Phase 1 Intermediate Design Report Hudson River PCBs Superfund Site

Attachment B – Phase 1 Intermediate Design Remedial Action Community Health and Safety Program Scope

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Albany, New York

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1. Introduction and General Requirements

This *Phase 1 Intermediate Design Remedial Action Community Health and Safety Program Scope* (Phase 1 ID RA CHASP Scope [Attachment B]) provides a description of the elements to be included in the *Phase 1 Remedial Action Community Health and Safety Plan* (Phase 1 RA CHASP) that will be submitted with the *Phase 1 Final Design Report* (Phase 1 FDR) for the Remedial Action (RA) for the Upper Hudson River. This Phase 1 ID RA CHASP Scope also provides a more detailed description of certain key elements of the community health and safety program to be designed and implemented for Phase 1 of the RA. The RA CHASP will be consistent with this Phase 1 ID RA CHASP Scope.

1.1 Background

In August 2003, the General Electric Company (GE) and the United States Environmental Protection Agency (EPA) executed an Administrative Order on Consent for Hudson River Remedial Design and Cost Recovery (RD AOC), effective August 18, 2003 (Index No. CERCLA-02-2003-2027), under which GE agreed to design the RA provided for in the Record of Decision issued by the EPA in 2002 for the Hudson River PCBs Superfund Site. That RA will be conducted in two phases – Phase 1, which will consist of the first year of dredging (at a reduced rate), and Phase 2, which will consist of the remainder of the dredging project. The *Remedial Design Work Plan* (RD Work Plan) that was attached to the RD AOC requires, among other things, that GE submit an RA CHASP with its FDRs for Phase 1 and Phase 2. The RD Work Plan specifies, in Section 4.4, that the Phase 1 RA CHASP will apply to on-site activities and will include a number of specified elements. Each of the elements specified in the RD Work Plan is listed below, along with additional details on the information to be included with each element.

1. Introduction, listing plan objective, site background, and site description, including:

    - Description of the purpose of the Phase 1 RA CHASP;
    - Description of the Phase 1 RA CHASP organization;
    - Summary of associated documents (e.g., Phase 1 FDR, *Phase 1 RA Monitoring Quality Assurance Project Plan* [Phase 1 RAM QAPP], worker *Health and Safety Plan* [HASP]) and their relationship to the Phase 1 RA CHASP;
    - Statement that this is a "stand alone" document and that, where appropriate, information from other documents is presented in an abbreviated form for completeness and readability; and

- Statement that the Phase 1 RA CHASP has taken full account of and has been developed based on the requirements outlined in the Quality of Life Performance Standards (QoLPS), and other relevant documents.

2. Summary of the RA program, including:
   - Description of each major program element and the activities associated with those elements, indicating which activities are associated with river operations (e.g., dredging) and which are associated with facility operations (e.g., transfer/processing); and
   - Description of how these elements provide the basis for the hazard analysis.

3. Project schedule and operations schedule, including:
   - Summary of activities by season;
   - Description of typical hours of operation;
   - Description of duration of activities (e.g., number of days within specific geographic areas);
   - Description of foreseeable reasons why work schedule may change; and
   - Description of notification plans in the event that there are significant changes to the schedule.

4. Description of potential hazards to the surrounding community associated with RA activities, including:
   - For each activity, description of associated hazards (both physical and chemical), potential impacts and measures to be taken to manage the hazards. Hazards will be prioritized based on potential seriousness and relevance to the local community. Information on how these hazards may impact the community will be discussed.

5. Site security plan, including:
   - General information regarding security for project areas, discussing river activities separately from facility activities; and
   - Details regarding access control for the processing site and active dredge areas.

6. Contingency plan for spills and releases during RA field activities, including:
   - Description of requirements for prevention (including best management practices), containment, cleanup, and notification for spills and releases that may affect the community; and
   - Information regarding emergency response (i.e., hospitals, lists of contacts, etc.).

7. Description of how each public hazard will be managed, including actions to be taken if the environmental monitoring indicates the need for corrective action, including:
   - Description of each activity, associated hazards assessed, potential impacts to the community identified, and measures to be taken to manage the hazards, primarily through prevention;
   - Discussion of the relevance and severity of the potential hazard to the community; and
   - Discussion of best management practices for hazard prevention.

