4:00 p.m. and 5:00 p.m. that deal with community events. Ms. Adkins also mentioned that  
4 Senator Frist’s assistant, Carolyn Jensen, has a community show on cable television.

5  
6 Kowetha Davidson suggested providing additional suggestions for contacts to Bill Taylor or  
7 Marilyn Horton.

## Work Group Reports

### EEWG

14 Tony Malinauskas said that the EEWG had four meetings. In the first and second meeting, the  
15 EEWG heard presentations by John Wilhelmi on the TSCA Incinerator PHA. Dr. Malinauskas  
16 indicated that many comments and suggestions were made to Mr. Wilhelmi during the first  
17 meeting, and Dr. Malinauskas was pleased that most (if not all) of the work group’s comments  
18 and suggestions were incorporated into the document. He noted that the second meeting was  
19 primarily a follow-up to comments and suggestions made during the first meeting. During the  
20 third EEWG meeting, Dr. Mark Evans of ATSDR presented the PHA on air releases from K-25  
21 and S-50. In the fourth meeting, LT Trent LeCoultre of ATSDR gave a report on the off-site  
22 groundwater PHA. The potentially affected areas were identified during these presentations.

23  
24 Regarding comments on the TSCA PHA, Tony Malinauskas said that the EEWG will be  
25 receiving and collating these comments for presentation to ORRHES. Dr. Malinauskas requested  
26 that all of the comments be e-mailed to him no later than April 5, 2005. On April 11, 2005, the  
27 EEWG will meet to form and collate comments and prepare them in formal recommendations for  
28 ORRHES.

29  
30 James Lewis asked Tony Malinauskas about the level of public participation received by the  
31 EEWG and asked what the work group members were doing to bring people into the meetings.  
32 Dr. Malinauskas responded that the public participation has been “disappointingly sparse.” He  
33 said that when they do get public participation, the individuals are usually concerned about  
34 particular issues and they make “significant contributions.” He asked if there were  
35 advertisements for the work group meetings. Marilyn Horton said that advertisements are not  
36 placed for work group meetings. He added that Ellen Rogers from *The Oak Ridger* attended the  
37 meeting held last night.

38  
39 Kowetha Davidson admitted that she has been lax in conveying their activities to people in the  
40 public, but said she would announce the meetings in her church. She recommended that each  
41 ORRHES member make efforts to get the public more involved.

42  
43 James Lewis wanted to get feedback from the technical people who no longer attended the  
44 meetings. He suggested interviewing these individuals to see what they would need to come  
45 back.



1 **CCCWG**

2 George Gartseff said that the CCCWG had met eight times since October 2004. He stated that  
3 during this time, the work group covered a variety of topics. Many of these topics were discussed  
4 during today's agenda, including the communications plan, Y-12 video, Web site redesign, and  
5 summary flyer for the TSCA Incinerator PHA. Mr. Gartseff recommended that the CCCWG  
6 meet on March 29, 2005, to discuss preparations for Dr. Robert Brent's public forums. He would  
7 send Bill Taylor a meeting announcement and asked the subcommittee members to send their  
8 comments on the flyer to him or Bill Taylor.

9  
10 **Health Outcome Data Work Group (HODWG)**

11 Pete Malmquist explained that this work group has not met on the Cancer Incidence Review. As  
12 he understood it, once Dee Williamson obtains the validated data from the state, the document  
13 will have to undergo an internal review similar to the PHAs. Dr. Malmquist thought that they  
14 were looking at several months before they could obtain a copy of the document. They also have  
15 not met because the PHAs to date have not dealt with health outcome data. Dr. Malmquist said  
16 that the work group will meet as any relevant topics arise.

17  
18 James Lewis thought that the original design of the work group was not only to discuss health  
19 outcome, but also because people had many health issues to discuss. Mr. Lewis explained that  
20 this group was developed so that the public could come and share their concerns with this work  
21 group. Pete Malmquist said that he could "solve the problem" and appointed Mr. Lewis as the  
22 Vice Chairman of Health Issues so he could call a meeting when he so desires.

