



Lindy Sue Czubernat  
Environmental Program Specialist  
Division of Environmental Permits  
New York State Department of Environmental Conservation  
625 Broadway, Albany, NY 12233-1750

February 5, 2015

Dear Ms. Czubernat,

Please accept these comments on behalf of Riverkeeper, Inc. about the proposed renewal of SPDES permit NY-00250457 for the Stewart Air National Guard Base in the Town of Newburgh.

The SPDES permit has significant inaccuracies that should at a minimum be corrected prior to renewing this permit. We believe the errors, as well as water quality information about the receiving waters, should prompt a full technical review of the permit to ensure effluent limits, monitoring and best practices plans are sufficient to protect receiving waters and downstream uses, particularly the drinking water supply of the City of Newburgh.

### **Correct Receiving Waters Classifications**

The SPDES permit states that the Class D receiving waters are tributaries of the Quassaick Creek or Silver Stream. In some places the permit states that certain of these same receiving waters are also classified as Class C.

In fact, many if not all outfalls discharge to Class A tributaries of the Washington Lake and Silver Stream (also known as Brown's Pond) Reservoirs, which make up the drinking water supply for the City of Newburgh, which serves approximately 29,000 people.<sup>1</sup> (While Silver

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<sup>1</sup> Newburgh Water Quality Reports,  
<http://www.cityofnewburgh-ny.gov/water-department/pages/water-quality-reports>



Stream is part of the Moodna Creek watershed, diversions carry water from its reservoir, via a diversion, to Washington Lake, part of the Quassaick Creek Watershed.)

Two specific examples include:

- Outfall No. 001 discharges to a Patton Brook, a primary tributary of Washington Lake. The permit labels this receiving water as a Class D drainage ditch tributary to Quassaick Creek.
- Outfall No. 010 discharges into Class A Silver Stream, a tributary of Washington Lake. The permit labels this receiving water as a Class D stream.

Riverkeeper has not exhaustively analyzed the permit's outfalls, discharge limits and receiving waters. By identifying these errors, we expect the Department will be compelled to thoroughly analyze and map the outfalls and receiving waters and revise the permit accordingly for all outfalls from this facility.

### **Revise Effluent Limits**

Since the discharges are to Class A waters currently being used as drinking water supply for a city of 29,000, all effluent limits and permit conditions should be reviewed to ensure that the drinking water supply is protected.

Specifically, but not exhaustively, the Department should set limits for acetone and glycol, and tighten any other limits, consistent with state Water Quality Standards<sup>2</sup> for Class A waters.

### **Consider Available Data About Existing Impacts to Receiving Waters**

The Department should consider the available information about water quality in the receiving waters, as documented in the Quassaick Creek Watershed Plan,<sup>3</sup> published in June 2014, which labeled as a “priority action” encouraging “local regulatory measures for water resource

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<sup>2</sup> ECL Part 703, <http://www.dec.ny.gov/regs/4590.html>

<sup>3</sup> Quassaick Creek Watershed Plan, [http://waterauthority.orangecountygov.com/quassaick\\_watershed.html](http://waterauthority.orangecountygov.com/quassaick_watershed.html)



protection, especially for drinking water, (and) stormwater reductions.”<sup>4</sup> The three subwatersheds of the Quassaick Creek that are part of the drinking water supply – Patton Brook, Upper Silver Stream and Washington Lake – are receiving waters for this permit holder’s discharges, and there is evidence that portions of the watershed are already significantly stressed. Consider some facts from the plan:

- land use analysis shows that each of these subwatershed has greater than 10% impervious surface;
- both reservoirs have documented impacts from watershed pollutants, described in this way: “While the City of Newburgh owns substantial tracts of land around the borders of the (Washington Lake) reservoir, most of the watershed is unprotected and thus vulnerable to development, examples of which have recently added significant amounts of sediment to Silver Stream... Brown’s Pond also experiences elevated levels of algal growth during the growing season and as such it too is considered eutrophic”<sup>5</sup>;
- biomonitoring data for Patton Brook, which is a receiving water for discharge outfall No. 001 and upstream of the Silver Stream (Brown’s Pond) Reservoir, received a Biological Assessment Profile (BAP) of 4.6, corresponding to a “moderate impact” classification, and an Impact Source Determination (ISD) indicating “toxic inputs”;
- two biomonitoring sampling points on Silver Stream, which is also downstream of receiving waters for permitted discharges from this facility and part of the drinking water supply system, received BAPs of 4.2 and 3.8, corresponding to a “moderate impact” classification. The ISDs were “organic and complex inputs” and “organic and toxic inputs,” respectively<sup>6</sup>; and,
- the Quassaick Creek Watershed Management Plan identified as “areas for improvement” developing Total Maximum Daily Loads for Washington Lake, Patton Brook and Upper Silver Stream.<sup>7</sup>