8. Overview of the QoLPS as they relate to community health and safety, including:
   - Description of how the Phase 1 RA CHASP is related to the QoLPS.

9. Discussion of protection of water supplies and references to the attendant monitoring program, including:
   - Description of the program for addressing all river water uses (e.g., house water intakes, agricultural intakes, public drinking water intakes); and
   - A listing of all known water intakes.

10. Section identifying the site safety personnel and their qualifications, responsibilities, and contact information, including:
    - Definition of the role and responsibilities of emergency response organizations.

11. Emergency procedures, including emergency contact telephone numbers, hospital directions, medical and fire emergency procedures, and list of emergency equipment located on-site, including:
    - Description of how the emergency contacts and responder information was developed, with appropriate references to the worker HASP.

12. Figures, including:
    - Flow charts of complaint process; and
    - Flow charts of notification process.

In spring 2004, the EPA issued Engineering Performance Standards (EPS) and QoLPS for Phase 1 of the RA. The EPS address resuspension during dredging, residual concentrations of polychlorinated biphenyls (PCBs) in sediments after dredging, and dredging productivity. The QoLPS address impacts related to air quality, odor, noise, lighting, and navigation. In accordance with the QoLPS, the Phase 1 RA CHASP will identify equipment, personnel, and specific procedures for protecting residents and workers, and educating and

informing the public on project progress. In addition as the QoLPS state further (page 5-3), the Phase 1 RA CHASP will provide information for the public on the following:

- Worker education and monitoring (including a summary of the HASP);
- Air monitoring (including a summary of routine, control, and exceedance monitoring);
- Contingency plan (including a summary of the design elements intended to control exceedances);
- Complaint management program (including a summary of the program, with flow charts to define the process); and
- Site health and safety personnel contact information.

This Phase 1 ID RA CHASP Scope specifies the required contents of the Phase 1 RA CHASP, as well as some of the key elements to be included in GE's community health and safety program for Phase 1 of the RA.

1.2 General Requirements

The Phase 1 RA CHASP will contain the elements listed in Section 4.4 of the RD Work Plan, as specified above. In addition, the Phase 1 RA CHASP will set forth contingency plans and actions, to be developed during Phase 1 Remedial Design (RD) and to be implemented during Phase 1 of the RA, for responding to and mitigating adverse impacts on air quality, odor, noise, lighting and navigation, which are the subject of the QoLPS. The Phase 1 RA CHASP will also describe a complaint management program for responding to complaints relating to these parameters, as well as to water quality. It will also provide site health and safety personnel contact information as part of a directory of emergency contacts. The Phase 1 RA CHASP will be developed as a stand-alone document, containing relevant information affecting community health and safety. The community will be involved in the development of the Phase 1 RA CHASP.

Where provisions addressing community health and safety are set out in other documents, the information will be summarized or re-iterated in the Phase 1 RA CHASP, as appropriate. Items that will be covered in documents other than the Phase 1 RA CHASP include the following:

- Worker education and monitoring will be addressed in the HASP to be provided as part of the *Phase 1 Remedial Action Work Plan* (Phase 1 RAWP) in accordance with Section 4 of the *Phase 1 Intermediate Design Report* (Phase 1 IDR). The separate standards applicable to workers with regard to issues such as air, lighting, noise, and safe operation of project-related watercraft will be summarized in the HASP.

- Routine, as well as contingency, monitoring requirements for surface water, air quality, hydrogen sulfide (H_2S) odor, noise, and lighting are described in the *Phase 1 Intermediate Design Remedial Action Monitoring Scope* (Phase 1 ID RA Monitoring Scope) provided in Attachment A of the Phase 1 IDR, and will be discussed further in the *Phase 1 Environmental Monitoring Plan* (Phase 1 EMP) and the Phase 1 RAM QAPP.

- Contingency actions (other than increased monitoring) for responding to exceedances of the action levels specified in the Resuspension Performance Standard and the water quality certification (WQC) requirements for in-river releases of constituents not subject to performance standards are described in the *Phase 1 Intermediate Design Performance Standards Compliance Plan Scope* (Phase 1 ID PSCP Scope) provided in Attachment C to the Phase 1 IDR, and will be discussed further in the *Phase 1 Performance Standards Compliance Plan* (Phase 1 PSCP) to be provided as part of the Phase 1 RAWP.

