

**North River Shipyard
Village of Upper Nyack, Rockland County
Final Scoping Document**

**Lead Agency:
New York State Department of Environmental Conservation
Region 3**

Date: March 18, 2022

1. Description of Proposed Action.

K. GRAEFE AND SONS CORP d/b/a Petersen Boatyard and Marina and d/b/a North River Shipyard (hereinafter collectively referred to as K. GRAEFE AND SONS CORP) has been doing business as a recreational boatyard and marina with hull maintenance for recreational pleasure boats for many years and prior to that had also operated as a shipyard, particularly during and for many years following WWII. In 2015, K. GRAEFE AND SONS CORP/North River Shipyard transitioned the business to include larger recreational and commercial boatrepair and maintenance, including dinner cruise boats and group fishing charter boats after receiving all necessary permits and approvals. The services to larger recreational and commercial boats include general maintenance and repair (such as engine repair), as well as installation, fabrication of ship components, and application of protective coatings. Sizes ranging up to 200 ft length, 40 ft max width, and +/-460 gross tons max weight. Except for the outdoor spray-painting operation, all other activities are currently authorized and ongoing as they have previously been deemed exempt from air permitting. For verification purposes, the exemption status of the currently authorized activities, such as water-blasting, machining, welding, and non-spraying surface coating needs to be updated and re-evaluated based on the past five year history of operations and with respect to potentially applicable federal requirements.

Currently, protective coatings are being applied by hand through roller and brush application. The proposed outdoor spray-painting of vessels requires an Air State Facility Permit from the Department.

The following Attachments provide more details of the existing facility and locations of current operations:

- North River Shipyard Site Plan Showing Site Work Areas 3.18.2022
- North River Shipyard Photo Showing Site Work Areas 3.18.2022

2. Potential Significant Adverse Impacts.

Due to the operations being conducted outdoors, there is the potential for emissions from the operations listed herein (particulate matter (PM), volatile organic compounds (VOCs) and some hazardous air pollutants (HAPs)). The types of outdoor operations generating these emissions can be grouped into six categories:

1. Water-blasting (existing activity),
2. Machining (existing activity),
3. Welding (existing activity),
4. Non-spraying surface coating using rollers and brushes (existing activity),
5. Spray Applied Surface coatings through spray painting (proposed),
6. Equipment Cleaning – sprayer cleaning using solvents and thinners (proposed).

The types of materials used on site for the above listed operations comprise glass or other blasting media, welding rods, paints and paint thinner, and cleaning solvents. These activities have the potential to create air emissions of PM, VOCs and HAPs, including some high toxicity air contaminants (HTACs), and, in some cases, odors. Thus, the potential for adverse impacts on air quality in the surrounding area and on broader ambient air needs to be evaluated.

Additionally, the site is located within the Van Houten Landing Historic District, which is listed in the State and National Registers of Historic Places. As such, the proposed action will be evaluated based on existing information for compliance with the New York State Historic Preservations Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law) through consultation with NYS Office of Parks Recreation and Historic Preservation (NYS OPRHP).

3. Information to be Used to Address Potential Impacts:

A. Air

The Draft EIS will include an analysis of potential air quality impacts related to outdoor spray painting and coating activities, as well as to water blasting, machining, welding, non-spray surface coating and solvent cleaning. Project-related emissions will be quantified, with individual ingredients broken down and identified as potential air contaminants.

