Hudson River PCBs Superfund Site Draft Quality of Life Performance Standards

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ecology and environment, inc.
International Specialists in the Environment

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Why Were Quality of Life Performance Standards Developed?

- The Performance Standards are required by the Record of Decision (ROD)
- To reduce the effects of the dredging and dewatering operations on
  - People
  - Businesses
  - Recreation
  - Community activities

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Development of the Quality of Life Performance Standards

- Based on well-established regulatory, environmental and scientific criteria.
- Developed by the EPA in consultation with the state and the federal Natural Resource Trustees.
- In the ROD, EPA identified performance standards to address air and noise emissions.

Goals of the Quality of Life Performance Standards

- **Air Quality**—To minimize the effects on people's health and the environment from air emissions during the cleanup.
- **Odor**—To minimize odors from the project.
- **Noise**—To minimize the effects of noise from the project on the surrounding communities.
- **Lighting**—To minimize the effect of lighting from the project on the surrounding communities.

- **Navigation**—To avoid unnecessary interference with, or the slowdown of, vessels unrelated to the cleanup that are within the project area.

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Air Quality Performance Standard

Elements of the Standard:

- **PCBs are the primary pollutant of concern**
- **Design evaluation of potential project related pollutant emissions is required**
- **Monitoring required for PCBs**

Pollutant	Performance Standard	Monitoring Frequency
PCBs (Residential Areas)	0.11 micrograms per cubic meter	Daily (24-hour) basis
PCBs (Commercial/Industrial Areas)	0.26 micrograms per cubic meter	Daily (24-hour) basis

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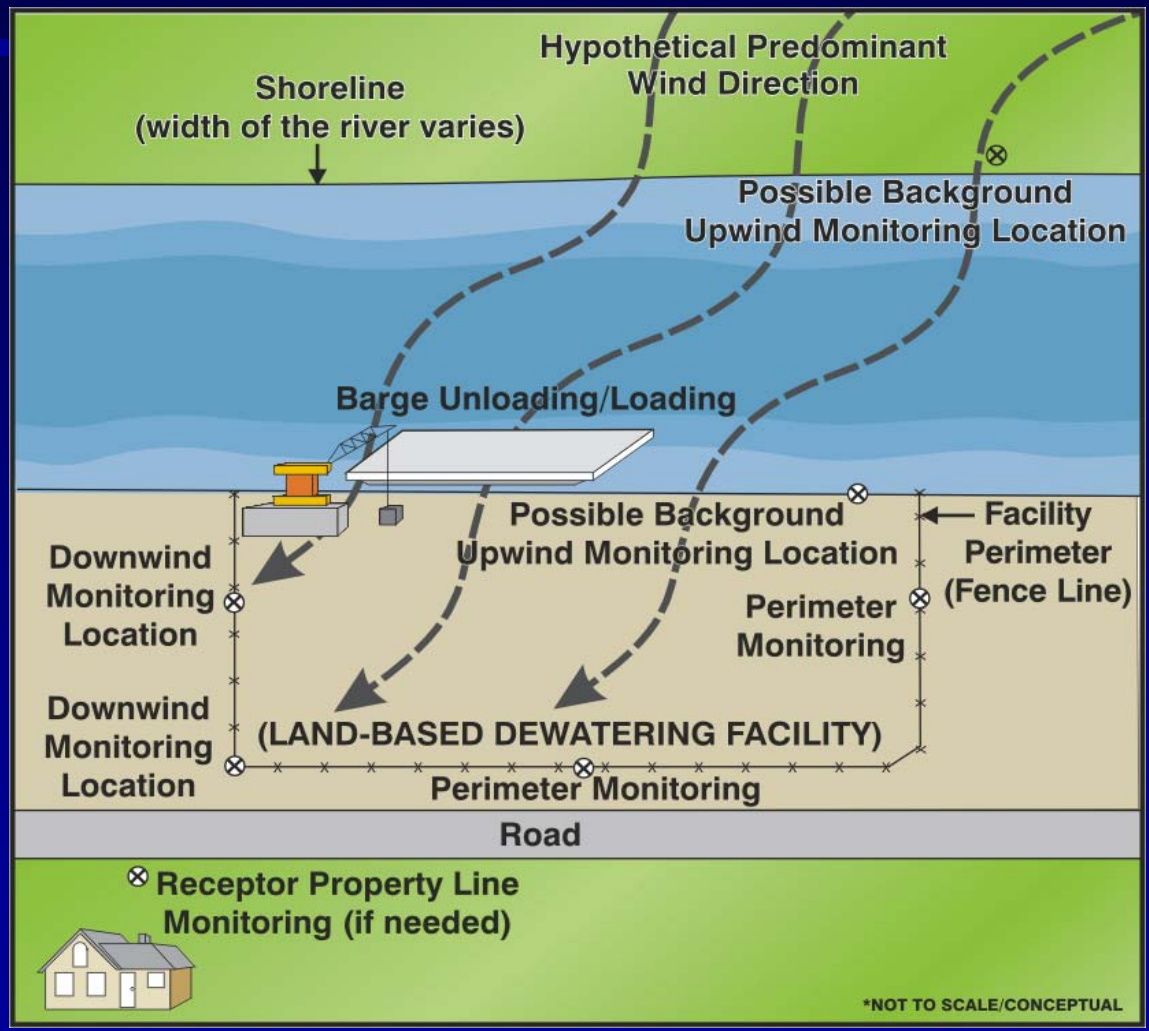
Facility Operations Monitoring