The following sections of this Phase 1 ID RA CHASP Scope provide a further explanation and description of certain components of the Phase 1 community health and safety program. Section 2 describes the design and implementation of contingency plans and actions to address exceedances of the quantitative standards (or Control Levels) set forth in the QoLPS for air quality, odor, noise, and lighting and deviations from the substantive requirements in the QoLPS for navigation. Section 3 describes the community notification program and the process to be followed in managing and responding to public complaints related to air quality, odor, noise, lighting, and navigation, as well as water quality. The Phase 1 design reports (insofar as they address these issues) and the Phase 1 RA CHASP will be consistent with this Scope.

Consistent with the RD Work Plan, this Scope is, and the Phase 1 RA CHASP will be, limited to addressing potential community hazards and impacts that occur in the vicinity of the Upper Hudson Work Area (as defined in the Consent Decree) and are associated with RA activities in this area. Hazards relating to off-site transport and disposal of dredged material, as well as those relating to delivery of raw materials and equipment prior to arrival at the Upper Hudson Work Area, are the responsibility of the transporters and disposal facilities and will not be addressed in the Phase 1 RA CHASP. However, the Phase 1 RA CHASP will include anticipated local traffic routings and a description of the transportation requirements which would apply to these shipments (e.g., DOT regulations, appropriate licensing of carriers/drivers, labeling, and placarding). In addition, GE will work with local first responders in an effort to establish appropriate response protocols to include in the Phase 1 RA CHASP.

In addition, this Scope is, and the Phase 1 RA CHASP will be, related to the activities to be performed during Phase 1 of the RA. If changes or modifications are warranted during Phase 1 (e.g., additional activities or hazards are identified), addenda to the Phase 1 RA CHASP will be developed and submitted to the EPA. Once approved, these addenda will be available for review on site and at public repositories. Following the completion of Phase 1, an evaluation will be conducted to determine whether modifications to the Phase 1 RA CHASP are needed for Phase 2.

2. Contingencies for Exceedances of or Deviations from Quantitative Quality of Life Standards

This section describes the activities that will be performed to address exceedances of the quantitative standards or Control Levels in the QoLPS, or deviations from other substantive requirements in the QoLPS, during Phase 1 of the RA. This section describes both the activities that will be performed during Phase 1 design to plan for such contingencies and the activities that will be performed during implementation of Phase 1 to respond to such contingencies.

As provided in Paragraph 35 of the RD AOC, GE will design Phase 1 of the RA to be consistent with, and fully take account of, the QoLPS (as well as the EPS). The Phase 1 IDR and Phase 1 FDR will document the engineering bases and assumptions for the design to demonstrate that the equipment and processes to be used in Phase 1 are expected to meet the QoLPS, as described in the Phase 1 ID PSCP Scope and to be provided in the Phase 1 PSCP and Phase 1 RA CHASP. The Phase 1 RA CHASP will include a summary of these analyses. The basis of design will be the Concern Level for ambient air concentrations of PCBs, the Control Level for noise, and the quantitative standards for opacity, H_2S, odor, and lighting, all as set forth in the QoLPS, as well as the substantive legal requirements referenced in the QoLPS for navigation.

In addition, during Phase 1 design, contingency plans will be developed for addressing potential exceedances of or deviations from those standards for air quality, odor, noise, lighting, and navigation. The mitigation methods and contingency plans developed during Phase 1 design to manage specific situations (as determined during potential hazard evaluations) will be included in the Phase 1 RA CHASP. These plans will be developed for potential contingencies that are reasonably foreseeable at the time of Final Design, taking into account the degree of confidence that the standards will in fact be achieved. Contingency actions to be planned in design will broadly include:

- Increased monitoring, as needed;
- Routine maintenance;
- Engineering controls;
- Equipment or process modifications;
- Operational modifications;
- Substitution of process components that are readily available and cost-effective; and
- Temporary shutdown of source of the exceedance and inter-related processes.

As noted above, only contingencies for scenarios that may affect the communities surrounding the Upper Hudson Work Area will be addressed in the Phase 1 RA CHASP.

During Phase 1, GE will conduct monitoring to determine whether the various performance standards are being met. The monitoring program and numerical levels of the standards are described in the Phase 1 ID RA Monitoring Scope, with additional details to be provided in the Phase 1 EMP and Phase 1 RAMP QAPP, and will be summarized in the Phase 1 RA CHASP.