23  
24  
25 **Presentation/Discussion: Y-12 Uranium PHA Video**  
26  
27  
28

29 Bob Safay explained that this is the first site-specific video prepared by ATSDR related to  
30 health. Mr. Safay said that the process began in September 2004. Since this time, he has received  
31 comments from many individuals and groups, including the CCCWG, EPA, DOE, and ATSDR/  
32 CDC. He said that EPA and DOE have signed off on the document and it has passed through  
33 ATSDR/CDC clearance.

34  
35 Bob Safay thanked the subcommittee members for their comments on the script and their  
36 suggestions for individuals to interview. He noted that he had a few changes to make: a) add  
37 credits, b) replace Tim Joseph's reference to mercury with silver, and c) re-shoot the community  
38 member gardening scene.

39  
40 Bob Safay wanted to hear their comments on this most recent version of the video. He noted that  
41 this will be menu-driven and emphasized that the community is the audience. The video is  
42 divided into three parts, with the first two parts mainly for the public and the last part for the  
43 more technical audience. Mr. Safay noted that the video measures 8.6 gigabytes (GB).

1 Bob Safay is currently in the process of developing a DVD jacket. After the jacket is completed  
2 and he adds the credits to the end, he will send it out for publication. Mr. Safay started the video  
3 at 4:35 p.m.

4  
5 Following the video, Herman Cember commented on the comparison of doses. He said that when  
6 you say 2/10 of a millirem (mrem) for lifetime, this would be about 10 minutes in an airplane.  
7 Dr. Cember said that you would get more in about an hour during a flight on a commercial jet  
8 aircraft.

9  
10 Tony Malinauskas said that the PHA should indicate the libraries (e.g., Oak Ridge Public  
11 Library) where the PHA is available for public review.

12  
13 Jeff Hill commented on the video. He noted that when the video discusses exposures and  
14 comparisons, the narration says that DOE restricts workers to 100 mrem per year; however, this  
15 is untrue. Herman Cember said that this is 5,000 mrem at the DOE level. Mr. Hill said that if  
16 they wanted to say that DOE has guidelines of 100 mrem for the public as the standard, then that  
17 would be a true statement. Jack Hanley said that this should be public instead of worker. Tim  
18 Joseph suggested saying that the regulation is 5,000 mrem, but that every year the highest  
19 maximum exposure for workers is usually less than 100 mrem. Mr. Hill suggested removing this  
20 unless they were going to conduct research to validate that statement. Bob Safay thought it  
21 would be easier to leave off.

22  
23 Jeff Hill stated that the kidney and liver are each noted as target organs in different parts of the  
24 video. Herman Cember said that this should be kidney.

25  
26 Jon Richards stated that the narration says that the Nuclear Regulatory Commission (NRC) and  
27 DOE have 100 mrem, but that the graphics still had federal government. Mr. Richards said that  
28 this is not a federal government number and that it would be better to put DOE and NRC on the  
29 graphic.

30  
31 Tony Malinauskas said that the video mentions background radiation due to generally ground  
32 level activities and then says it is because of elevation when discussing radiation in Denver.  
33 However, Dr. Malinauskas noted that this is actually cosmic radiation. Bob Safay said that the  
34 original video mentioned location and geography, but EPA asked him to change it to say this was  
35 due to elevation. Dr. Malinauskas added that the video says that the general background radiation  
36 is due to radiation from rocks and water, which does not make sense because elevation has  
37 nothing to do with radiation in rocks and water. Jon Richards clarified the term “elevation” in  
38 that Dr. Malinauskas was saying people are getting more cosmic radiation. Mr. Safay reminded  
39 the group that they are trying to keep this video in terms that are understandable for the general  
40 public. He thought they might not want to use terms such as “cosmic radiation,” but noted that  
41 they could work on the language.

