### **Testing Procedure**

Participants will take part in either an in-person or remote usability test. During all testing sessions, the facilitator will provide a brief overview of the HHE Program, an introduction to the HHE Program website, and an explanation of the usability test procedure, equipment, software, and timeframe expectations. The facilitator will also provide test instructions for completing tasks, including stating that the purpose of the test is to evaluate the HHE Program website – NOT the participant. The facilitator will explain that each task will be measured and that exploratory behavior outside the task flow should not occur until after task completion.

The testing process will begin with participants completing a pre-test demographic questionnaire. The participant will then be asked to complete twelve tasks on the HHE Program website sequentially. At the start of each task, the facilitator will read aloud the task description from a printed copy of the Usability Testing Guide and ask the participant to begin the task. The observer will monitor all sessions and take notes.

After all task scenarios are attempted, the participant will complete the post-test satisfaction questionnaire. The questionnaires will use free-form responses and rating scales to rate overall satisfaction and provide overall comments and suggestions on how to improve the HHE Program website.

### In-Person Testing with Eye Tracking Equipment

At the beginning of the study, the participant will calibrate their eye movement with the eye tracking equipment, ensuring that eye movements are recorded properly during the performance of the tasks. While completing tasks, eye tracking software will map eye movement and produce gaze data used to create gaze plot and heat map visualizations used for analysis and reporting. During the completion of tasks the participant will be asked to hold all comments until after the testing sessions are completed. After testing is complete, the facilitator and participant will view a video of the recorded session together and discuss specific moments that occurred during testing.

Note: The anticipated time to complete the test is approximately 60 minutes.

### **Remote Testing with Morae Usability Software**

During the testing period, remote testing participants will need to have uninterrupted access to a computer with a web browser and internet connection and a telephone, preferably with a headset or speakerphone capability. Participants will be provided a link to GoToMeeting and a teleconference phone line. The participant's interaction with the HHE Program website will be monitored by the facilitator remotely.

At the beginning of each session, the facilitator will give the participant control of the mouse to accomplish tasks on the facilitator's computer. The facilitator will instruct the participant to 'think aloud' so that a verbal record exists of their interaction with the HHE Program website. Morae usability software will capture user performance data and audio/video of each task, and the facilitator and observer will record user behavior, user comments, and system actions. Recorded data will be used for analysis and reporting.

Note: The anticipated time to complete the test is approximately 45 minutes.

## **Pre-Test Demographic Questions**

Pre-test questions will be provided at the beginning of each testing session that will provide us with demographic data of the users that are participating in the usability test. The data will ensure that we are getting a variety of participants for the usability study.

- Question 1: What is your age?
- Question 2: What is your gender?
- Question 3: What is your occupation?
- Question 4: How many hours a week do you use a computer?

### **Usability Tasks**

Because most of the website tasks are relevant for both employers and employees, both user groups will be asked to complete the same set of tasks during their testing sessions.

## Tasks for Employer and Employee User Groups

## Task 1: If you needed help relating to health hazards at your place of work, where would you go on the Internet?

This is the participant's chance to find occupational help relating to work place health hazards on the Internet before being introduced to the HHE website. Information gathered will inform the HHE Program about how users would search the internet to find this information.

### Task 2: Find information about who can request a health hazard evaluation.

HHE Program website users may want to request a health hazard evaluation in their work place and want to know who is permitted to submit the request. This task can be initially accessed in at least five ways:

- Clicking on the "HHE Program Information" button in the left navigation, and scrolling down on the page
- Clicking on the "HHE Program Information" button in the left navigation, and clicking on the second anchor (table of contents) link
- Clicking on the "Information about the Health Hazard Evaluation (HHE) Program" link in the Home Page content, and scrolling down on the page
- Clicking on the "Information about the Health Hazard Evaluation (HHE) Program" link in the Home Page content, and clicking on the second anchor (table of contents) link

### Task 3: Download an informational brochure about the Health Hazard Evaluation Program.

The HHE Program provides users with downloadable brochures containing information about health hazard evaluations to print and read as a guide. This task can be initially accessed in one way:

Clicking on the "Resources" button in the left navigation

### Task 4: Contact the Health Hazard Evaluation Program to learn more about how the program works.

HHE Program website users may want to ask a question about the program, report a website error, or find reports or more information about the program that is not located within the website. Once the correct page is reached, what is your preference for contacting the HHE Program: online form, phone, email, or mail? This task can be initially accessed in at least four ways:

- Clicking on the "Contact Us" button in the left navigation
- Clicking on the "Have Ouestions?" button in the Home Page banner
- Clicking on the "Contact Us" link in the Home Page content
- Clicking to another primary page on the website, and clicking the "Contact Us" link

# Task 5: Find an existing health hazard evaluation report relating to the textile industry that was conducted in West Virginia.