During implementation of Phase 1, in the event that there is an exceedance of the quantitative QoLPS or a deviation from other substantive requirements in the QoLPS (i.e., the substantive navigation requirements), contingency actions will be implemented, as set forth in the Phase 1 RA CHASP. Such activities may include routine maintenance, operational changes, equipment or process modifications, additions of equipment, or, in extreme cases, a temporary shutdown of certain operations – all depending on the circumstances. GE will not be required, during the Phase 1 field season to make equipment modifications or additions that are not reasonably available from a schedule or cost standpoint, recognizing that substitutions for major equipment approved in the Phase 1 Final Design or being used in Phase 1 may be impractical. However, in the event reasonable changes can be made to address achievement of the performance standards during the Phase 1 dredge season, such changes will be proposed to equipment or operations for EPA review and approval. During Phase 1, EPA will consider any information that GE may submit regarding impacts to schedule and project costs when the Agency reviews GE's proposals, if any, for modification of the EPA-approved Phase 1 FDR based on field conditions or experience.

The following sections discuss in more detail the contingencies to be considered for air quality, odor, noise, lighting, and navigation.

2.1 Air Quality Contingencies

Potential air quality issues that will be evaluated during the design are:

- PCBs in ambient air;
- The following pollutants subject to National Ambient Air Quality Standards (NAAQS) (criteria pollutants): nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), particulate matter with a median

diameter of 10 micrometers or less (PM_{10}), particulate matter with a median diameter of 2.5 micrometers or less ($PM_{2.5}$), and ozone (O_3); and

- Opacity.

The EPA established standards for total PCB concentrations in ambient air concentrations are 24-hour average concentrations of 0.11 micrograms per cubic meter ($\mu g/m^3$) for residential areas, with a Concern Level of 0.08 $\mu g/m^3$, and 0.26 $\mu g/m^3$ in commercial/industrial areas, with a Concern Level of 0.21 $\mu g/m^3$. The Phase 1 IDR and Phase 1 FDR will include emission inventories and air dispersion modeling to predict PCB concentrations in ambient air at receptors (e.g., nearby residences or businesses). The results of this design analysis will be summarized in the Phase 1 RA CHASP. If the design predictions exceed the applicable standard at a receptor for any given uncontrolled source, the design will be modified such that predictions are below the applicable standard. The basis of design will assume that the quantitative standards are protective of the health of the community, and therefore, the project will be designed to meet those standards. Scaling or dispersion factors will be developed so that concentrations can be predicted at the receptor (e.g., a residence) based on data from monitoring stations that are closer to the source (e.g., a site fence line). Compliance with the standard will be demonstrated at the monitoring station. In the event that the monitoring station location is not representative of any receptor, conservative modeling will be used to assess compliance at the receptor, with approval of the EPA.

During Phase 1 operations, air monitoring will be conducted as described in the Phase 1 ID RA Monitoring Scope, with additional details to be provided in the Phase 1 EMP and Phase 1 RAM QAPP. In the event that monitoring (or modeling, if used to assess compliance at the receptor, with approval of the EPA) shows an exceedance of a Concern Level, the following steps will be taken: 1) promptly notify the EPA, but no later than 24 hours after receipt of the analytical results; 2) investigate the cause of increased emissions; 3) implement increased monitoring as described in the Phase 1 ID RA Monitoring Scope; and 4) as necessary, implement mitigation measures as outlined in the Phase 1 RA CHASP, provided that any equipment modifications or additions that are part of such measures are reasonably available from a schedule and cost standpoint, recognizing that substitutions for major equipment approved in the Phase 1 FDR and being used in Phase 1 will be impractical.

In the event that the monitoring (or modeling, if used to assess compliance at the receptor) shows an exceedance of a standard, the following steps will be taken: 1) notify the EPA, as well as the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH), immediately upon receipt of the analytical results; 2) investigate the cause of the exceedance; 3) implement increased monitoring as described in the Phase 1 ID RA Monitoring Scope; 4) work with EPA field staff to develop an

action plan and implement additional mitigation (subject to the same proviso regarding mitigation measures as noted in the preceding paragraph); 5) continue monitoring and provide daily monitoring reports to the EPA, NYSDEC, and NYSDOH until the standard is achieved; and 6) provide a corrective action report to the EPA in accordance with the Phase 1 RA CHASP.

