HUDSON TUNNEL PROJECT

NEPA RE-EVALUATION #8

Hudson River Ground Stabilization Contract:
Approval Request for Crane Barge Use of a Tier 0 Engine

March 25, 2025

GATEWAY DEVELOPMENT COMMISSION

January 31, 2025

VIA E-MAIL

Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590
Attn: Christopher Hansen, Environmental Protection Specialist, Major Projects Team,
Office of Environmental Program Management

Federal Transit Administration
Region II Office
One Bowling Green, Room 428 New York, NY 10004
Attn: Ky Woltering, Environmental Protection Specialist,
Office of Planning and Program Management

RE: Hudson Tunnel Project National Environmental Policy Act (NEPA) Re-Evaluation #8
Hudson River Ground Stabilization Contract: Approval Request for Crane Barge Use of a Tier 0 Engine

Dear Mr. Hansen and Mr. Woltering:

This National Environmental Policy Act ("NEPA") re-evaluation considers the continued use the Weeks 526 Crane Barge, a piece of equipment that currently utilizes three (3) Tier 0 nonroad diesel engines for the implementation of the Hudson River Ground Stabilization[1] ("HRGS") portion of the Hudson Tunnel Project ("HTP" or "Project"). As explained in greater detail below, it is currently anticipated that one (1) of the three Tier 0 nonroad diesel engines will be replaced with several Tier 3 swing engines. However, the HRGS contractor continues to experience long lead times and supply shortage for the replacement of the remaining Tier 3 engines. This re-evaluation is particular to the HRGS work in the Hudson River portion of the Study Area and is specific to HRGS work performed during the second in-water work season (July 2025 to January 2026) and the third in-water work season (July 2026 – January 2027).

1 PROPOSED MODIFICATIONS

1.1 Conditions Included in the FEIS/ROD

The Project's Combined Final Environmental Impact Statement ("FEIS") and Record of Decision ("ROD") (together, "FEIS/ROD"), issued on May 28, 2021, requires the following as an Air Quality Mitigation:

> *Utilization of Newer Equipment. EPA's Tier 1 through 4 standards for nonroad diesel engines regulate the emission of criteria pollutants from new engines, including PM, CO, NOx, and hydrocarbons. The Project construction contracts will specify that all diesel-powered non-road construction equipment with a power rating of 50 hp or greater will meet at least the Tier 3 emissions standard. All diesel-powered engines used in the construction of the Project rated less than 50 hp will meet at least the Tier 2 emissions standard as the Tier 3 emissions standard does not apply to these engines.*[2]

[1] The FEIS/ROD refers to this area as the "low-cover area." However, as part of the Project's procurement and contracting processes, the low-cover area is also referred to as the "Hudson River Ground Stabilization area."
[2] HTP FEIS/ROD, "Attachment A: Mitigation Commitments," May 28, 2021, Page A-14.

1.2 Understanding of Changes Since Publication of the FEIS/ROD

1.2.1 NEPA Re-Evaluation #5: Hudson River Ground Stabilization Contract: Weeks 526 Crane Barge Request for Waiver

The Gateway Development Commission ("GDC"), as the Project Sponsor under NEPA, submitted NEPA Re-Evaluation #5 to the Federal Transit Administration ("FTA") and Federal Railroad Administration ("FRA") on April 19, 2024, which was approved on April 30, 2024. NEPA Re-Evaluation #5 approved the use of the Tier 0 engines associated with the Weeks 526 Crane Barge during the first in-water work season (July 2024 to January 2025). NEPA Re-Evaluation #5 explained that the HRGS contractor was experiencing long lead times and supply shortage for some of the replacement Tier 3 engines. It further explained that the Weeks 526 Crane Barge is a custom marine barge with no known equivalent replacements within the local market that would meet the engine tier requirements. NEPA Re-Evaluation #5 concluded that there would be no change nor potential exceedance of the *de minimis* threshold in General Conformity applicability from the original analysis in the FEIS/ROD and stated that the HTP is an exempt project for Transportation Conformity and therefore does not require a transportation conformity analysis.

1.2.2 Understanding of Changes Since Approval of HTP NEPA Re-Evaluation #5

The HRGS Contractor concluded the first in-water work season in January 2025. The HRGS Contractor has made a request to GDC to continue to utilize certain Tier 0 engines that power the Weeks 526 Crane Barge during cofferdam installation and removal during the second in-water work season (July 2025 to January 2026) and third in-water work season (July 2026 to January 2027). The Weeks 526 Crane Barge includes a total of three (3) engines that are Tier 0 engines:

- Boom Hoist Engine: 432 horsepower
- Main Hoist Engine: 535 horsepower
- Swing Engine: 380 horsepower

The HRGS Contractor continues to experience long lead times and supply shortage for some of the replacement Tier 3 engines. The Weeks 526 Crane Barge Tier 0 Swing Engine is scheduled to be replaced with four (4) John Deer 173 horsepower Tier 3 engines prior to when pile driving activities resume in July 2025. However, they are still having difficulty securing the specialized equipment to retrofit the Weeks 526 Crane Barge Boom Hoist and Main Hoist Engines. As noted above, the Week 526 Crane Barge is a custom marine barge with no known equivalent replacements within the local market that would meet the engine tier requirements. It also has specialized floating equipment required to handle large scale cofferdam installation in open rivers.

