



Hudson River

PCBs SUPERFUND SITE

Region 2: NJ, NY, PR, VI • 290 Broadway, New York, NY 10007

Quality of Life Performance Standards General Overview

Spring 2010 Update

Highlights

This fact sheet has been created to provide an overview of the objectives, intended use and primary components of the Quality of Life Performance Standards for air quality, odor, noise, lighting and navigation. Information on the performance standards can be found in individual fact sheets and in the Quality of Life Performance Standards document, issued in May 2004.

Background

The February 2002 Record of Decision (ROD) for the Hudson River PCBs Superfund site required the development of performance standards that set specific goals and requirements for the project. The quality of life performance standards are intended to reduce the effects of the dredging; sediment processing, transferring and dewatering; and support operations on people, businesses, recreation, and community activities in the project area. The U.S. Environmental Protection Agency (EPA) reviews project design plans for consistency with the quality of life performance standards, and oversees cleanup activities to ensure that they are met.



Quality of Life Performance Standards

Air Quality

Various cleanup activities such as sediment handling and processing could result in the release of pollutants into the air.

The performance standard for air quality addresses the potential exposure of both adults and children in the project area to pollutants from the project.



Goal: To minimize the effects on people's health and the environment from air emissions during the cleanup.

Key Components: The standard for air quality has both monitoring and design requirements. Air emissions were evaluated

during the design to predict the amount of project-related emissions from PCBs and other pollutants such as ozone, nitrogen oxides, sulfur dioxide, carbon monoxide, particulate matter, and volatile organic compounds released from cleanup operations. Since PCBs are the primary pollutant in the sediment, the performance standard sets the following limits for PCBs:

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

Odors

Odors may be generated by equipment and cleanup activities. Odors are difficult to measure because they vary depending on the concentration of the pollutant and the sensitivity of the person exposed to the odor. One of the most reliable indicators of odor emissions is a smell detected by the human nose. The most likely odor during dredging and sediment processing activities would come from hydrogen sulfide released by decaying plants and other organic material found in the river sediments.

Goal: To minimize unwanted odors from the project.

Key Components: The performance standard for odor requires the monitoring of hydrogen sulfide, control of the sources of potential odors, and ongoing followup of any odor complaints. The performance standard sets the following limit:

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

Noise

Many of the activities associated with the removal of PCB-contaminated sediments have the potential to produce noise.

Goal: To minimize the effects of noise from the project on the quality of life in the surrounding communities.

Key Components: The performance standard for noise requires regular monitoring of the sources of noise from the cleanup. It establishes standards for short-term operations (construction, dredging, and backfilling) and long-term operations (sediment processing/transfer facilities). The standards vary depending upon the time of day (daytime or nighttime) and whether the noise occurs in a residential or commercial/industrial area. The performance standard, which is the level at which action is required, sets the following limits:



Location	Performance Standard	Minimum 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/Industrial (daytime and nighttime)	80 decibels	
Long-term		
Residential (daytime and nighttime)	65 decibels	24-hour average noise level
Commercial/Industrial (daytime and nighttime)	72 decibels	24-hour average noise level

*Control level is the level at which measures are recommended

Typical noise levels in the range of the standard include a running refrigerator, normal conversation or summer nocturnal insects (about 65 decibels) to average street traffic or a business office (about 80 decibels).

Lighting

Lighting systems are used to illuminate cleanup operations on the river and at the sediment processing/transfer facilities.

Goal: To minimize the effect of lighting from the project on the quality of life in the surrounding communities.



Key Components: The performance standard for lighting requires the monitoring of light levels on a regular basis. The standard varies with the type of area – rural and suburban, urban or commercial/industrial. The performance standard for lighting sets the following limits:

Location	Performance Standard	Monitoring Frequency
Rural and suburban residential areas	0.2 footcandle*	Three times each evening between 10:00 p.m. and 7:00 a.m.
Urban residential areas	0.5 footcandle	
Commercial/industrial areas	1 footcandle	

* A measurement of light.

For comparison purposes, the brightness in general office work areas and classrooms is usually 10 to 50 footcandles.

Navigation

The river will be used by public, commercial, and project-related vessels during the cleanup.

Goal: To avoid unnecessary interference with or the slowdown of vessels unrelated to the cleanup that are within the project area.

Key Components: The performance standard for navigation requires compliance with the applicable sections of federal and state navigation laws, rules and regulations. It also calls for the following requirements, as needed, to meet the goal of the standard:

- 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 buoys to maintain safe and efficient vessel movement, and
- Scheduling project activities to consider vessel movement.



In addition, there will be monitoring of vessel traffic, follow up on complaints, and outreach to mariners on a regular basis. EPA developed and will ensure compliance with the navigation performance standard in consultation with the New York State Canal Corporation (NYSCC) and other appropriate agencies.

Compliance With the Performance Standards

Compliance with the quality of life performance standards will be achieved through the evaluation of potential effects during project design and by meeting the following requirements during the cleanup:

- Monitoring to measure the sources of potential emissions/effects on people and the environment. Monitoring instruments are placed between the potential source of the quality of life concern and the potentially affected area.
- Complaint evaluation and resolution includes communications with individuals raising complaints, investigations of the complaints, and appropriate responses such as monitoring or controls to address the issues of concern. The complaint evaluation and resolution process is described in the Remedial Action Community Health and Safety Plan.
- Mitigation and contingencies have been planned and will be carried out during the cleanup to prevent and/or minimize potential effects on people and the environment.
- Reporting and notification is required to keep EPA and other appropriate agencies informed regarding compliance.

The quality of life performance standards are based on well-established regulatory, environmental, and scientific criteria. In the Record of Decision, EPA identified performance standards for air quality and preliminary standards for noise. EPA has developed these standards in consultation with the state and the federal Natural Resource Trustees. EPA will be evaluating the methods and frequency of sampling and monitoring as the project proceeds and will consider any necessary changes when appropriate.

EPA is working with local officials and communities through various stakeholder groups, including the Community Advisory Group (CAG), to keep them up-to-date on compliance with the performance standard. EPA and/or personnel responsible for day-to-day operations provide updates through verbal and written notifications and regularly scheduled stakeholder and CAG meetings.

For More Information

The Quality of Life Performance Standards and related fact sheets are available at the information repositories located in Glens Falls, Ft. Edward (Hudson River Field Office), Ballston Spa, Albany, Poughkeepsie, and New York City (EPA Region 2 offices) and in Edgewater, New Jersey. Electronic

versions can be found on the EPA project Web site (www.epa.gov/hudson). Copies are also available in print and on CD-ROM by calling the Hudson River Field Office. Visit, call or write to the Hudson River Field Office at the address below or log on to www.epa.gov/hudson.



Visit, call, or write to the Hudson River Field Office at the address below or log on to **www.epa.gov/hudson**.

EPA Contact

 **Community Involvement Coordinator**
Hudson River Field Office
421 Lower Main Street
Hudson Falls, NY 12839
(518) 747-4389 or (866) 615-6490 Toll-Free
hrfo@roadrunner.com

*The Field Office hours are Monday – Friday
8:00 am – 4:30 pm, with evening hours by
appointment.*

EPA Regional Public Liaison

EPA Region 2 has designated a public liaison as a point-of-contact for community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express concerns, or register complaints about Superfund. The public liaison for EPA's Region 2 office is: George H. Zachos, U.S. EPA, Region 2, 2890 Woodbridge Avenue MS-211, Edison, New Jersey 08837, (732) 321-6621, Toll-free (888) 283-7626.