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Odor Performance Standard

Elements of the Standard:

- **Hydrogen sulfide released by decaying plants and other organic material: monitoring required as needed**
- **Complaint evaluation and response is required**

Pollutant	Performance Standard	Monitoring Frequency
Hydrogen sulfide	0.01 parts per million	One hour periods (as needed)

Noise Performance Standard

- Removal and processing of PCB contaminated sediments will produce noise.
- **Long-term activities:**
  - Facility operations
- **Short-term activities:**
  - Facility construction
  - Dredging
  - Backfilling

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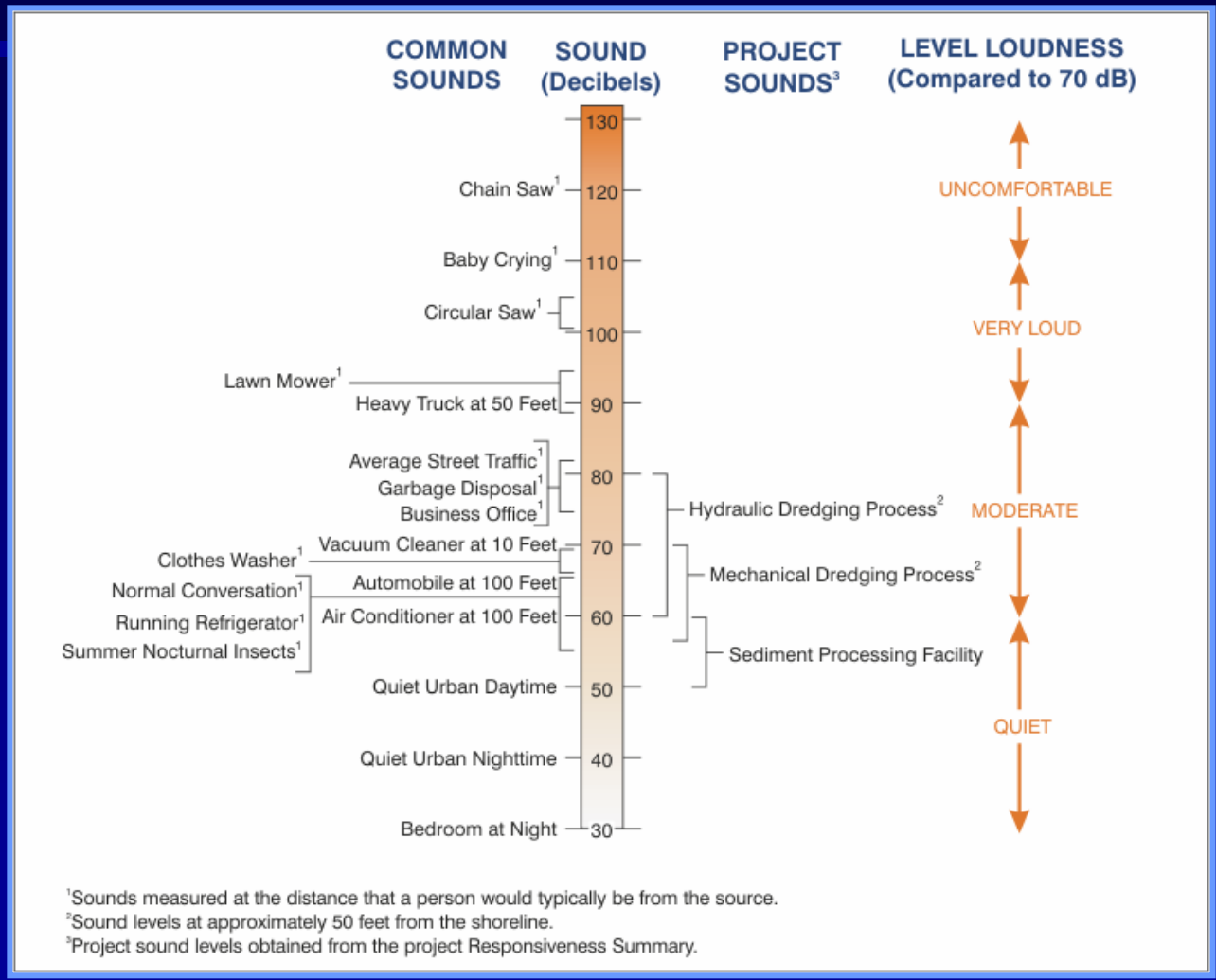
Noise Performance Standard



[1]Sounds measured at the distance that a person would typically be from the source.
[2]Sound levels at approximately 50 feet from the shoreline.
[3]Project sound levels obtained from the project Responsiveness Summary.