Some HHE Program website users want to find previously released reports that contain specific topics relating to their own work place, industry, geographic area, or health effects. Common industries that use HHE program services include healthcare, manufacturing, and services. This task can be initially accessed in at least three ways:

- Clicking on the "Find an HHE Report" button in the left navigation
- Clicking on the "Find an HHE Report" button in the Home Page banner
- Clicking on the "Search thousands of HHE reports" link in the Home Page content

### Task 6: Complete an online form requesting a health hazard evaluation.

Some HHE Program website users visit the website to request a health hazard evaluation in their work place when they notice an issue. This task can be initially accessed in at least six ways:

- Clicking on the "Request an HHE" button in the left navigation, and clicking on the "Fill out our online request form" link in the content
- Clicking on the "Request an HHE" button in the Home Page banner, and clicking on the "Fill out our online request form" link in the content
- Clicking on the "Request an evaluation" link in the Home Page content, and clicking on the "Fill out our online request form" link in the content
- Clicking on the "Request an HHE" button in the left navigation, and clicking on the "HHE Request Form" secondary button in the left navigation
- Clicking on the "Request an HHE" button in the Home Page banner, and clicking on the "HHE Request Form" secondary button in the left navigation
- Clicking on the "Request an evaluation" link in the Home Page content, and clicking on the "HHE Request Form" secondary button in the left navigation

# Task 7: Find a downloadable form requesting a health hazard evaluation that you can print, complete, and mail or fax to the HHE Program.

The second way HHE Program website users can request a health hazard evaluation is by downloading, completing, and sending a form to the program by mail or fax. This task can be initially accessed in at least three ways:

- Clicking on the "Request an HHE" button in the left navigation, and clicking on the "Print this form" link in the content
- Clicking on the "Request an HHE" button in the Home Page banner, and clicking on the "Print this

- form" link in the content
- Clicking on the "Request an evaluation" link in the Home Page content, and clicking on the "Print this form" link in the content

### Task 8: Find a recent announcement by the Health Hazard Evaluation Program.

Some HHE Program website users may visit the website to look for new material or announcements relating to the program. This task can be initially accessed in one way:

Clicking on the "What's New" button in the left navigation

# Task 9: Find information about the kinds of hazards that can be evaluated by the Health Hazard Evaluation Program.

The HHE Program offers Frequently Asked Questions (FAQs) that provide answers to commonly asked questions regarding the program. This task can be initially accessed in one way:

Clicking on the "FAQs" button in the left navigation

# Task 10: If you were an occupational medicine student or professional where would you go on the HHE website to find information about educational training opportunities?

Some HHE Program website users are occupational medicine residents who visit to the website for information on how to get involved in conducting evaluations that include on-site investigations, medical evaluations, exposure assessments, and office consultations. This task can be initially accessed in one way:

Clicking on the "Occupational Medicine Rotation" button in the left navigation

#### Task 11: Follow the Health Hazard Evaluation Program on Facebook.

The HHE Program provides users with the opportunity to follow program news through Facebook posts. This task can be initially accessed in at least two ways:

- Clicking on the Facebook icon in the right column of the Home Page
- Clicking to another primary page, and clicking on the Facebook icon in the right column

# Task 12: If you were looking for help at your worksite and came to this webpage where would you go or what would you do?

This is the participant's chance to reveal information about what they want to see on the website. Information from all participants will be combined and presented as suggestions for additional content or updated navigation.

## **Usability Testing Exit Questions**

Exit questions will be provided at the end of each testing session to enable participants to provide feedback about their overall experience with the HHE Program website and make recommendations for future improvements.

Question 1: What is your overall impression of the Health Hazard Evaluation Program website?

- **Question 2:** I would recommend this site to others who want to know more about the HHE Program or are concerned about health and safety in their workplace? (1: Strongly Disagree 5: Strongly Agree)
- **Question 3:** The homepage content makes me want to explore the entire site. (1: Strongly Disagree 5: Strongly Agree)
- **Question 4:** This website was easy to use. (1: Strongly Disagree 5: Strongly Agree)
- **Question 5:** The site is well organized. (1: Strongly Disagree 5: Strongly Agree)
- **Question 6:** It was easy to keep track of where I was on the site. (1: Strongly Disagree 5: Strongly Agree)
- Question 7: I could find information quickly. (1: Strongly Disagree 5: Strongly Agree)
- **Question 8:** The site's content would keep me coming back. (1: Strongly Disagree 5: Strongly Agree)
- **Question 9:** What is this site about? If you were to describe this site to someone interested in the Health Hazard Evaluation Program in a sentence or two, what would you say?
- Question 10: Do you feel this site provides current and up-to-date information? Why or Why not?
- **Question 11:** What do you like best about the site?
- Question 12: What did you like least about the site?
- **Question 13:** If you were in charge of designing this site, what improvements (if any) would you make? Is there anything that you would not use or is not important to you, and if so, why?
- Question 14: Is there anything that you feel is missing on this site?
- Question 15: Do you have any other final comments or questions?