

## Dunn Mine and C&D Debris Landfill Monitoring and Enforcement

NYS Solid Waste and Mined Land Reclamation Programs

Partition Street Extension, Rensselaer

### WHO TO CONTACT



Comments and questions are always welcome and should be directed as follows:

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Additional information on DEC's ongoing air quality study of the Dunn facility can be found at the following website:

<https://www.dec.ny.gov/chemical/117071.html>

The New York State Department of Environmental Conservation (DEC) is committed to protecting the environment and public health of the City of Rensselaer and its residents during the ongoing operations of the Dunn Mine and C&D (construction and demolition) Debris Disposal Facility on Partition Street Extension (the Dunn facility). DEC and its partners in New York State and local government are coordinating efforts to keep community residents and students and school staff informed about **DEC's rigorous oversight of all operations at this facility** and actions to respond to community concerns and minimize any impacts on quality of life.

**New York State's** top priority is ensuring that residents and students, faculty, and staff at the Junior and Senior High School are not exposed to any potential site-related health or safety hazards. This update includes the latest information on **DEC's** efforts to ensure that operations at the Dunn facility are in compliance with all applicable environmental laws and regulations, **and to report on DEC's responses** to community concerns about potential odors and air quality impacts arising from the placement of C&D debris, the offsite migration of dust from mining operations, and other issues regarding the facility.

### Background Information

The Dunn facility has been the location of sand and gravel mining since the 1890s. After the New York State Legislature enacted the Mined Land Reclamation Law in 1975, DEC issued the first mining permit for the Dunn facility in 1984, following an environmental review and the submission of a Full Environmental Impact Statement (EIS). After another round of environmental review in the early 1990s, including noise and traffic studies and a public hearing, the mine site was expanded from eight acres to 51 acres. As part of the permitted expansion of the site in 1993, the Dunn facility was subject to designated truck routes, truck counts, hours of operation, and other operational requirements.

The mining permit was renewed and modified several times between 1993 and 2012, including modifications related to aid the construction of the school and to account for changes in ownership.

In 2012, the operator applied to DEC for another modification to the permit to allow for a phased conversion of the sand and gravel mine to a C&D disposal facility. The permit application process included the submission of an additional Full Environmental Impact Statement and noise mitigation and traffic studies. DEC was lead agency for the coordinated environmental review and provided public notice and a public hearing at Rensselaer City Hall. After the environmental review process was completed, and after finding that the application met all applicable regulatory standards and requirements, DEC issued the combined solid waste and mining permit, effective July 20, 2012. This permit has since been further renewed and modified, **including the operator's construction of a new water tower for the City of Rensselaer.** The current permit is in effect and is scheduled to expire on July 19, 2022.



## DEC Enforcement History

In March 2018, DEC commenced an enforcement action against the operator of the Dunn facility for numerous violations, including the use of two unpermitted truck access points on Partition Street Extension, the off-site placement of mined material, off-site stormwater discharge, and off-site dust migration. In August 2018, the operator entered into an Order on Consent with DEC. The 2018 order assessed a civil penalty of \$100,000 and required the operator to fund a \$225,000 environmental benefit project to benefit the school and local community and to implement a Schedule of Compliance, including site stabilization, dust control, haulage-way improvements, and additional dust mitigation measures such as hydro-mulching, fencing, street sweeping, and truck washing. In coordination with the City of Rensselaer, the environmental benefit project under this order was invested in the construction of a new playground at the school, stormwater improvements to the roadway and parking area leading from Sixth Street to The Hollow and Quackenderry Creek, and tree plantings and other stormwater improvements along Partition Street.

In early 2019, following site inspections and analyses, DEC determined that the permeability of the soil component of the liner system over the C&D debris at the Dunn Facility did not satisfy regulatory standards. DEC took immediate enforcement action, resulting in an Order on Consent requiring the operator to implement a liner enhancement plan subject to the technical review and approval of DEC. In March 2019, DEC directed the Dunn Landfill to take new actions to improve operations and reduce odors at the facility, including a new gas collection and cover system requirements and enhanced odor monitoring to reduce impacts to the community. DEC installed four hydrogen sulfide (H<sub>2</sub>S) monitors at strategic locations to provide enhanced monitoring of odors at the landfill.