With respect to criteria pollutants, the design analysis is expected to demonstrate compliance with the NAAQS; therefore, no contingencies for monitoring or control of these pollutants are expected to be provided in the Phase 1 RA CHASP. If the initial design analysis does not demonstrate achievement of the NAAQS, the design will be modified to demonstrate compliance with the NAAQS.

The opacity standard states that opacity must be less the 20% (as a 6-minute average), except that there can be one continuous 6-minute period per hour of not more than 57% opacity. Routine maintenance of diesel engines, generators, and other equipment is expected to achieve the opacity standard. Opacity monitoring will verify this expectation and reasonably foreseeable contingencies will be specified in the Phase 1 RA CHASP in the event of an exceedance.

2.2 Odor Contingencies

For this project, the airborne chemicals that have the potential to be a public health concern via inhalation pathway are PCBs and H_2S. PCBs are odorless, and the EPA has established the air quality standard for PCBs to be protective of public health. As indicated in the QoLPS for odor, the quantitative standards for H_2S have been established to control nuisance odors, and thus also conservatively protect public health. The odor threshold for H_2S is much lower than the level of potential concern to health; therefore adherence to the standard should alleviate both odor and exposure concerns. Odor is not otherwise expected to be a public health concern. The Phase 1 RA CHASP will address H_2S, as well as other odors that "unreasonably interfere with the comfortable enjoyment of life and property" (*Hudson QoLPS*, page 6-18).

The contingency plan for odor will be triggered by the identification of uncomfortable project-related odors by RA workers or by complaints from the public; the complaint process is described in Section 3.2 below. If the odor is identified as H_2S (i.e., rotten eggs), H_2S monitoring will be conducted as described in the Phase 1 ID RA Monitoring Scope, with further details in the Phase 1 EMP and the Phase 1 RAM QAPP. If the monitoring shows an exceedance of the H_2S standard (14 $\mu g/m^3$ as a one-hour average), the following steps will be taken: 1) promptly notify the EPA, but no later than 24 hours after receipt of the analytical data; 2) investigate the cause of the odor to verify that it is project-related; 3) if so, work with EPA field staff to develop an action plan

and implement mitigation measures, provided that any equipment modifications or additions that are part of such measures are reasonably available from a schedule and cost standpoint, recognizing that substitutions for major equipment approved in the Phase 1 FDR and being used in Phase 1 will be impractical; 4) continue regular monitoring until the standard is achieved; and 5) provide a corrective action report to the EPA in accordance with the Phase 1 RA CHASP.

Procedures for addressing complaints regarding odors other than H_2S are described in Section 3.2 below.

2.3 Noise Contingencies

The applicable quantitative Control Level and standards for noise are set forth in the QoLPS and listed in Section 5.2 of the Phase 1 ID RA Monitoring Scope. The Phase 1 RD will include an evaluation of noise intensity generated by equipment or processes and traffic associated with site operations. Attenuation modeling will be completed during the design to predict noise intensity at receptors (e.g., nearby residences or businesses), and the results will be summarized in the Phase 1 RA CHASP. If the design predictions exceed the applicable standard at a receptor for any given uncontrolled source, the design will be modified such that predictions are below the applicable standard. The quantitative levels specified in the QoLPS will be assumed to be protective of the community and will be used as the basis of design. Attenuation factors, defined by site-specific conditions, will be developed so that intensities can be predicted at the receptor (e.g., a residence) based on data from monitoring stations that are closer to the source (e.g., a site fence line). These predictions will be validated by a noise study during the startup of RA operations, as described in the Phase 1 ID RA Monitoring Scope. Compliance with the standard will be demonstrated at the monitoring station if the station location is representative of a receptor. In the event that the monitoring station location is not representative of any receptor, temporary monitoring stations may be established at or closer to receptors or modeling may be used to assess compliance at the receptor.

Contingency actions for noise will be triggered by a measurement of noise intensity above a prescribed quantitative limit or by a complaint. The complaint process is described in Section 3.3 below. In the event that monitoring (or modeling, if used to assess compliance at the receptor) shows an exceedance of the Control Level (which applies only to residential areas and only during the daytime), the following steps will be taken: 1) investigate the cause of the noise increases to verify that they are project-related; 2) if so, implement increased monitoring as described in the Phase 1 ID RA Monitoring Scope; and 3) consider mitigation measures, as outlined in the Phase 1 RA CHASP.

