

The final review and conclusion pertaining to the original permit for the Dunn Construction and Demolition Landfill was issued by NYSDEC on July 20, 2012. The official title is ***State Environmental Quality Review Act Findings Statement, Facts and Conclusions for SA Dunn Sand and Gravel, Inc. Dunn Pit C&D Site Rensselaer and North Greenbush, Rensselaer County DEC# 4-3899-0006/0001 Prepared by The New York State Department of Environmental Conservation, Division of Environmental Permits-Region IV Office***

This document is a review of the conclusions of this Findings Statement. It also contains recommendations for DEC to consider as new information requiring permit application modifications. The 2012 Findings Statement, Final Environmental Impact Statement (FEIS) and related application materials formed the basis for the current operating permit for the Landfill. This is important because the applicant, in their January 2022 renewal application, used these 10-year-old application documents to justify continuing their operation, and we believe that these documents inadequately assessed the potential impacts of this large industrial operation.

On the first page of the Findings Statement, under the heading *“Facts and Conclusions in The FEIS Relied Upon to Support the Decision”*, the DEC concluded that the *“project has been designed, and where necessary, revised, to avoid, minimize or mitigate to the maximum extent practicable, adverse environmental impacts which would preclude the issuance of these permits.”*

Also under the above-mentioned heading, the statement continues, *“Environmental Impacts have been satisfactorily addressed as follows...”*

The problem with the above statements is that the FEIS upon which the conclusion was based was seriously flawed and deficient in scope and method.

The sections of the Findings Statement with the most obvious deficiencies are addressed below.

I. TRUCK TRAFFIC AND ASSOCIATED CONGESTION, NOISE, DUST, AIR QUALITY AND PROPERTY VALUES.

Congestion and Noise:

The Findings Statement says that *“Vehicle traffic was previously reviewed under SEQRA in 1992 for a modification for the mining permit at that time.* However, this is based on a traffic study conducted 20 years earlier that related to mining trucks, which are significantly smaller and quieter than long-haul tractor trailer C&D trucks. The typical Sand and Gravel truck used for mining has 10 wheels and weighs up to 20 tons fully loaded. A C&D truck can weigh from 40-60 tons with special permits when loaded and have 18 or more wheels. They are not equivalent vehicles.

The findings statement goes on to say, *“Prior permits issued for mining operation included a limit of 100 round trip truck trips to mitigate potential noise on Partition Street. The project will keep the truck limit intact and will restrict total truck traffic to 100 round trips per day, inclusive of all cumulative traffic (C&D traffic, mining traffic and leachate collection trucks).”* Again, this 100-truck per day limit was for a substantially different type of truck.

The findings statement also refers to a traffic study conducted by CT Male Associates in 2010 during a time when Broadway traffic was restricted due to construction. The findings statement goes on to state: *“---traffic data available as part of this projects review was also compared to existing baseline traffic for the former mining permit, as well as data collected in July 2010. All traffic data was considered comparable, and no significant changes to baseline traffic conditions were noted.”* Because of the aforementioned traffic restrictions at that time, we question the validity of this study.

The findings statement on traffic concludes, *“Based upon the updated traffic analysis and continued limit of 100 truck round trips per day, there will be no change to the pre-approved traffic limits imposed in 1992, and therefore there will be no significant impacts to traffic and levels of service for this project.”*

So, DEC based their conclusions on traffic impact on a comparison to sand and gravel trucks which indicated no significant difference from C & D trucks. No data was cited upon which to base this assertion. C&D diesel trucks were in operation all over the country at this time. An honest and unbiased comparison would have included a traffic study with C&D trucks, which would also have investigated the noise levels of those vehicles.

Permit renewals after this 2012 approval allowed for no input from the public and were a basic “rubber stamp” process despite public complaints about the negative impacts of these vehicles on the people living on or near the truck route. The traffic congestion and noise from these C&D trucks on the truck route, including Partition Street, Broadway, and nearby side streets, has been well documented by residents in photos, videos, a decibel meter and by a formal survey.

Noise was inadequately studied. The statement, ***“Since truck traffic is projected to remain below existing approved levels, noise impacts from traffic are not anticipated” must be challenged.*** This statement has proved to be incorrect considering the actual experience of the people on the truck route. A baseline noise study was conducted and the 1992 study was also cited. Neither of these involved measuring decibel levels of long-haul heavy C&D trucks struggling at full throttle up and down steep hills. Speed limits on City streets are also referenced as a mitigating factor. The incoming trucks start their ascent to the landfill at the intersection of East and Partition Streets on an uphill grade that increases significantly as the truck proceeds, therefore speed limits are largely irrelevant on Partition Street and nearby areas in addressing noise control in this area.

