



Memorandum

DATE: April 18, 2014
TO: File
FROM: Mark N. Page, Jr. *MP*
RE: Well Monitoring Plan during Construction

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Commissioner

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**Water for the Future Program: Rondout-West Branch Bypass Tunnel Repair
CEQR No. 10DEP042U**

New York City Department of Environmental Protection (DEP) is proposing to construct a bypass tunnel around a leaking portion of the Delaware Aqueduct in the Roseton area of the Town of Newburgh (Orange County), New York. Construction is underway in the Town of Newburgh and Town of Wappinger (Dutchess County), New York.

DEP is undertaking a two-part approach to the environmental review for the proposed WFF program. The first Environmental Impact Statement (EIS 1) provided a detailed analysis of the RWBT Shaft and Bypass Tunnel Construction project (Project 1). EIS 1 was scoped in August 31, 2011, with the Final Environmental Impact Statement (FEIS) Notice of Completion filed on May 18, 2012, and the Statement of Findings issued on June 28, 2012. Project 1 is expected to take several years to complete. EIS 1 evaluated construction of the bypass tunnel commencing in 2013 with completion in 2020. The current schedule for completion of the bypass tunnel is 2021.

As described in EIS 1, the bypass tunnel will be constructed approximately 600 to 900 feet below grade. At the time DEP undertook preparation of EIS 1, design of the bypass tunnel was in its preliminary stage and the precise route of the bypass tunnel was not yet determined. Since the issuance of EIS 1, new design information has become available and DEP has modified the bypass tunnel project to incorporate a well monitoring program for wells within 500 feet of the proposed bypass tunnel route in order to protect wells within this area during construction of the tunnel.

As set forth below, the project modification would not result in new potential undisclosed significant adverse environmental impacts.

Well Monitoring Plan

DEP is implementing a well monitoring plan to safeguard water supply for properties within 500 feet of the tunnel alignment. As part of the plan, DEP would reach out to property owners within the corridor to determine whether they would want to participate in the program. DEP would allow property owners to join the program prior to and/or throughout the construction period.

The well monitoring plan would include two types of monitoring – water quality and water levels within the well. As part of the plan, DEP has established thresholds by which property owners would be eligible for corrective measures to be undertaken by DEP, including the installation of water filters or other applicable methods to ensure continued adequate water supply for the affected properties.

Well Monitoring Plan Thresholds:

Water Quality

- Prior to construction, where landowners allow, monitor existing water quality for one year to establish baseline conditions
- During construction where landowners allow and monitoring indicates, action levels for DEP to address water quality would either be:
 - o Water quality of well water declines enough to cause an exceedance of New York State Department of Health Regulations Sub-Part 5-1 Public Water Systems drinking water Maximum Contaminant Levels (MCL); or
 - o A significant increase in regulated contaminant levels if well water quality in the baseline condition exceeds the MCL.

Water Level

- Prior to construction where landowners allow, monitor existing water level for one year to establish baseline condition
- During construction where landowners allow and monitoring indicates, action levels for DEP to address water level would be:
 - o Any decline of the water column of a monitored well by 25 percent or more (which would then prompt a detailed assessment of the water level monitoring data to correlate the water level trends to either the decommissioning of the tunnel leak, or other environmental factors unrelated to the decommissioning).
 - o Any decline of the water column of a monitored well shown to have been caused by bypass tunnel project which indicates that the available supply may not be sufficient to meet the anticipated demand.