



May 22, 2009  
Jeremy Rosenthal  
NY State Department of Environmental Conservation  
Division of Environmental Permits  
625 Broadway, 4<sup>th</sup> Floor  
Albany, New York 112233-1750

VIA US MAIL and EMAIL: [depprmt@gw.dec.state.ny.us](mailto:depprmt@gw.dec.state.ny.us)

**Re: Clearwater's Scoping Comments on the Proposed Haverstraw Water Supply Project**

Dear Mr. Rosenthal:

I am submitting these scoping comments on behalf of Hudson River Sloop Clearwater, Inc. ("Clearwater") on the proposed Haverstraw Water Supply Project ("Proposed Project" or "HWSP") described below. Please also consider this letter a request that Clearwater be considered an "interested" person pursuant to State Environmental Quality Review Act ("SEQRA") regulations at 6 NYCRR Part 617, and accordingly, please send us a copy of all filed SEQRA documents (including, but not limited to, additional scoping documents, Draft Environmental Impact Statements, Generic Environmental Impact Statements, Environmental Impact Statements, and notices) as they become available.

From NYS DEC determination of significance for this project: The proposed United Water New York Inc. (UWNY) Haverstraw Water Supply Project may have a significant adverse impact on the environment and a Draft Environmental Impact Statement (EIS) must be prepared. The project is a proposal by UWNY, a subsidiary of Suez Environment, to construct a desalination facility in the Town of Haverstraw, New York to produce potable water from the Hudson River. The project would withdraw up to 10 million gallons per day (mgd) of water from the Hudson River. The proposal includes: a raw water intake unit and pumping station that would be located along the Hudson River, near a dock formerly operated by U.S. Gypsum; a desalination facility/water treatment plant which would be located upslope, on lands of the former Haverstraw Landfill; a raw water transmission line between the two facilities; potable water main route(s) connecting the water treatment plant to existing water utility infrastructure; and pipelines to transmit effluent from the water treatment plant to the Haverstraw Joint Regional Sewage Treatment Plant (sewage treatment plant). A temporary pilot plant will be constructed and operated for a 12-18 month period to gather data in support of design and operation assessments and decisions. Significant environmental issues which the NYS DEC has preliminarily identified include, but are not limited to: effects on aquatic species and habitats; water quality in the reach of the Hudson River where the intake is proposed; water supply allocation including cross-watershed transport; suitability of the landfill site; ability of the sewage treatment plant to handle the proposed effluent; energy demands of the desalination pre-treatment and treatment technologies; and relative impacts and viability of possible alternatives to desalination, including demand reduction.

**Project need has not been sufficiently demonstrated:** As we stated at the Scoping Session on May 7, 2009, Clearwater does not feel that the NYS Public Service Commission has adequately demonstrated the

need for this project, specifically because the potential for conservation was considered to be speculative and omitted from their calculations of future demand, while many other communities have reduced their water usage considerably by implementing comprehensive conservation practices and infrastructure, including repair of an aging, leaking distribution system. A shining example is New York City's amazing reduction of water use by 33% following the installation of low-flow toilets and individual apartment metering. What is, in fact, turning out to be speculative are the growth forecasts, in light of the current, serious economic downturn. In a sustainable society when a community has reached carrying capacity – with water, in this case, as a limiting factor – it develops by further enhancing what it already has; it does not try to push past natural limits to growth by trying to engineer its way out of this reality. Clearwater believes the basis for these proceedings are flawed and that it is unclear if UWNY/Suez is responding to a PSC mandate by proposing the desalination plant in Haverstraw or, in fact, it originated the proposal.

If the energy needed to process brackish Hudson River water, laced with contaminants including PCBs and possibly radioactive isotopes from Indian Point, cannot be generated cleanly on site, building a desalination plant will increase the demand for more energy and exacerbate the vicious cycle of unlimited growth consuming resources in an unsustainable pattern. In other words, the attempt to solve one problem will compound another. The DEIS must evaluate whether or not the project demonstrates resource based planning, or incorporates Ecosystem Based Management (EBM), which has been developed by a large consortium of stakeholders coordinated by the New York Ocean and Great Lakes Ecosystem Conservation Council. Is the proposed project consistent with the goals of the Hudson River Estuary Action Agenda, local, county and regional plans? Does the project incorporate Greenway Smart Growth principles?

**The DEIS must consider impacts of plant on the ecosystem of the Hudson River, and specifically the importance of Haverstraw Bay as important aquatic habitat supporting fish and other aquatic species, many of whose populations are in decline.** Haverstraw Bay has been designated as a “significant coastal fish and wildlife habitat” because it is an important spawning ground and nursery for striped bass, American shad, white perch, Atlantic tomcod, and Atlantic sturgeon, bay anchovy, and blue crab. The 2008 Pisces Report has indicated that 10 of the 13 signature Hudson River fish are decreasing, in spite of the Clean Water Act and other protective measures. Loss of habitat, as well as fish kill due to impingement and entrainment in once through cooling systems at Indian Point and the numerous fossil fuel power plants on the Hudson, are major factors contributing to this problem. American eel and shortnose sturgeon are also found in Haverstraw Bay. The cumulative impact of taking an additional 10 million gallons per day at full build out for Rockland's water supply must be considered in detail, on top of the 2.8 billion gallons per day that Indian Point withdraws directly across the Hudson, which makes Haverstraw Bay an important sanctuary for fish and other aquatic wildlife in this area of the river.