42  
43 Charles Washington stated that minimum risk levels (MRLs) in vegetables are discussed in the  
44 video, but the video does not mention that the data are for 1995–2003 when the facilities were  
45 not operating at capacity. He suggested interjecting a clarification statement to show that risks  
46 are not expected even when the capacity is much greater than today. Jack Hanley responded that

1 when the state estimated doses for soil in the Dose Reconstruction, assumptions were made for  
2 consuming vegetables based on the past analysis for 1944–1995, and estimates were made for  
3 uranium exposure posed from the vegetable pathways. He noted that measured data were  
4 available for the current exposure.

5  
6 Charles Washington asked if Jack Hanley had emissions data from 1944; Mr. Hanley said that he  
7 did have these data. He had emissions rate and deposition rate data and used the highest level of  
8 uranium in the soil in the floodplain for the evaluation. Mr. Washington stated that no filters  
9 were present back then and now there is equipment to keep the emissions from being airborne.  
10 Mr. Hanley said that the past estimates were based on emissions released from Y-12 during  
11 1944–1995, and all assumptions were included in those estimated emission releases. Mr.  
12 Washington said that many questions came to his mind while he watched the video and  
13 explained that there are many people in the area who know about these past activities. His  
14 concern was not to raise more questions than they solve.

15  
16 James Lewis thought that Karen Galloway had brought up some comments that were made about  
17 the Dose Reconstruction by people at the Oak Ridge National Laboratory (ORNL). He recalled  
18 that the responses were that some of this information was not necessarily believable. He asked if  
19 the people familiar with these topics and those who had made these comments reviewed this  
20 video. He wanted to know the identities of these people and their comments. He also thought it  
21 had been mentioned that data in the *Reports of the Oak Ridge Dose Reconstruction, Uranium*  
22 *Releases From the Oak Ridge Reservation—a Review of the Quality of Historical Effluent*  
23 *Monitoring Data and a Screening Evaluation of Potential Off-Site Exposures* (referred to as the  
24 Task 6 report) had underestimated a particular amount. He wanted to know if the author of the  
25 report was in agreement with ATSDR’s findings because he wanted to hear from technical  
26 experts familiar with the Task 6 to see if it is as good a document as it seems.

27  
28 Kowetha Davidson did not want them to discuss the document because this was the group’s  
29 opportunity to talk about the video. She said that they do not need to discuss the PHA because it  
30 has already been released to the public. She either wanted the group to endorse the video or  
31 suggest that ATSDR not prepare additional videos.

32  
33 James Lewis wanted to know if ATSDR has received input on the video from principal scientists  
34 who prepared these documents. Jack Hanley explained that ATSDR hired independent technical  
35 experts to review the Task 6 report, and one of the reviewers also peer reviewed the Y-12 PHA.  
36 He noted that all of this information was provided to ORRHES last year and that no substantive  
37 comments were received on the document by any of the three independent peer reviewers. In  
38 addition, ATSDR addressed comments from EPA, which were included in the PHA, and EPA  
39 has also reviewed the video. Tim Joseph added that DOE had an independent review of the Task  
40 6 report via Auxier & Associates. Mr. Lewis wanted to know if the principal author or other  
41 technical experts who have questioned the document (e.g., Bob Peele) reviewed the video.  
42 Kowetha Davidson said that there was no new material in the video and these individuals have  
43 seen the PHA. Mr. Hanley added that everything in the video is also in the document.

44  
45 Bob Craig said that ORNL is only called X-10 by “insider clubbers” and that it is known  
46 worldwide as ORNL. Kowetha Davidson cautioned Dr. Craig to remember that ORNL has also

1 been located at Y-12. Jack Hanley thought that it would have been X-10 when discussing iodine  
2 and other products depending on the time period. Dr. Craig said that iodine would have come  
3 from ORNL because it was around 1954/1955.

4  
5 Jeff Hill said that the video mentions exposures to the community as 150 mrem over lifetime (70  
6 years) only one time. He found it confusing that this comparison was used and the comparison to  
7 the 100 mrem annual dose was also mentioned. He suggested possibly removing this from the  
8 video because he did not think it added anything. Mr. Hill thanked Bob Safay for producing the  
9 video. Tony Malinauskas thought this was a very good product.