This information will be used to conduct an air quality impact analysis using air dispersion modeling methods for refined modeling, where the US EPA preferred model AERMOD will be used. This analysis will be conducted in accordance with published and approved procedures (e.g., as provided in US EPA's Guideline on Air Quality Models, DAR-10: NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis). In particular, the analysis and associated report will describe at a minimum:

- Protocols: The facility shall submit an AerMOD modeling protocol to NYSDEC for written approval prior to being conducted. The protocol shall describe how the modeling will be carried out and include all assumptions and input parameters to be used in the modeling analysis according to DAR-10 guidelines;
- Identify building and other permanent structures or landscape features that will affect the Downwash.
- Identify Land Use Classification;
- Identify and provide Receptor Grid (property line and cartesian grid surrounding site);
- Meteorological data: – the refined dispersion modeling will be conducted using five years of representative hourly meteorological data, to more accurately assess the short-term and long-term air quality impacts of all regulated pollutants.
- Determination of any significant impact area(s);
- Special modeling issues (e.g., treatment of intermittent emission sources);

- Comparison of maximum predicted impacts of pollutants to the National Ambient Air Quality Standards (NAAQS), published odor thresholds, and any applicable short-term (SGC) and annual guideline concentrations (AGC) (per 2021 DAR-1 AGC/SGC tables);
- Monitoring stations to be used to determine background air quality concentrations with their positions described in the protocol.
- Evaluation of the impact of all operations: K. GRAEFE AND SONS CORP/North River Shipyard shall list and describe all operations taking place at the site. Additionally, K. GRAEFE AND SONS CORP/North River Shipyard shall provide five-years of actual usage records for all products including, but not limited to, welding rods, water blasting media, surface coating, surface stripping, and equipment cleaning;
- K. GRAEFE AND SONS CORP/North River Shipyard shall identify all emissions sources (i.e., operations that lead to emissions) and their potential emissions including actual hourly emissions (lbs/hr) and annual emissions (lbs/yr) of PM, VOCs, HAPS and HTACs, based on the past five years purchase records of materials used;
- K. GRAEFE AND SONS CORP/North River Shipyard shall evaluate work locations: the modeling analysis shall be carried out with respect to the locations of where operations take place currently or may be taking place in the future. Based on the modeling analysis, K. GRAEFE AND SONS CORP will identify locations inside facility property where work could take place without causing exceedances of the 1-hour Short-term Guideline Concentration (SGC) or Annual Guideline Concentration (AGC) thresholds at potential receptor locations. Specifically, in cases where operations take place at locations where emissions appear to exceed the SGC values, K. GRAEFE AND SONS CORP shall relocate operations to areas whose distance from the property line will be adequate to reduce emissions to below the 1-hour SGC value. K. GRAEFE AND SONS CORP/North River Shipyard shall provide Maps indicating location of where work will be taking place with respect to distance from property lines and proximity to neighboring properties;
- HTACs emissions: In the event specific HTACs emissions exceed the SGC values, mitigation measures shall be identified;
- Climate Leadership & Community Protection Act (CLCPA) analysis;
- Adhering to the regulatory requirements specific to a complete Part 212 review with the use of its accompanying DAR-1 Guidelines for the Evaluation and Control of Ambient Air Contaminants Under 6NYCRR Part 212 document, the following should be included:
 - The hourly emission rate potential for each high toxicity air contaminant (HTAC) as identified in 212-2.2 Table 2.
 - The hourly emission rate potential for each non-HTAC with annual emissions greater than 100 pounds per year.
- Adhering to federal regulatory requirements specific to 40 CFR 63 HHHHHH review and evaluate operations with respect to 40 CFR 63.11169 (c) and comply with the notifications and general requirements under 40 CFR 63.11173 which outline surface coating application practices, emission controls, personnel training and certifications.

- Adhering to federal regulatory requirements specific to 40 CFR 63 XXXXXX review and evaluate operations with respect to:
 1. standards, and management practices for reduction of emissions of metal finishing (or metal fabrication) hazardous air pollutants (MFHAP), as defined by 40 cfr63.11514 (b), for machining under 40 CFR 63.11516 (b), welding under 40 CFR 63.11516 (f) , spray painting under 40 CFR 63.11516 (d);
 2. monitoring requirements under 40 CFR 63.11517 of visual determination of fugitive emissions for welding;
 3. notification, training, recordkeeping and reporting, requirements under 40 CFR 63.11519 .