In the event that the monitoring (or modeling, if used to assess compliance at the receptor) shows an exceedance of an applicable noise standard, the following steps will be taken: 1) promptly notify the EPA, but no later than 24 hours after discovery of the exceedance; 2) investigate the cause of the exceedance to verify that it is project-related; 3) if so, implement increased monitoring as described in the Phase 1 ID RA Monitoring Scope; 4) work with EPA field staff to develop and implement an action plan for mitigation measures, provided that any equipment modifications or additions that are part of such measures are reasonably available from a schedule and cost standpoint, recognizing that substitution for major equipment approved in the Phase 1 Final Design and being used in Phase 1 will be impractical; 5) continue monitoring and provide daily monitoring reports to the EPA until the standard is achieved; and 6) provide a corrective action report to the EPA in accordance with the Phase 1 RA CHASP.

2.4 Lighting Contingencies

The quantitative lighting standards that the EPA has established are 0.2 footcandle in rural and suburban areas, 0.5 footcandle in residential areas, and 1.0 footcandle in commercial/industrial areas. The Phase 1 RD will include an evaluation of light intensity generated by illumination of active dredge areas, processing areas, loading and staging areas, and administration areas and other work areas on and near the river to provide a safe and secure work place. Light intensity calculations at receptors will be used to assess and confirm compliance. The design basis will assume that the quantitative standards are protective of the community. Lighting will be directed towards work areas and will be compliant with worker safety practices and United States Coast Guard (USCG) and New York State navigation laws.

Contingency actions for lighting impacts, such as position adjustments, will be triggered by a measurement of light intensity (footcandle) above an applicable standard or by a complaint. The complaint process is described in Section 3.3. In the event that monitoring shows an exceedance of the Concern Level (in which lighting levels are above the standard but the exceedance can be easily and immediately mitigated), the following steps will be taken: 1) investigate the cause of the lighting problem to verify that it is project-related; 2) if so, implement increased monitoring as needed; 3) implement mitigation measures as outlined in the RA CHASP, provided that any equipment modifications or additions that are part of such measures are reasonably available from a schedule and cost standpoint, recognizing that substitutions for major equipment approved in the Phase 1 FDR and being used in Phase 1 will be impractical; and 4) submit a follow-up report to the EPA in accordance with the Phase 1 RA CHASP.

In the event that the monitoring shows an exceedance of an applicable lighting standard that is not easily and immediately mitigated, the following steps will be taken: 1) promptly notify the EPA, but no later than 24 hours after discovery of the exceedance; 2) investigate the cause of the exceedance to verify that it is project-related; 3) if so, implement regular monitoring as described in the Phase 1 ID RA Monitoring Scope; 4) develop and implement an action plan for mitigation measures (subject to the same proviso regarding mitigation measures as noted in the preceding paragraph); 5) continue regular monitoring until the standard is achieved; and 6) provide a corrective action report to the EPA in accordance with the Phase 1 RA CHASP.

2.5 Navigation Contingencies

The Phase 1 RD will confirm that the river-based elements of the project comply with the substantive requirements of the federal and New York State regulations governing the navigation of commercial vessels. The New York State Canal Corporation (NYS Canal Corporation) will be consulted during the design and development of the Phase 1 RAWP on issues relating to navigation.

The design basis will assume that compliance with these regulations will constitute compliance with the substantive requirements of the QoLPS for navigation. Hazard analyses will also be conducted to assess potential navigation hazards to the public.

Navigational logistics are not related to health and safety and will not be addressed in the RA CHASP. Navigation-related complaints are addressed in Section 3.4 below.

In the event that on-river operations deviate from the relevant federal and state navigation regulations listed in the QoLPS for navigation or from the design plans relating to navigation and such deviation poses a health or safety hazard, which can be easily and immediately mitigated, the following steps will be taken: 1) promptly notify the EPA and the NYS Canal Corporation, but no later than 24 hours after discovery of the deviation; 2) implement mitigation measures as outlined in the RA CHASP, provided that any equipment modifications or additions that are part of such measures are reasonably available from a schedule and cost standpoint, recognizing that substitutions for major equipment approved in the Phase 1 FDR and being used in Phase 1 will be impractical; and 3) submit a follow-up report to the EPA and NYS Canal Corporation in accordance with the Phase 1 RA CHASP.