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<sup>4</sup> Quassaick Creek Watershed Plan, Appendix E, Recommendation 2-7

<sup>5</sup> Quassaick Creek Watershed Management Plan, Page II-18

<sup>6</sup> Quassaick Creek Watershed Management Plan, Page II-29

<sup>7</sup> Quassaick Creek Watershed Management Plan, Page II-73



Also potentially relevant to the health of the receiving waters, if not this particular discharge, is ongoing monitoring for Enterococcus, an Environmental Protection Agency-recommended fecal indicator.<sup>8</sup> No site designated for primary contact recreation should exceed a geometric mean of 35 on a rolling monthly, according to the EPA's recommended water quality criteria<sup>9</sup>. Based on preliminary analysis of data gathered between August and October, 2014, at 13 points in the Quassaick Creek watershed, the geometric mean of six samples taken at each site biweekly ranged from 117 to 912. The geometric mean of six samples at a point in Patton Brook between the permit holder's discharge points and the Reservoir was 182. The geometric mean of six samples in Silver Stream between the discharge points and Washington Reservoir was 577.

These past and ongoing monitoring efforts suggest water quality in the receiving waters are likely not meeting Class A uses and standards, and that permits discharging to these waters should at a minimum be written with Water Quality Based Effluent Limits (WQBELs), which are necessary to control pollutants which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard."<sup>10</sup> Particular attention should be paid to toxic discharges, such as benzene and xylene, given the suspected toxic impacts on macroinvertebrates documented by biomonitoring in Patton Brook and Silver Stream, and the downstream use for drinking water.

### **Increase Monitoring Requirements**

The frequency of sampling required, particularly of toxic constituents such as benzene, toluene and xylene, should be increased from quarterly to monthly, if not daily, to ensure that these constituents are not discharged at levels that could endanger the receiving waters or the Newburgh drinking water supply. Whether or not frequency of regular monitoring is increased, or increased to the degree recommended here, event-based monitoring requirements should be

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<sup>8</sup> Enterococcus monitoring data for the Quassaick Creek watershed, <http://www.riverkeeper.org/water-quality/citizen-data/quassaick-creek/>

<sup>9</sup> 2012 Recreational Water Criteria, <http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/>

<sup>10</sup> 40 C.F.R. § 122.44(d)(1)(i), [http://cfr.regstoday.com/40cfr122.aspx#40\\_CFR\\_122p44](http://cfr.regstoday.com/40cfr122.aspx#40_CFR_122p44)



added to the frequency-based requirements. Specifically, because the highest concentration of stormwater contaminants enters receiving waters during the first flush, sampling should occur within the first hour of discharge during at least a 1-year, 24-hour storm event, or any storm event following a spill event, whenever practicable.

Additionally, monitoring requirements should be imposed on all outfalls, including 005, 006, 007, 008, 009A and 009B, if they are found to be upstream of Newburgh's drinking water supply.

#### **Amend Management Plan to Include Downstream Notification and On-Site Education**

Finally, Riverkeeper urges the Department to place conditions on the permit, as part of the condition to develop and use a Best Practices Management Plan, requiring the permit holder to develop a spills notification plan for the City of Newburgh, and to engage in an ongoing education program for facility staff and visitors.

There appear to have been at least five spills from this facility recorded in the NYS Spill Incidents Database<sup>11</sup>:

- 75 pounds of jet fuel (11/04/2009; Spill No. 090877)
- 0.10 gallon of an unnamed substance (05/07/2010; Spill No. 1001481)
- 100 gallons of jet fuel (01/31/2011; Spill No. 1011070)
- 25 gallons of hydraulic oil (11/28/2012; Spill No. 1212675)
- 16 gallons of jet fuel (07/22/2014; Spill No. 1404350)

A spill notification protocol and on-site training and education would help ensure that Newburgh officials can take any timely action necessary to protect their drinking water supply source, and that all on-site personnel are aware that stormwater runoff and other pollutants spilled or discharged from the facility may affect drinking water for 29,000 people downstream. It is our understanding that the city is working toward an overdue watershed

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<sup>11</sup> Spill Incident Database, <http://www.dec.ny.gov/cfm/external/derexternal/index.cfm?pageid=2>



protection and education effort for its drinking water supply, and the Department can assist meaningfully in this effort with permit conditions on this facility.

Thank you for the opportunity to comment on this proposed SPDES permit renewal. If you would like to discuss any of the points raised in this letter, please contact me at 914-478-4501 x226 or by email at [dshapley@riverkeeper.org](mailto:dshapley@riverkeeper.org).

Sincerely,

Dan Shapley

Water Quality Program Manager