New York State Department of Environmental Conservation

Division of Environmental Permits, 4th Floor

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July 3, 2014

Peter Sanderson, Project Director The New NY Bridge NYS Thruway Authority 303 South Broadway, Suite 413 Tarrytown, NY 10591

Re:

DEC Permit 3-9903-00043/00012

Permit Modification - Water Quality Monitoring

Dear Mr. Sanderson:

This responds to your May 6, 2014 letter to me requesting modification of the subject permit. Subsequent discussions between Department and Thruway Authority staff resulted in changes to your original request that were agreeable to the Authority and the Department.

A notice announcing the modifications established in those discussions was published in the Department's June 18, 2014 *Environmental Notice Bulletin*. The final changes alter the scope and frequency of water quality monitoring during aspects of the bridge's construction.

For some activities whole water sample collection for contaminant analysis will be reduced or eliminated and the frequency of sample collection for total suspended solids analysis will be reduced. The proposed monitoring adjustments are supported by the sampling results collected during the first year of construction activities.

These data confirm that bridge construction activities have had no contaminant-related impacts on water quality. Accordingly, the subject permit is hereby modified as follows:

DREDGING

27. A. The overlying water in the barge may be pumped to the water column after 12 hours of settling.

BRIDGE DEMOLITION

45. At least 45 days before any in-water demolition-related work begins the Permittee must submit a plan to the Department providing details of all in-water demolition-related work including, among other things, a detailed plan for any dredging, cofferdams, or silt curtains. The plan will demonstrate conformity with all special conditions (45-51) in this Bridge Demolition Section. The Department may specify water quality monitoring requirements that differ from those listed in conditions 59 through 67 to reflect the details of the demolition plans.

WATER QUALITY MONITORING

- 59. At least 45 days before starting dredging activities; decanting activities; removal of large debris fields; pile driving in zone C; channel armoring; cofferdam construction; removal of the existing bridge; or any activity that may cause resuspension of bottom sediments, Permittee must submit a water quality monitoring plan to the Department. If activities occur concurrently in multiple locations, each activity that may cause resuspension of bottom sediments must be monitored separately. The Plan must be in effect at all times during these activities. The above activities may start when the Department has given written approval of the plan.
- 60. The plan shall include monitoring for total suspended solids (TSS), turbidity (visual monitoring) and the following contaminants: total mercury, dissolved nickel, copper, lead, zinc, PCB and naphthalene and benzo(a)pyrene. The plan must: (i) describe procedures for background sampling and sampling at the edge of a 500-foot mixing zone around the activities identified in condition 59, above; (ii) require whole water samples in the vertical water column (from at least 3 depths in waters greater than 20 feet deep, from two depths in waters between 10 and 20 feet deep, and at mid-depth in waters less than 10 feet deep) along a transect within the plume; and (iii) include an upstream transect. When silt curtains are deployed, monitoring should take place at the nearest practicable distance from the silt curtain. Monitoring may be temporarily suspended due to weather or other safety concerns. Conditions resulting in suspension of monitoring must be documented in the reports described in conditions 62 and 65.
- 61. The following Water Quality Standards must be achieved immediately outside of the silt curtain, at the edge of the 500-foot mixing zone, or, if necessary to maintain a safe survey distance, at the nearest distance practicable around the activities identified in condition 59, above, subject to the monitoring requirements of condition 64 below. When a Detection Limit listed below is greater than the listed Water Quality Standard, the Water Quality Standard will be presumed to be met when analytical results demonstrate compliance with the Detection Limit. Where background concentrations exceed the Water Quality Standard, the limit at the edge of the mixing zone is 30% over background, with the exception of TSS which shall be 100 mg/L above ambient. Monitoring for turbidity is visual only with no laboratory analysis required.

Contaminant	Water Quality Standard (ppb)	Detection Limit * (ppb)
Total Mercury	0.0007-H(FC)	0.050
Dissolved nickel	8.2-A(C)	
Dissolved copper	5.6-A(C)	
Dissolved lead	8.0-A(C)	
Dissolved zinc	66 -A(C)	
PCB	I.OxI0-6	
Aroclor 1242		0.2
Aroclor 1248		0.2
Aroclor 1254		0.2
Aroclor 1260	7	0.2
Naphthalene	16	
Benzo(a)pyrene	0.0006	0.1
TSS	None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages.	100 mg/L above ambient
Turbidity	No increase that will cause a substantial visible contrast to natural conditions.	

^{*} Using EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136.

- 62. All analytical results must be sent to DEC by fax or email within 48 hours of receipt of data results, followed by a mailed hard copy. Exceedances should be highlighted.
- 63. In the event of exceedance of a water quality standard, the Department will be notified and the Permittee and the Department will determine if there is a need for procedural changes.
- 64. Water quality monitoring must be conducted daily (every day the activity occurs) at the

start of each activity identified in condition 59, above, and during dredging of East Sediment Mound #3. Monitoring may be temporarily suspended due to weather or other safety concerns. Conditions resulting in suspension of monitoring must be documented in the reports described in conditions 62 and 65.

- A. If there are no water quality standard exceedances for five consecutive monitoring events, water quality monitoring for that activity may be reduced with Department approval. Daily visual turbidity monitoring must continue for all activities throughout the duration of the in-river operation.
- B. TSS monitoring must be conducted daily for each bridge removal activity and for dredging and bottom profiling activities when they occur. If there are no TSS exceedances for five consecutive monitoring events for dredging and bottom profiling activities, TSS monitoring may be reduced to twice per week.
- C. If, during the reduced sampling for any activity, turbidity resulting in a substantial visible contrast to the Hudson River is observed immediately outside of a silt curtain or at the edge of the 500-foot mixing zone or if there is an exceedance of 100 mg/L above the ambient TSS value, corrective action shall be taken and TSS monitoring frequency shall return to daily (every day that the activity occurs) for that activity until such time as TSS concentrations are less than 100 mg/L above ambient values on two consecutive measurements and turbidity does not result in a substantial visible contrast to the Hudson River. NYSDEC may specify additional monitoring until compliance is demonstrated. Samples shall be collected until NYSDEC approves resumption of reduced monitoring.
- 65. Three copies of a monitoring report summarizing the results of the monitoring and analyses shall be submitted to the Department within 30 days of completion of the in-river Authorized Activity in any calendar year.
- 66. All laboratory analyses required by this permit must be conducted by a laboratory certified by the New York State Department of Health.
- 67. Nothing contained in this Permit shall be construed as authorizing a violation of Water Quality Standards.

ROCK DRILLING DEWATERING CONDITIONS

70. All decant water must be held in the decant-holding scow for a minimum of 12 hours.

All other terms, conditions, and requirements of the permit, unless previously modified, are applicable. This modification should be appended to all copies of the permit and shared

with the project contractor and appropriate personnel.

If you have any questions please contact me.

Respectfully,

John J. Ferguson

Chief Permit Administrator

ecc: Kristine Edwards, New NY Bridge NYSTA

Ken Avery, IOECM, New NY Bridge David Paget, Sive Paget & Riesel Thomas Berkman, NYSDEC Karen Woodfield, NYSDEC Diane English, NYSDEC

Thomas Rudolph, NYSDEC