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Noise Performance Standard

Elements of the Standard:

- Daytime and Nighttime considerations
- Design Requirements
- Monitoring Requirements
- Complaint Evaluation and Response

Location	Performance Standard	Monitoring Frequency
Short-term		
Residential (nighttime)	65 decibels	Monitored for a full hour every four hours
Residential (daytime)	75 decibels (control level)* 80 decibels	
Commercial (daytime and nighttime)	80 decibels	
Long-term		
Residential (daytime and nighttime)	65 decibels	24-hour average noise level
Commercial (daytime and nighttime)	72 decibels	Monitored for a full hour every four hours

*** Control level is the level at which measures are recommended instead of required.**

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Lighting Performance Standard

Elements of the Standard:

- Design Requirements
- Monitoring
- Complaint Evaluation and Response

Location	Performance Standard	Monitoring Frequency
Rural and suburban residential areas	0.2 footcandle*	Three times each evening between 10:00 p.m. and dawn
Urban residential areas	0.5 footcandle	
Commercial/ industrial areas	1 footcandle	

•A measurement of light using a brightness meter.

•Illuminating Engineering Society of North America

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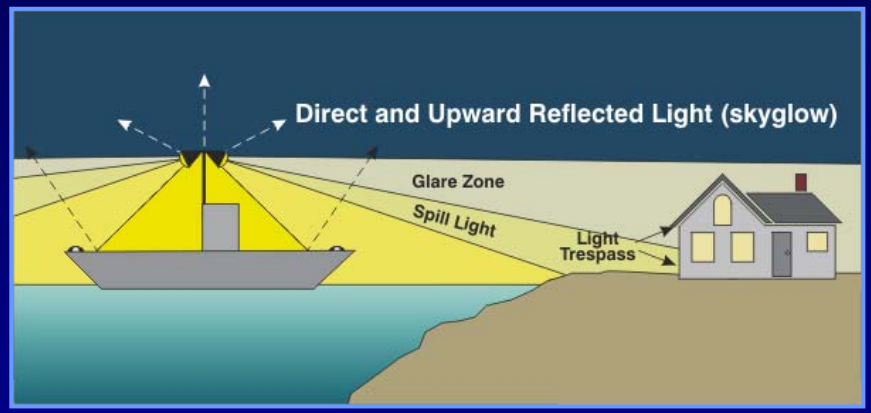
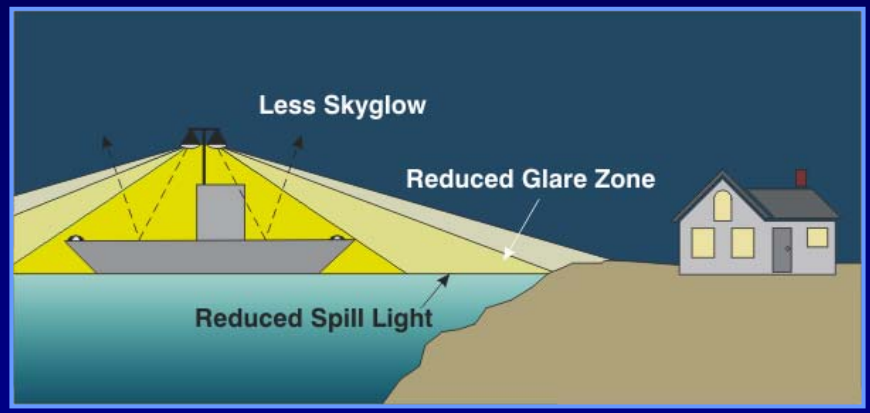
Lighting Configurations

Improper Lighting Configuration
(lighting will be adjusted)



Proper Lighting Configuration



Lighting at the sediment processing/transfer facilities and dredging operations will be directed toward work areas and away from homes.

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Navigation Performance Standard

Elements of the Standard:

- **Design Requirements**
- **Monitoring Requirements**
- **Complaint Evaluation and Response**

Navigation Performance Standard

Compliance with the Standard

- Comply with applicable federal and state navigation requirements.
- Comply with Other Requirements:
  - Evaluating vessel movement;
  - Restricting access to work areas and providing safe access around them;
  - Keeping mariners informed about scheduled project work that might affect vessel movement;
  - Establishing temporary aids to navigation such as signs; and
  - Scheduling project activities to consider vessel movement.