There is now a real-life comparison on Partition Street each day the landfill is operating. It is not theoretical or based on trucks that have no similarity to C&D trucks. We believe DEC needs to recognize that the route to the landfill coming up Partition Street from Broadway is a steep hill that starts at a red light at East Street intersection with Partition Street. In-bound loaded trucks stopped at the East Street light must ascend a steep 20-to-25-degree incline (est.), which means these trucks are moving slowly through a residential neighborhood with their engines at full throttle. Others make it through the green light and travel faster and noisily up the hill. The decibel levels measured in this area from the sidewalk with a handheld monitor ranged from 80 to 107 decibels. The DEC document *"Assessing and Mitigating Noise impacts"* (https://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf), contains Table E which summarizes the noise level, in decibels, from common noise sources for comparison purposes: 110 decibels - jet takeoff at 200 feet; 100 decibels - Jet takeoff at 1000 feet; 90 decibels (very annoying) - NY Subway Station; Heavy Truck at 50 feet - 80 decibels; Pneumatic Drill at 50 feet (Annoying). The Chemistry Department at Purdue University published a chart showing effects at various decibel levels. It notes that 110 decibels is the Average Human Pain threshold, and this sound level is 16 times as loud as 70 decibels. It also notes that the upper 70 in decibels is annoying loud for some people (<https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm>).

Once the apex of the hill is reached, the trucks must descend a steep downhill stretch into what is called the "Hollow" which is also approximately 25 degrees of incline or more. They then ascend a long steep hill up to the landfill, still going past private residences. Residents on cross streets along the way are affected.

Another flaw in using sand and gravel trucks as a comparison for traffic analysis is that these trucks do not start at 6:30 AM because they are local and don't come from seven states like the C&D trucks do. The earliest sand and travel trucks pass through around 8:00 or 9:00 AM and they do not come in convoys like the earlier group of C&D trucks. The Findings statement cites the 100-truck limit *"as well as adhering to existing hours of operation to minimize impacts to nearby receptors. Additional significant noise impact is not expected and have been mitigated to the extent practicable."* A convoy of C&D trucks arrive on Broadway and Partition Street at 6:30 AM. There are sometimes so many of them that they are backed up from the entrance to the landfill all the way up to Third Street at the top of Partition Street. When the line of trucks is climbing the hill, it is essentially an incessant roar of noise while residents are still sleeping or just getting up to start their day and when kids are waiting for the school bus. The noise is so bad that the City of Rensselaer passed a law forbidding the use of Jake Brakes (Compression brakes) on Partition Street.

There have never been 100 sand and gravel trucks, so the idea of using 100 trucks a day as a basis for mitigating noise and congestion is another flaw in the FEIS that facilitated the approval of the facility.

Chronic noise exposure increases the risk of chronic and metabolic diseases including hypertension, coronary artery disease, type 2 diabetes, myocardial infarction, and stroke. It is also associated with psychological stress and interferes with sleep.

Dust and Air Quality

Diesel pollution was not mentioned in the Findings statement or the FEIS. This is a significant omission. Residents are being exposed to diesel particulate matter, a harmful pollutant consisting of fine particulates and 100s of chemicals. The smell of exhaust hangs in the air when the long-haul tractor trucks, leachate trucks and sand and gravel trucks go through the city. It is well established that fine diesel particulate matter containing fine particulates is harmful to pulmonary and cardiac health and is associated with lung cancer and other respiratory disease. Dr. David Carpenter MD, Director of the Institute of Health and the Environment at the SUNY School of Public Health, has cited evidence that these ultra-fine particles create the biggest health risk because they get past the natural protection the body has against the absorption of larger particles in the air sacs in the lungs. Inspections or testing of these vehicles is rarely conducted along the truck route and the air quality has never been tested.

The section of the findings statement relating to dust deals primarily with on-site issues with the exception of stating, *“Incoming and outgoing loads are required to be covered... ”*. Many outgoing trucks are observed without covers, and even though they may not be carrying loads, residual material can escape from the trailer into the surrounding neighborhood. In addition, dust and dirt are constantly tracked onto the outgoing lane of Partition Street and is sometimes so thick it can be removed with a shovel. This issue has been ignored by both the applicant and DEC, even though it states in the permit that *“The surface of any paved road that intersects with the entrance/exit to the mine and the entrance/exit areas will be kept free of any tracked materials which can cause dust, slippery conditions or any other condition that is unhealthy or unsafe.”* In addition, the FEIS states in Response 2.13-2. *“Covers will be required on dump trucks entering or exiting the project site. This applies to the transport of sand and gravel product off of the project site as well as on-site transport of C&D.”* While the wording of this statement does not explicitly cover C&D trucks off site, there are numerous references in the document that trucks will be covered. The reality is different. Many C&D trucks leaving the facility are uncovered. Also stated in Response 2.13-2.: *“In the event of off-site dust complaints, the potential source of the dust will be investigated, and remedial steps will be taken to prevent the escape of dust from the project site.”* The dust is escaping from the project site on the trucks and then it is pushed into the air by the street sweeper which is supposed to mitigate the problem but only makes it worse. Complaints have been made to the Regional Staff about this situation. This is a direct violation of the terms of the permit that has not been resolved over the course of the landfill’s operation.