10  
11 Tim Joseph believed that the public is unable to visually perceive log graphs. He suggested not  
12 using log graphs in future videos because they are difficult for the public to understand and they  
13 do not visually show what you are trying to indicate. Bob Safay explained that recommendations  
14 were made several times to remove them, and then to include them. ATSDR's contractors told  
15 him that the line would be almost invisible because it would be so far down on the graphs. Dr.  
16 Joseph replied, "That's the point."

17  
18 Kowetha Davidson asked ORRHES members to send all of their comments on the video to  
19 George Gartseff, Jack Hanley, or Marilyn Horton.

20  
21 Bob Safay summarized the comments received on the video regarding: a) cosmic radiation,  
22 b) removing the word worker when discussing 100 mrem, and c) changing liver to kidney. He  
23 would also look into Jeff Hill's comment on changing the dose to annual instead of lifetime. Bob  
24 Craig commented that the whole basis for the 5,000 mrem is to compare it to lifetime. Dr. Craig  
25 did not see how they could not compare the dose to lifetime. Jack Hanley said that there are  
26 comparisons for annual and lifetime in the PHA, but that this would be too much for the video.

### **Discussion of Next Meeting**

27  
28  
29  
30  
31  
32 Kowetha Davidson said that they needed to choose a date for the next ORRHES meeting. She  
33 suggested the first Tuesday in May 2005. During the meeting, the EEWG will bring forward its  
34 recommendations and comments to ORRHES, and the subcommittee will provide  
35 recommendations to ATSDR based on the EEWG's comments and the discussion during the  
36 ORRHES meeting. The tentative meeting date was scheduled for May 3, 2005.

### **Action Items From Today's Meeting**

37  
38  
39  
40  
41  
42  
43  
44  
45  
46 Marilyn Horton went over the action items from today's ORRHES meeting:

- 1 • Provide James Lewis with a hard copy version of PHAGM.
- 2 • Add DVD onto the old schedule of PHAs.
- 3 • Add a column to show the final PHA at the end of the schedule table.
- 4 • ATSDR is currently working on the four-page summary document for the TSCA Incinerator  
5 PHA.
- 6 • Discussed (not recommendation or vote) on having a draft summary document available at  
7 the time that the PHAs are mailed out.
- 8 • Add overheads and transcripts to presentations on the Web site.
- 9 • Post recommendations and responses from each meeting on the Web site.
- 10 • Post the Draft TSCA Incinerator PHA on the Web site.
- 11 • Discussed the Y-12 Uranium PHA video and the subcommittee's suggestions.
- 12 • Next CCCWG meeting is scheduled for March 29, 2005.
- 13 • Send comments on the TSCA Incinerator PHA to Tony Malinauskas by April 5, 2005.
- 14 • Next EEWG meeting is scheduled for April 11, 2005.
- 15 • Next ORRHES meeting is scheduled for May 3, 2005.

### Additional Items

16  
17  
18  
19  
20  
21 Jeff Hill asked if they needed to make a vote or motion to have the draft summary document  
22 released. Kowetha Davidson replied that the work group decided that it did not want this  
23 summary document released at this time. Mr. Hill said that they had wanted the draft available at  
24 this ORRHES meeting. Dr. Davidson responded that the current process is to have the summary  
25 document released at the same time as the PHA; however, this summary document was not  
26 released at that time because the CCCWG did not want it released. Jack Hanley explained that  
27 this is a problem with the new process. Mr. Hill confirmed that the summary and the PHA would  
28 be released at the same time in the future; Mr. Hanley said that this was correct.

29  
30 Tony Malinauskas reminded the group that comments on the TSCA Incinerator PHA are due to  
31 him by April 5, 2005, and will be discussed at the April 11, 2005, EEWG meeting. Kowetha  
32 Davidson would also ask Bill Taylor and Marilyn Horton to send comments to Dr. Malinauskas  
33 no later than April 15, 2005.

### Meeting Adjourned

34  
35  
36  
37  
38 Kowetha Davidson adjourned the meeting at 5:45 p.m.