B. Noise

Potential noise impacts to the surrounding community from work activities and equipment operation associated with the outdoor spray painting will be evaluated using the NYSDEC Program Policy DEP -00-1 Assessing and Mitigating Noise Impacts as well as considering previous reviews conducted by the Village of Upper Nyack Planning Board, and the Revised Special Permit that was granted to the site.

4. Consistency with Village of Upper Nyack Zoning and Comprehensive Plan

- A. Evaluate the proposal (outdoor spray painting) relative to any current zoning or comprehensive plan within the Village of Upper Nyack.

5. Initial Identification of Mitigation Measures:

If potential impacts are determined to require mitigation, several options will be considered. For instance, with respect to minimizing air quality impacts, the use of portable enclosures with integral control devices, complete enclosures or other acceptable measures shall be considered.

Mitigation Measures: Based on the modeling results, mitigation measures such as complete enclosure of the operation, as well as capture and control of the emissions with the aid of systems to reduce emissions to acceptable levels shall be evaluated and submitted to NYSDEC for approval to be included as applicable permit conditions. K. GRAEFE AND SONS CORP shall consider all possible measures to reduce emission impacts.

Similarly, limiting spraying activities to a certain time of day and times when meteorological conditions such as wind direction and speed are most favorable for minimizing offsite impacts.

Noise barriers and noise barrier materials are mitigation measures for noise that would be considered, considering provisions of the Revised Special Permit and how to best achieve the desired noise levels.

6. Initial Identification of Reasonable Alternatives to be Considered

Additionally, the alternative of occasionally applying coatings using application techniques with higher transfer efficiencies (e.g., brush coating) when conditions are unfavorable for spraying operations (and such measures are temporarily advisable) would be considered.

Alternative equipment for spray painting and cleaning would be considered, as well as alternative chemical formulations.

7. Information or data that should be included in an appendix rather than the body of the draft EIS

- a. Site location map
- b. Existing conditions site plan
- c. Proposed Spray-painting locations site plan as dictated by air dispersion modeling results
- d. Equipment specifications, and operation & maintenance (O&M) manuals.

8. Prominent issues that were raised during scoping, and determined to be neither relevant nor environmentally significant or that have been adequately addressed in a prior environmental review and the reasons why those issues were not included in the final scope**A. Visual Impacts from existing operations**

The North River Shipyard is an existing, operating shipyard with approvals from the Village of Upper Nyack. The Shipyard currently uses portable screens when conducting the existing activities including water blasting and hand rolling and brushing paint. Therefore, these measures are considered to be part of existing operations and will not be evaluated further in the DEIS.

B. Noise impacts from existing operations

The North River Shipyard is an existing, operating shipyard with approvals from the Village of Upper Nyack. The DEIS will not evaluate any noise impacts associated with existing equipment used as part of the approved, existing operations.

C. Traffic Impacts from existing operations

The North River Shipyard is an existing, operating shipyard with approvals from the Village of Upper Nyack. The proposed spray-painting activities have no relation to existing traffic levels or operations and will not be evaluated as part of the DEIS.

The NYS DEC as lead agency issued a Draft Scoping document on January 26, 2022. The Draft Scope was published in the DEC Environmental Notice Bulletin on February 2, 2022 https://www.dec.ny.gov/enb/20220202_not3.html.

In addition, the Department posted the Notice of Public Scoping Comment period and the Draft scope on a DEC website on January 27, 2022: <https://www.dec.ny.gov/permits/79144.html>.

North River Shipyard - Photo Showing Existing Site Work Areas



Equipment
Storage (indoors)

Metal Cutting
Saw (indoors)

Boat Maintenance and Marine
Contract Work (indoors)

Mechanic Shop

Machine Shop

Main Boat
Repair Area

Main Office

Storage

Crane Barge

Deck Barge
40' X 140' Work Area

Spud Barge
Dock for boats awaiting service
(Engine, Transmission Replacement)

3 Moorings (Special Anchorage) located 1500-2500'
out for boats/barges awaiting service