The findings statement says: *“Based on the proposed permit conditions and proposed mitigation measures, off-site impacts are not expected to occur, ... ”*. The reality is that a street sweeper employed by Dunn to control the dust on the truck route dispenses dust into the air, spreading it onto public and private properties. When the street sweeper runs out of water it simply continues sweeping without refilling its water reservoir.

No one knows what is in this dust, which could contain toxic materials from the landfill. Residents complain about having to continually clean up their porches and home exteriors due to the dust which also contains unknown health risks. People can't stay outside because of the dust and the noise of both the trucks and the street sweeper which has been recorded at 98 decibels.

The impact of traffic congestion, noise, air pollution and dust on the residents on the truck route is substantial and this area has been declared an environmental justice zone due to the income level and racial composition of the residents.

As additional evidence of the impact of the truck traffic on the community, a door-to-door and mailed survey was conducted between June 5 and July 18, 2021, on Broadway and Partition Streets, and nearby cross-streets. Of 138 surveys 32% or 44 were returned. It is clear from the results of this survey that most of the people completing it are significantly affected by the trucks:

- Almost all participants thought truck noise and vibration was bothersome and a majority thought diesel exhaust, dust and traffic congestion negatively affected their lives.
- A majority said trucks were most bothersome all day long; many said early morning.
- Having to close windows, having to go inside and getting woken up early we're the most commonly cited quality of life problems.
- There was a steep decline in perceived quality of life since the landfill started operating.

A copy of this report is attached for your review.

Property values

Residents along the truck route have had their property taxes reduced because the value of their property has reduced as a result of the truck traffic making their home less desirable for purchase if they wished to sell. This reality for Rensselaer citizens is at odds with what was stated in the FEIS in Response 2.10-1. *"In conclusion, broad generalizations cannot be made regarding whether or not a landfill has either no impact or a negative impact to property values. However, based on the unique factors cited above, there is no reason to believe that the proposed action of continuing sand and gravel mining operations and initiating C&D landfill operations within the two (2) pits with truck trips remaining within the existing daily limits will have an adverse impact to surrounding property values. This statement assumes construction and operation of the landfill in compliance with general and specific permit conditions imposed by NYSDEC."*

ODORS

The Findings Statement states, *"The proposed engineering design and mitigation measures will prevent odors from impacting off-site receptors, and 6NYCRR Part 360 standard of no nuisance odors past the property line will be met."*

In addition, the FEIS in Response 2.8-1 *“If odors become noticeable in the vicinity of the landfill cells, then the facility may recycle unadulterated sheet rock or stop accepting pulverized sheet rock. Quarterly air monitoring including field measurement of hydrogen sulfide gas will be conducted to further ensure that landfill gas is within acceptable concentrations. In addition, NYSDEC will perform periodic inspections of the facility to assess potential odor generation.”*

An active odor control system has been installed by the landfill in the last couple of years and it has improved some of the hydrogen sulfide odors, but complaints persist to this day, both in East Greenbush and in the “Hollow” on the west side of the landfill. Elimination of sheet rock as debris would be one answer to this issue. The odor of hydrogen sulfide is also regularly reported and the noise from the heavy equipment is often prominent at the Holy Sepulchre cemetery. At burial ceremonies, participants have reported overwhelming smell as well as intrusive noise from heavy equipment operating at the landfill. This is completely unacceptable. People visiting their loved one’s graves are not able to do so on a regular basis because of the odors. These conditions have been described during public events as well as having been personally reported to the REC.