In the event that there is a deviation from the relevant federal and state navigation regulations or the design plans relating to navigation and such deviation cannot be easily and immediately mitigated, the following steps

will be taken: 1) notify the EPA and NYS Canal Corporation immediately; 2) identify the cause of the deviation; 3) develop and implement an action plan for mitigation measures (subject to the same proviso noted in the preceding paragraph); and 4) provide a corrective action report to the EPA and NYS Canal Corporation in accordance with the Phase 1 RA CHASP.

In addition, contingency plans for navigation accidents related to the project will be included in the Phase 1 RA CHASP. Appropriate emergency response agencies (e.g., police, sheriff, fire departments, etc.) will be worked with during design to establish the contingency plans.

3. Community Notification and Complaint Management Programs

The Phase 1 RA CHASP will include a community notification program and a complaint management program to address community health and safety concerns.

3.1 General

The community notification process summarized in the Phase 1 RA CHASP will consist of notifications to mariners regarding on-river activities, and a website where the general public can obtain project status information, such as information on active dredge areas, anticipated dredge schedule and standard hours of operation, dredged material transport traffic patterns, safety and security information for non-project vessels, monitoring results for QoLPS parameters, and responses to frequently asked questions. In addition, a toll-free phone number, the website, and a mailing address will be established for project inquires and complaints; the phone number will be activated and continuously staffed during processing facility construction and remedial operations. There are also a number of additional sources of specific information for this project. The website will provide references to them. The Phase 1 RA CHASP will summarize the plan for communications with the public.

The complaint management process will address all project-related complaints, including those associated with air quality, odor, noise, lighting, navigation, and water quality. When a phone call, electronic mail communication, or written correspondence is received, it will first be determined whether the individual is making an "inquiry" or a "complaint." For this purpose, an "inquiry" will mean a communication in which the individual is requesting project-related information and is not requesting that corrective action be taken. No regulatory notification or follow-up will be necessary for an inquiry. However, inquiries made through the toll-free phone number, electronic mail, and the mail will be documented in a log noting the time received, subject matter, name of inquiring party, and any follow up required (e.g., if any agencies need to be engaged). A "complaint" will mean a communication in which the individual is requesting that corrective action be taken regarding some aspect of the project, including those associated with a quality-of-life issue (air, odor, noise, lighting, navigation, or water quality).

During Phase 1 of the RA, complaints will be managed in accordance with the following procedure:

- When a complaint is received (as opposed to an inquiry), it will be recorded in a log noting the time the complaint was received, the subject of the complaint, the name of the complainant and how he or she can be reached.

- Following receipt of the complaint, an investigation will be conducted to determine whether the subject of the complaint – i.e., air quality, odor, noise, lighting, navigation, or water quality – is project-related.

- If the complaint is project-related and it pertains to a parameter for which the QoLPS specify numerical standards (or Control Levels) – i.e., PCB concentrations in air, opacity, H_2S concentrations in air, noise, lighting, or surface water concentrations of constituents addressed by the Resuspension Performance Standard or WQC requirements –monitoring (and/or modeling) will be conducted as necessary to determine whether the applicable standard or limit has been exceeded in the area referred to in the complaint.

- If the monitoring (and/or modeling) does not show an exceedance of the applicable numerical standard, any further mitigation action will not be required; however, the party performing the remedy will work with the EPA to evaluate potential mitigation measures, and if both parties agree, such measures will be implemented. Preliminary monitoring results will be reported to regulatory agencies as described in Section 2.

- If the monitoring (and/or modeling) shows an exceedance of the applicable numerical standard or control level, contingency mitigation actions will be implemented in accordance with the procedures and requirements specified in Section 2 of this Phase 1 ID RA CHASP Scope. Preliminary monitoring results will be reported to regulatory agencies as described in Section 2.

- If the complaint is project-related and pertains to a parameter for which the QoLPS do not specify a numerical standard – e.g., odors other than H_2S, navigation impacts, or water quality impacts not addressed by the Resuspension Performance Standard or WQC requirements –the complaint will be evaluated and, if appropriate, take contingency mitigation measures, as described further in subsequent sections of this Phase 1 ID RA CHASP Scope.