Compliance with the Performance Standards

Compliance will be achieved through:

- **Monitoring**
- **Complaint Evaluation and Response**
- **Mitigation and Contingencies**
- **Reporting and Notification**

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Compliance with the Performance Standards (Cont.)

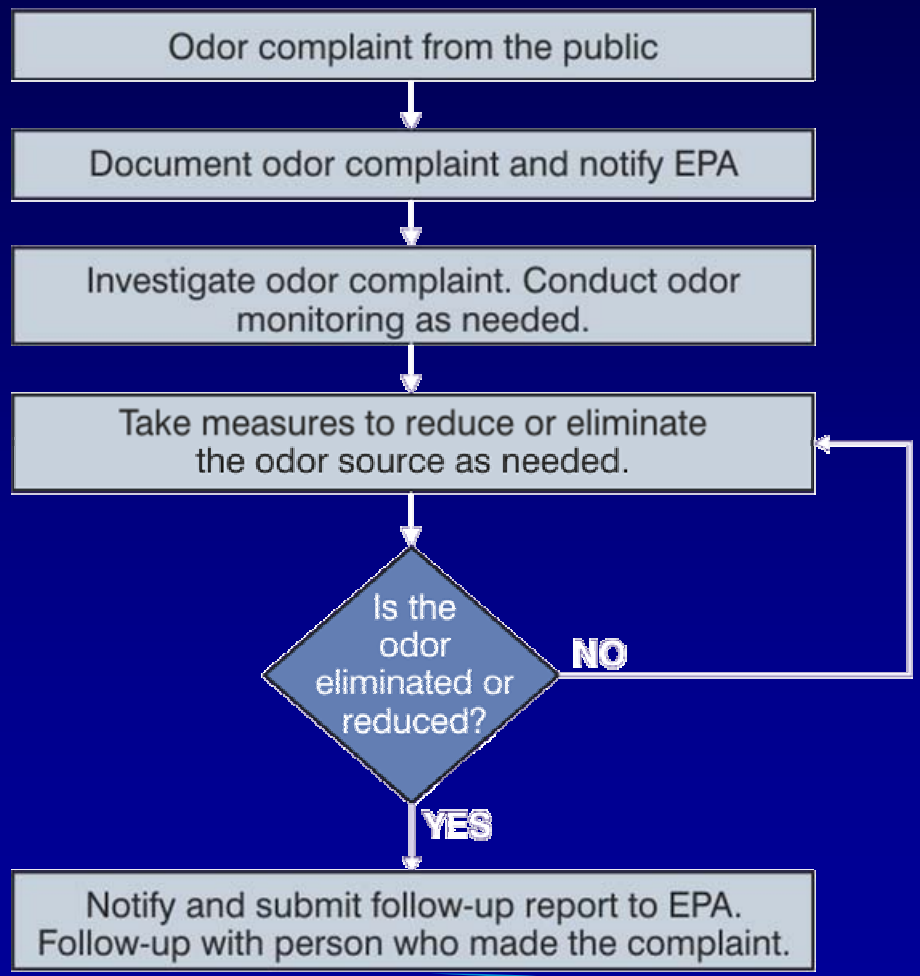
- **Monitoring**
  - **Measures the sources of potential emissions/effects on people and the environment.**
  - **EPA will evaluate the methods and frequency of sampling and monitoring as the project proceeds and will consider any necessary changes when appropriate.**

EPA will monitor the cleanup to confirm compliance.

Compliance with the Performance Standards (Cont.)

- **Complaint Evaluation and Resolution**
  - **communication with individuals raising complaints,**
  - **investigation of the complaints, and**
  - **appropriate responses to address the complaint.**

The complaint process will be included in the Remedial Action Community Health and Safety Plan (CHASP).



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Compliance with the Performance Standards (Cont.)

- **Mitigation and Contingencies** will be planned as a part of the design and carried out during the cleanup to prevent and/or minimize potential effects on people and the environment.

- Frequent **Reporting and Notification** will be required to keep EPA and other appropriate agencies informed regarding compliance.
  - EPA will work with local officials and communities through various stakeholder groups.

Quality of Life Performance Standards Process

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Public Review

The public comment period for the draft Quality of Life Performance Standards began on December 19, 2003 and ends February 17, 2004.

The public can submit comments in writing via hard copy and email. All comments should be sent to:

Dean Maraldo, Project Manager
USEPA Region 2
290 Broadway, 19th Floor
New York, New York 10007
maraldo.dean@epa.gov

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