PUBLIC/ADJUDICATORY HEARING/REGULATORY STANDARDS

The Findings Statement concludes with, *“A thorough review of the potential for impacts, and specifically the likelihood of impacts to residential areas and local residents, indicated that environmental impacts of the proposed action have been avoided or mitigated below levels of environmental impact significance.”*

The FEIS contained an analysis of all the public comments received and allowed the applicant to criticize and counter the testimony and concerns provided by the public. This process is clearly not fair because it did not appear to give the public participation full independent weight yet allowed the applicant’s hired engineering firm to dispute the statements, and it is the latter that DEC used to make their determination. This is hardly an objective and transparent review. DEC should be able to read or hear the public comments independently of the counter argument by the applicant. Once that happens, then DEC can read the opposing arguments. Because this was not done in this initial permit review, the conclusion in the findings statement was *“no substantive or significant issues have been raised which would warrant a public adjudicator hearing.”*

The Common Council of the City of Rensselaer, the Town of East Greenbush and the Rensselaer County Legislature have all issued resolutions calling for the closure of the landfill. The Rensselaer City School District has forwarded a letter to you requesting the permit not be renewed, and Questar III BOCES for Columbia, Green and Rensselaer Counties has committed to do the same. We think DEC should take these statements seriously.

School proximity to proposed landfill

The FEIS upon which the NYSDEC decision to approve the permit was based doesn’t acknowledge the fact that the PreK-12 Rensselaer City Public School District Campus is only a few hundred feet from the perimeter of the landfill. This should have been a central issue in

evaluating the merits of this landfill application. Instead, it was minimized in the FEIS to the point that you would hardly know that having a school near the proposed operation was a consideration. This entire situation would never have been allowed to exist if the applicant was forthright and honest in their presentation.

The lack of transparency in the application regarding the school's location next the proposed landfill, and the resulting lack of scrutiny by DEC resulted in the almost complete omission of this fact from other application documents.

The first reference in the DEIS of the school is found in the following paragraph on Page 10 of the DEIS. *"Surrounding land uses are primarily residential around the southern and eastern boundaries of the project site. Vacant land is located around the perimeter of the property, and a water supply storage tank is located between the north and south pits. A pre-kindergarten to 12th grade school owned by the Rensselaer City School District is located to the northeast of the property site, and a cemetery is located to the east. The Partition Street Disposal Area, and exempt waste disposal facility registered with NYSDEC is located directly south of the project site. Draft and Final Environmental Impact Statements were completed in 2005 prior to the construction of the pre-kindergarten to 12th grade school, these reports assessed the potential impact of the surrounding land uses within the Partition Street Corridor, concluding landfilling and gravel mining operations, would not have any impacts on the school facility."*

The Draft Scoping Document signed by Michael Dunn on 4/22/2010 in Part 1. Section C. Zoning and Planning Information: *"7. What are the predominant land use(s) and zoning classifications within ¼ mile radius of the proposed action? (Answer: "Cemetery to the east, Vacant land to the west, Closed Solid Waste Landfill to the south, and a school to the north."* *"8. Is the proposed action compatible with the adjoining/surrounding land use within ¼ mile?" (Answer marked with an "X" for "Yes").*

In the FEIS, **the following responses to public comments regarding the school's location in relation to the proposed landfill** are telling:

Comment 2.11-12 Response: *"There are not anticipated to be any adverse impact to the City of Rensselaer School associated with the proposed C&D landfill. **The landfill is not considered to be located proximal to this school.**"*

Comment 2.11-13 Response: *"The proposed action is not anticipated to have an adverse impact to the school campus, quality of life to the surrounding area, or air quality."*

We believe that a close examination of all the relevant documents will lead your agency to conclude that the applicant provided inadequate documentation and possibly deliberately misrepresented and omitted facts, such as school proximity, that required close scrutiny by your agency. The result is the current situation, with a landfill right next to a school.

According to Dr. David Carpenter, MD, Director of the Institute of Health and the Environment at SUNYA, who testified at the Special Town Hall meeting at the Town of East Greenbush on September 29, 2021, the biggest issue with the landfill is its location next to the Rensselaer City Schools. Dr. Carpenter explained the dust generated by the landfill seriously threatens the future health of these children, as well as that of the school staff, and the air around the school is likely to contain asbestos and lead. He cited an article on construction and demolition landfills in Europe documenting that the dust in landfills contain lead, arsenic, and mercury, which are neurotoxicants and carcinogens. He said the dust also likely contains PCBs from older demolished buildings, which are known carcinogens and are linked to other health problems. In addition, he indicated that hydrogen sulfide is a known neurotoxin and causes a reduced ability to learn and therefore has no business near a school.

Additionally, these H₂S odors affect the nearby communities in East Greenbush, who also report dust of unknown composition on their properties.