The following is supportive information as part of this re-evaluation for the use of the Tier 0 Boom Hoist Engine and the Tier 0 Main Hoist Engine for the Weeks 526 Crane Barge during cofferdam installation and removal during the second in-water work season (July 2025 to January 2026) and third in-water work season (July 2026 to January 2027), which at this time the HRGS Contractor believes cannot be replaced due to the constraints outlined above.

2 CONSTRUCTION-RELATED IMPACTS

2.1 Air Quality (FEIS Chapter 13)

The FEIS/ROD determined there was no adverse construction air quality impacts to nearby onshore land uses during in-water Hudson River construction activity for the HRGS work. This was based upon the limited in-water construction activity and the work being considered short term in nature. The FEIS/ROD also concluded that barges

with emission sources moored near the construction site would be required to comply with the same standards as land-based equipment, including EPA's Tier 1 through 4 standards for nonroad diesel engines. Although there was no finding on air quality impacts during the short duration of in-water Hudson River construction activity, the FEIS/ROD stated that the barges with emission sources moored near the construction site would be required to comply with the same standards as land-based equipment.

As part of this NEPA re-evaluation, a detailed air emissions analysis was conducted to determine if there will be a change or potential exceedance of the *de minimis* threshold in General Conformity applicability from the original analysis in the FEIS/ROD regarding the impact this change (use of Tier 0 engines). The analysis used a list of equipment provided by the HRGS Contractor to estimate the air emissions from these Tier 0 engines (Tier 0 Boom Hoist Engine and the Tier 0 Main Hoist Engine) as part of the cofferdam installation and removal, as well as all Tier 2, 3, and 4 equipment operating as part of other HRGS activities. The air emissions analysis included the four (4) John Deer 173 horsepower Tier 3 Swing Engines as these engines are scheduled to be replaced prior to the commencement of work activities in July 2025.

Since this is a NEPA re-evaluation of the original analysis conducted as part of the FEIS/ROD published in May 2021, the same *de minimis* levels used in the May 2021 FEIS/ROD applicable to New York County (where the HRGS construction activities would occur) were applied. The applicable *de minimis* levels are 50 tons/year of nitrogen oxides (NO_x) and volatile organic compounds (VOC) (as ozone precursors) and 100 tons/year of carbon dioxide (CO), particulate matter 2.5 ($PM_{2.5}$) and particulate matter 10 (PM_{10}).

Estimated air emissions for all the nonattainment or maintenance criteria pollutants (NOx, VOC, CO and the Particulates) are well below their respective *de minimis* thresholds when compared to the 2024 emission rates predicted in the FEIS/ROD and below the *de minimis* criteria levels for the duration of the HRGS work, as predicted in the FEIS/ROD.

The FEIS/ROD described mitigation measures to limit air pollutant emissions during the construction period, all of which are currently being and will continue to be applied to barge-based non-road equipment conducting the in-river work for HRGS. Barges with emission sources moored near the construction site would be required to comply with the same standards as land-based equipment. These measures include use of clean fuel, employment of best available tailpipe emission reduction technologies, and utilization of newer equipment, etc.

3 CONCLUSION

The continued use of Weeks 526 Crane Barge Tier 0 engines for the Boom Hoist and Main Hoist Engines are unlikely to cause any criteria pollutants to exceed *de minimis* rates as part of general conformity. There would be no change or potential exceedance of the *de minimis* threshold in General Conformity applicability from the original analysis in the FEIS/ROD. This is an exempt project for Transportation Conformity and therefore does not require a Transportation Conformity Analysis. With this Proposed Project Modification, the original FEIS/ROD remains valid and a supplemental NEPA analysis is not required.

As with the in-water construction activities described in the FEIS/ROD, Hudson River construction activities related to the barges with emission sources would not result in an adverse construction air quality impact to nearby onshore land uses, such as HRP, given the short duration and limited area of in-water construction activity.

If you have any questions, please do not hesitate to contact me at BEngle@gatewayprogram.org.

Sincerely,

Benjamin Engle
Senior Program Manager, Program Planning
Gateway Development Commission

Enclosures:

FRA Impact Table NEPA Re-evaluation #8
FTA Worksheet NEPA Re-evaluation #8

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