



November 18, 2018

Colleen Connelly [coconnolly@pa.gov](mailto:coconnolly@pa.gov)  
Pennsylvania Department of Environmental Protection

**Re: Proposed Air Quality Plan Approval 48-00111A, Slate Belt Heat Recovery Center**

Delaware Riverkeeper Network submit these comments on the Proposed Air Quality Plan Approval 48-00111A for Synagro's Slate Belt Heat Recovery Center, LLC (SBHRC) to construct and operate a biosolids processing facility which will be sited on a parcel of land owned by Grand Central Sanitary Landfill (GCSL), in Plainfield Township, Northampton County, as described in the Permittee's May 18, 2018 Air Quality Plan Approval Application and any other subsequent supplemental submissions.

The Department has proposed a "Single Source Determination" for the facility. As stated in the application dated March 20, 2018: "The SBHRC facility will be a stand-alone facility separate from GCSL and GKEDC [Green Knight Energy Center]. The proposed SBHRC facility will be sited on a parcel of land owned by GCSL, and situated near the GKEDC facility in Plainfield Township, Northampton County, Pennsylvania (see Figure 1 -Site Location Map)."

The application continues "United States Environmental Protection Agency (USEPA) and Commonwealth of Pennsylvania Department of Environmental Protection (PADEP) guidance documentation and the discussion at the pre-permit application meeting on November 28, 2017 indicate the emissions from the proposed SBHRC facility should not be aggregated with GCSL or Green Knight Energy Center (GKEC)." (EarthRes Group, Inc. Air Quality Plan Approval Application for the SBHRC dated March 20, 2018, pages 7-8).

Delaware Riverkeeper Network disagrees with the Single Source Determination for the GCSL, the Green Knight Energy Center (GKEC) and Synagro's SBHRC. By definition, the entire project is a coordinated effort to utilize landfill gas and represent a single source of emissions. Synagro has proposed to construct the facility on land currently owned by the GCSL and names the facility a heat recovery center, which is inextricably connected to the landfill and the GKEC for the landfill gas they state they will be using.

Synagro's "Air Quality Plan Approval Application" does not acknowledge that Northampton County is out of attainment for both the 2008 Ozone standard and the 2006 Particulate Matter (PM) 2.5 standard. Yet the nonattainment status is verified by USEPA for both the landfill and the landfill gas facility under the tab for "environmental conditions":

<https://echo.epa.gov/detailed-facility-report?fid=110064155319>

<https://echo.epa.gov/detailed-facility-report?fid=110012591187>

The nonattainment status is also determined by USEPA for PM2.5:

<https://www3.epa.gov/airquality/greenbook/rbcty.html>

In Table 1 of "Attachment A: Application Narrative and Regulatory Review", the applicant incorrectly lists the "Title V Thresholds" for pollutants as if Northampton County was in attainment of both Ozone and Particulate Matter. It doesn't list the PM2.5 levels or thresholds, only listing PM10. (EarthRes Group, Inc. Air Quality Plan Approval Application for the SBHRC dated March 20, 2018, Table 1, page 3).

At the bottom of page 3 of this USEPA document it lists "a significant emissions rate for PM10 of 15 tpy" <https://www.epa.gov/sites/production/files/2015-07/documents/pm25guid.pdf> Synagro is proposing to emit 15.47 tpy of PM10 in an area that does not attain PM2.5 standards.

Clearly, the application is incorrect and must be rejected. Given Northampton County's poor air quality and the interconnections of this proposal, all three pollution sources should be aggregated in permitting. Synagro seeks the advantages of coordinating with GCSL and GKEC without the accompanying pollution standards that come with a proper permit, to the detriment of the community and regional air conditions. Synagro's permit application does not mention that Northampton County fails the 2006 PM2.5 standard as well as the 2008 Ozone standard. The 16.07 tons of Nitrogen Oxide pollution proposed will push Northampton County further away from ozone attainment.