- Reporting to EPA regarding complaints, as well as follow-up communications with the complainant to inform him/her of progress in resolving the complaint, will be described in the Phase 1 RA CHASP.

The Phase 1 RA CHASP will describe the reasonably foreseeable contingencies that are likely to generate complaints about air quality, odor, noise, lighting, navigation and water quality and summarize the range of responses to complaints. Where there are numerical standards and project activities have not caused an exceedance of the applicable numerical standard, complaints will be addressed as set out in the above procedure. Additional elements of complaint management applicable to particular types of complaints are set out below and will be described further in the Phase 1 RA CHASP.

3.2 Odor Complaints

If an odor complaint is received and the odor is identified as potentially H_2S, the response procedure discussed in Section 2.2 will be implemented. In the event that an odor complaint is received that is identified as project-related but is not H_2S, the odor will be investigated to determine whether it is uncomfortable, rather than simply discernible. For this purpose, an uncomfortable non- H_2S odor will be defined, in accordance with New York State Law (6 NYCRR § 211.2), as an odor which "unreasonably interfere[s] with the comfortable enjoyment of life or property." In making this investigation, further discussion will be held with the complainant regarding the nature and intensity of the odor, and if necessary, the odor intensity will be objectively assessed. Further details will be provided in the Phase 1 RA CHASP. If a project-related uncomfortable odor is identified, contingency mitigation actions will be taken consistent with those described in Section 2.2. In applying these requirements, multiple complaints regarding the same potential odor source will be treated as one complaint.

The QoLPS for odor defines the Exceedance Level to include "frequent, recurrent odor complaints" related to project activities. For this purpose, "frequent, recurrent odor complaints" will be defined on a case-by-case basis, as will be provided in the Phase 1 RA CHASP. However, the occurrence of "frequent, recurrent odor complaints" will trigger the same responses discussed above.

3.3 Noise and Lighting Complaints

The QoLPS for noise and lighting also define the Exceedance Level to include "frequent, recurrent" complaints related to project activities. For this purpose, "frequent, recurrent" complaints will be defined on a case-by-case basis, as will be provided in the Phase 1 RA CHASP. However, the occurrence of "frequent, recurrent" complaints will trigger the same responses discussed in Section 3.1 above.

3.4 Navigation Complaints

If a navigation complaint relating to health or safety is received from the public relating to the project, an investigation will be conducted to determine whether the project is in compliance with all substantive federal and state navigation regulations and whether and the extent to which the project has interfered with other river traffic. The NYS Canal Corporation will be notified of each complaint and will be consulted if necessary in this investigation. If it is determined that the project is in compliance with all substantive federal and state navigation regulations listed in the QoLPS for navigation and that the appropriate steps have been taken to minimize interference with river traffic consistent with the efficient operation of the project, then no mitigation action will be required to respond to the complaint; however, the party performing the remedy will work with the EPA, in coordination with the NYS Canal Corporation, to evaluate potential mitigation measures, and if both parties agree, such measures will be implemented. If the foregoing criteria are not met, then contingency mitigation actions will be taken as described in Section 2.5.

The QoLPS for navigation defines the Exceedance Level to include "frequent, recurrent complaints indicating project activities are unnecessarily hindering overall non-project-related vessel movement." Such complaints will be handled in the same manner described above.

3.5 Water Quality Complaints

If a water quality complaint is received from the public regarding the quality of river water in the Upper Hudson Work Area, the EPA, NYSDEC and NYSDOH will promptly be notified, but no later than 24 hours after receipt of the complaint, and an investigation will be conducted as to the nature of the complaint. If the complaint relates to resuspended sediments from dredging activities, the available water quality monitoring data will be reviewed to determine whether the complaint is project-related and to determine whether there has been an exceedance of any of the action levels set forth in the Resuspension Performance Standard or the WQC requirements for releases of other constituents. If review of these data indicates an exceedance of such an action level, increased monitoring specified in the Phase 1 ID RA Monitoring Scope and the other contingency actions specified in the Phase 1 ID PSCP Scope will be conducted. If the data do not show such an exceedance, no mitigation action will be required and any further action will be implemented at GE's discretion.

If the complaint investigation identifies a spill, the spill contingency and emergency response actions (including timeframe for such actions), which will be included in the Phase 1 RA CHASP, will be implemented.