On April 3, 2019, dust from the wind-sided slopes of the mine migrated off-site, impacting the school and neighboring properties. DEC immediately mobilized in response to the dust event and launched an additional enforcement action before securing an Order on Consent in June 2019. Based on a statutory maximum penalty of \$8,000 per violation and \$2,000 per day for a continuing violation, the 2019 order assessed a total civil penalty of \$35,000 for the two mining violations. In addition, the 2019 order required the facility to hire a full-time on-site monitor, submission of a revised dust control plan to minimize the risk of any future dust events, and the construction of a soil berm along the northern and northeastern perimeter of the Dunn facility to provide an additional visual, odor, dust, and noise buffer to the school.

The operator has applied for modification to the permit for construction of the berm as required by the 2019 order. DEC found this application to be incomplete and is awaiting additional information from the operator. If the additional information is provided and DEC determines that there is enough information to begin the public review of the application, DEC will schedule opportunities for public comment and input on this application.



## Site Inspections

DEC maintains active and continuous monitoring and inspections of the Dunn facility to ensure that its operations remain in compliance with all applicable environmental laws and regulations and to allow DEC to quickly respond to any actual or potential violations or other concerns.

In addition to the daily inspections undertaken by the full-time on-site monitor DEC required in the 2019 order, since July 2, 2019, DEC staff have been diligently responding to community concerns and performing after-hours and weekend odor inspections nearly every day. DEC staff also visit the Dunn facility regularly during normal business hours to ensure compliance with the permit and all outstanding DEC enforcement measures and to identify any potential areas of concern for further action.

## Odor Control

DEC is undertaking comprehensive measures to identify, quantify, and reduce odors from the solid waste placement at the Dunn facility. DEC initiated active odor monitoring by installing four hydrogen sulfide (H<sub>2</sub>S) Acrulog pole-mounted samplers at strategic locations around the perimeter of the Dunn facility. These samplers are an effective screening tool to detect H<sub>2</sub>S odors. After receiving public input, on August 14, 2019, DEC relocated one of the monitors from its previous location on Ninth Street, where detections were minimal, to its current location at Garden Place near Quackenderry Creek.

These devices sample and record H<sub>2</sub>S data every 10 minutes, and the resulting data are then compiled and analyzed by DEC. To date, monitors have recorded low levels of H<sub>2</sub>S, although data acquired from the Acrulogs have indicated elevated 10-minute results, which coincided with operational issues at the Dunn facility that required DEC to respond. Additional DEC review and interpretation of this sampling data indicate times when short-term odor events may have been noticed by residents. DEC will continue to actively monitor the results and if values become elevated, require an appropriate responsive and corrective action.

Gas collection and cover measures have been implemented on-site to address odors and DEC is requiring these measures be expanded and enhanced to address community concerns. Additional information regarding the upcoming enhancements will be included in future Community Updates.





In addition to **DEC's** regular and off-hour inspections, the full-time, on-site monitor, and continuous Acrulog air monitoring meter readings, DEC installed a trailer at the School on July 12, 2019, to take continuous samples of air particulate matter of 10 micrometers or less in diameter (PM10). To date, all the data collected by the trailer show PM10 concentrations to be lower than current measurements across the Hudson River in the City of Albany and well below the National Ambient Air Quality Standard. DEC will continue to analyze the data from the air monitoring to determine if there are any PM10 concentrations that are determined to be a health or environmental hazard.

In response to a request on August 20, 2019, from the Rensselaer City School Board of Education and Superintendent Joseph Kardash, the Rensselaer City Mayor, and the Rensselaer County Legislature Chairman, DEC will continue coordinating with its partner state agencies and include **the School District's health and safety** professionals to initiate a new baseline air quality survey at the school. DEC will include additional information regarding the upcoming air quality study in future Community Updates.

DEC will continue to closely monitor operations and air quality conditions at the facility and surrounding community and will strictly oversee the implementation of the corrective actions and modifications to ensure public health and the environment are protected.

### Where to Find More Information

Data from DEC's ongoing air quality studies will be posted at the following website:

<https://www.dec.ny.gov/chemical/117071.html>

Questions and comments should be directed to:

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Watch for additional Community Updates from DEC