**The DEIS must assess energy consumption associated with desalination, identify how the additional energy demand will be met, and address the impacts the generation of to meet this incremental load will have on climate change, greenhouse gas emissions, air quality, and our national dependence on ever-decreasing supplies of imported fuel.** It is estimated that we passed the peak of global oil supplies in 2008 and are now at the point of diminishing returns. In addition, the application must assess the impacts of sea level rise on the facility itself and the salinity of the proposed water withdrawn from the Hudson, as well as the impacts of increasingly severe storm events. The DEIS must also consider energy transmission constraints related to the proposed project's increased energy demand, because Rockland County is in the Mid-Atlantic National Transmission Corridor, a federally-designated area of electric transmission congestion. Other plants in the region, located above the salt front, consume less energy to deliver greater volumes of water than this plant will.

For example, the Poughkeepsies' Water Treatment facility consumes 10.5 million gpd, but it delivers all it produces to its customers. UWNYS's proposed HWSP will, at full operation, withdraw 10 million gpd, but will only deliver 7.5 M gpd, using energy-consumptive reverse osmosis to desalinate the brackish waste to potable standards. The 2.5 m gpd discharged back into the river will contain elevated concentrations of salt removed by treatment. How will this briny mixture impact the ecology of Haverstraw Bay and the Hudson River?

According to Paul Lill, Waste Water Treatment Plant Administrator, Poughkeepsie uses 2,180 kWh per million gallons (Mgal). The HWSP DEIS, on p. 16-11, indicates that Rockland's proposed desalination facility will use 33,200 kWh per day, or between 4,427 and 6,520 kWh/Mgal of potable water produced – between **two and three times as much electricity** to produce only three-quarters of the usable water.

Further, the DEIS cites a New York State Energy Research and Development Authority (NYSRDA) study of 10 highest scoring utilities, which showed a much lower normalized energy use -- averaging 324 kWh/Mgal versus 2,360 kWh/Mgal for the 10 lowest scoring utilities. Desalination and pumping are major factors in electricity consumption by water treatment facilities.

UWNYS/Suez acknowledges that the cost of operating their proposed desalination plant, as compared to a reservoir, is excessive. In January 2007, UWNYS indicated that the cost per thousand gallons from Ambrey Pond would be \$0.70, versus \$1.79 per 1,000 gallons produced by desalination.

**Possible contamination of drinking water by radioactive isotopes leaking from Indian Point:** Due to a series of leaks from fuel pools and other sources, the groundwater under Indian Point Nuclear Power Plant is contaminated with radioactive isotopes, including tritium, strontium-90, cesium-137, and iodine-131, in excess of drinking water standards. Clearwater has filed a contention in the Indian Point relicensing case, requesting that the Nuclear Regulatory Commission (NRC) and Entergy study the potential impacts from the highly contaminated ground water under the plant on the Hudson River, to determine how large and how many plumes in the fractured bedrock below the plant are bringing this contamination into the Hudson River and in what concentrations. Acknowledging that there will be some dilution by the river, it is still essential to assess the transport of radioisotopes in river water to determine how much of this contamination could reach Haverstraw Bay, 3.5 miles to the southwest, and whether or not reverse osmosis (RO) can filter it out. We have been informed by our reliable science advisors, Dr. Kim Touchette of Bard College and Dr. William Flank of Pace University, that RO may be able remove most of the Sr-90, but not Cs-137 or tritium, which is tritiated water. Water cannot be filtered out of water. In addition, Clearwater has a report prepared by Joe Mangano of the Radiation and Public Health Project that analyzes NYS Department of Health data collected from 1982-2003 that shows that Gross Alpha Radiation (characteristic of plutonium) is between 10.6 and 11.8 times higher in Verplanck, immediately south of Indian Point, than in samples taken in Albany. This study also shows Gross Beta Radiation (characteristic of Sr-90, Cs-137 and I-131) to be 10.6 – 10.9 times higher at Verplanck than at Albany. Gamma (tritium) is now being analyzed and will be included in future comments.

**Environmental Justice and the potential cumulative effects of exposure to toxins and radiation:** Most analyses of health impacts focus on one contaminant and one route of exposure. What happens when an individual or a population is exposed to multiple sources via multiple routes? For example, a subsistence fisherman in Haverstraw or Peekskill breathes minimal amounts of dioxin from the Westchester County "waste-to-energy" garbage incinerator at Charles Point, consumes small amounts of PCBs, strontium and cesium in Hudson River fish and crabs, and now is exposed to small but ongoing doses of radioactive isotopes in drinking water, which also may move through the skin through dermal exposure while bathing or showering – at what point do many small exposures alter the risk assessments that assure the public that existing standards are safe? Dioxin and PCBs are known to impair a healthy

immune response, further compromising the exposed individual's or population's ability to counteract these negative health effects. In this regard, the DEIS must look at a wider population than has been defined in the present narrowed Environmental Justice analysis: to include all of Haverstraw, West Haverstraw and Peekskill at a minimum.

In addition to these specific concerns, Clearwater agrees entirely with the scoping comments submitted by Riverkeeper, Citizens Campaign for the Environment and Rockland Water Coalition.

We see no reason why a 30-day extension for scoping to assure the widest input into a project that may have such significant impacts has not been granted, and request DEC to reconsider, especially to allow more elected officials to weigh in.

### **Conclusion**

In conclusion, we do not feel that there is genuine need for this proposal, and that even if the need were adequately demonstrated, this is the wrong solution in the wrong location. We strongly urge DEC and all other involved and interested agencies, and public officials, to review the proposed Haverstraw Water Supply Project with special attention to the proposed alternatives, the potentially profound environmental impacts that are likely to occur, and in the context of contemporary land use and public policy goals, which increasingly favor sustainable development, not unlimited growth.

Please contact me if you have any questions or wish to discuss these comments.

Sincerely,

A handwritten signature in cursive script that reads "Manna Jo Greene".

Manna Jo Greene, Environmental Director  
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