Dr. Carpenter concluded his remarks as follows: *“The Dunn Landfill poses significant threats to the people in the whole greater community, including East Greenbush. It has particular harm to the children going to the Rensselaer Public School. It’s going to reduce their ability to learn, it’s going to cause more asthma attacks. It’s going to, in the future, more respiratory disease, cancer. It must be closed. I see this as an urgent public health hazard. I would totally support having the landfill closed yesterday. It certainly must not be renewed next year. But this is a very serious hazard. Everybody should take every action they can to urge the powers to be to close it, and the sooner the better.”*

Landfill truck traffic standards enforcement

It is apparent that responsible agencies are not doing their part to ensure these trucks are safe and meet weight standards since there have been no public reports of truck inspections since 2018 when the Albany Times Union and other media reported 36 trucks were stopped on the way to the landfill were stopped, inspected and weighed. 170 citations were issued, including 29 weight limit violations.

One possible option to correct this obvious safety and weight violations is to establish an inspection station at the entrance to the landfill where every truck is to be weighed and inspected. It should be independently supervised by other than Landfill employees.

RECOMMENDATION 1. Treating the permit renewal as a new application makes sense in light of the problems with the original permit process and the continuing problems and complaints. We are glad that Commissioner Seggos has stated in writing that this application will be treated as a new application. In his March 2021, letter to Mr. Kristoph Dimaria, the Commissioner said: *“In the event the Facility submits a timely application to renew its operating permit prior to expiration in July 2022, please be assured that in reviewing those applications DEC will require full opportunity for public comments regarding the Facility’s operations, including with respect to truck traffic, odor complaints, and other actual or potential impacts on the community.*

Because the opportunity for public comment will be necessary, DEC will treat the renewal application as a new application for a permit in accordance with DEC's regulations." This has also been stated in the NYSDEC webpage on the Dunn Landfill.

One of the new discoveries which support the Commissioner's decision in this letter is the fact that the entire truck route and traffic, noise, dust, air quality and odors should be considered as new since they were not adequately presented in the original application. If the application is to be properly considered, the Dunn operators should be required to propose how they will enforce steps to control the situation in the surrounding community through direct control of the truck traffic and the route to the facility and the inspection of trucks and their contents with new reporting requirements to NYSDEC. This must be part of the permit because it is a major part of the operation of the landfill.

RECOMMENDATION 2. The location next to the school must be a major portion of the permit application since it is the major health risk of the operation and the NYSDEC is bound by its statement of purpose to assure the protection of all people, including children, in this situation. This is a new issue because it was not addressed in the original application.

RECOMMENDATION 3. The other major new issue, one that needs to be considered as a new development, is the discovery of PFAS chemicals at the landfill and in the leachate that is transported to the Albany Wastewater Treatment Plant and where millions of gallons each year are discharged, untreated, into the Hudson River. This situation has the potential for more far-reaching effects in the communities downriver, where over 100,000 people get their water from the Hudson. The NYSDEC is now requiring the landfill to do regular testing of PFAS and the agency is doing some of its own testing. The potential problems to health are significant despite results regarding the chemicals that have drinking water standards. There much that is not known about the thousands of chemicals known as PFAS, and expert scientific articles stress that all landfill liners eventually leak, and the problems of PFAS are likely to get worse over time as more materials are deposited in the landfill. The PFAS is likely coming from unauthorized household materials being brought in on trucks. The landfill is supposed to be inspecting the contents of the trucks, but it is obvious these are cursory inspections. Over the seven years of the landfill's operations the only reports of unauthorized materials have been made because of inspections by DEC regular staff. There have been no reports ever from Dunn staff and no reports at all in at least two years. There is an on-site monitor who files daily reports with DEC that includes pictures of activities. These reports are not inspections and provide no criticisms of operations with the exception of the first two reports filed by the monitor. The balance of the reports is just that, monitoring. The PFAS issue has recently become even more important because the US EPA has recently issued white papers citing new research that safe levels of PFAS for drinking water should be much lower than they currently are. This entire situation is difficult to address by any agency or business, but harm reduction principals would dictate that those operations that have obvious health consequences because of their location should be the first to be closed. The PFAS discovery is a new consideration for the application, and the landfill must be required to address this in its application due to the possible serious long- and

short-term health consequences from this dangerous combination of chemicals. A much more stringent review of the entire application is required due to this emerging threat.

In conclusion, the Dunn facility is next to a school, as well as sizeable, populated areas. The permitting process in 2012 ignored key problems, later borne out on the ground, and new issues, including the presence of PFAS and a newly designated Environmental Justice Community, have arisen.

We recommend that the dump's existing permit be revoked because the 2012 permit approval process was obviously flawed, contained false and misleading statements, and is now being used by the applicant to justify continued operations. If it is not closed, we recommend that DEC require a Full Environmental Impact Statement that addresses all of the issues brought to your attention and not just the berm construction as originally submitted by the applicant.