Even if SBHRC was an independent pollution source, it still constitutes a major source of particulate matter (PM). SBHRC is proposing over 15 tons per year (TPY) of PM10 (15.47) and over 25 TPY of general PM (35.62), both of which should trigger Prevention of Significant Deterioration thresholds in a county that fails PM standards. Synagro's proposed 9.92 TPY of PM2.5 is just under the New Source Review (NSR) threshold of 10 TPY. Because of the large amounts of a variety of particulate matter generated by this proposal, we do not consider the proposed PM2.5 emissions estimate is sufficiently below NSR standards. Synagro should be required to adhere to New Source Review requirements for PM 2.5.

Delaware Riverkeeper Network objects to the various odors, dust, and chemical emissions that the facility would entail, adding to the air quality problems that currently result in complaints from residents on a regular basis to Waste Management Inc. for the day to day operations of GCSL.

Adding to these emissions will be chemical compounds that are described in New General Permit Application No. WMGR160 for the Slate Belt Heat Recovery Center, submitted by the applicant

March 20, 2018: Sulfuric Acid and Sodium Hydroxide. Sulfuric Acid will be stored and used in processing.

Sulfuric Acid can cause irritation to eyes, skin, nose, throat; pulmonary edema, bronchitis; emphysema; conjunctivitis; stomatis; dental erosion; eye, skin burns; dermatitis (<https://www.cdc.gov/niosh/npg/npgd0577.html>) The International Agency for Research on Cancer (IARC) has classified strong inorganic acid mists containing sulfuric acid as a known human carcinogen. (<https://bit.ly/2zqNgeN>) Sodium hydroxide can cause eye and skin burns, digestive and respiratory tract burns. (<http://www.certified-lye.com/MSDS-Lye.pdf>) What concentration of sulfuric acid will be used, how will these chemicals be controlled within and outside of the facility and how much will be stored, used and disposed each day? Why is hydrogen sulfide only proposed to be removed up to 1.5 ppm and ammonia only up to 2 ppm? Why aren't emissions from these chemicals being completely prevented?

Odorous compounds such as hydrogen sulfide, ammonia, and odors from the belt dryer system, fans and other sources should be predicted based on an air dispersion model that considers wind direction, weather, and other site specific features such as existing structures. These emissions must also be modeled employing accurate data of current odors from the landfill in order to ascertain the cumulative or mixing effect of existing odors combined with new odor sources at this facility. There is no evidence that this will be considered in the applications.

Delaware Riverkeeper Network questions the effectiveness of the proposed odor control system in the building in controlling emissions, as discussed in the General Permit application for the project. Additionally, outside dust from new truck and other vehicle traffic for this facility must be prevented if air quality conditions are ever to be improved in the area and the County.

Additionally, it is stated that water will be applied to gravel and paved areas when needed. Dust from sludge drying facilities can carry dangerous pollutants and the unloading and truck operations outside the facility can contribute to leaks, spills, and splashes that accumulate in dust on the site. Has an air dispersion model considered these potential pollutants?

Regarding the water to be applied at the site for dust suppression, where will this water come from and if the water is trucked in, what will be its source, will it be tested for contaminants and how much is projected to be used monthly/annually? Will dust be monitored for potential pollutants from water used for dust suppression or winter road conditioning? These issues being addressed in Synagro's companion application for a General Permit for waste management for the facility are evidence of the potential for compounding air quality problems that must be addressed by the Department.

Based on the errors in the Air Quality Plan Approval Application and the potential for degradation of air quality in the community and the region, Delaware Riverkeeper Network requests that the proposed Air Quality Plan be rejected for the SBHRC.

Thank you for the opportunity to comment.

Submitted by:

A handwritten signature in blue ink that reads "Maya K. van Rossum".

Maya K. van Rossum

the Delaware Riverkeeper

[keepermaya@delawareriverkeeper.org](mailto:keepermaya@delawareriverkeeper.org)

A handwritten signature in blue ink that reads "Tracy Carluccio".

Tracy Carluccio

Deputy Director

Delaware Riverkeeper Network

[tracy@delawareriverkeeper.org](mailto:tracy@delawareriverkeeper.org)