



March 30, 2021

Pennsylvania Department of Environmental Protection
Waste Management Program Manager
Kai Ding, Waste Management Program
Southeast Regional Office
2 East Main Street
Norristown, PA 19401-4915

Submitted by U.S. Mail and kding@pa.gov

To the Waste Management Program Manager and Mr. Kai Ding:

Re: Comment to Pennsylvania Department of Environmental Protection (PADEP) re. MED-FLEX solid waste permit for the proposed Medical Waste Processing Facility, Bristol Township, PA

Delaware Riverkeeper Network (DRN) submits these comments on behalf of our 25,000 members, many of whom live in the Southeastern Pennsylvania region and many of whom reside in Bucks County and Bristol Borough and Bristol Township, PA. Delaware Riverkeeper Network headquarters are located in Bristol PA. DRN's mission is to protect and defend the Delaware River, its watershed, communities, and tributaries and restore environments, habitats and ecosystems where needed.

Our staff spoke with the Southeast Region Office of PADEP and were advised that we could submit comments based on documents that we subsequently received through a Right to Know Law request and public documents, even though the submission is not within the time period advertised in the Pennsylvania Bulletin at "OPERATE WASTE PROCESSING OR; DISPOSAL AREA OR SITE; Application(s) Received Under the Solid Waste Management Act (35 P.S. §§ 6018.101—6018.1003), the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§ 4000.101—4000.1904) and Regulations to Operate Solid Waste Processing or Disposal Area or Site" in January 2021. DRN was advised that the permit was still undergoing review and that it was still timely to submit comments.

The draft Permit No. 400694. MED-FLEX, Inc., at Ford Road and Frost Road, Bristol, PA is in response to an application submitted "for the construction and operation of a new regulated medical waste transfer and processing facility to be called MED-FLEX, Inc., (MED-FLEX) Facility, located at Ford and Frost Roads in Bristol Township, Bucks County. MED-FLEX was a permitted medical waste transfer and processing facility that had received its solid waste permit on September 16, 2014. However, because the facility was never built and pursuant to Section 271.211(e) of the DEP's Municipal Waste Rules and Regulations, 25

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Pa. Code § 271.211(e), that permit was voided. The provided application is to pursue the re-permitting of the facility, the new application proposes no changes to the original facility's permit issued on September 16, 2014. The application was considered received by the Southeast Regional Office on October 1, 2020.” (Pennsylvania Bulletin).

DRN received responsive documents to our Right to Know Law request to review the full applications to PADEP and related documents describing the MED-FLEX proposed project. We submit these comments based on the materials we received and other pertinent information.

Materials Handling

The subject permit application states that the facility will handle “acceptable waste types at the site for segregation and storage”¹ and describes the materials to be handled: “General medical waste will be treated onsite and processed for proper off-site processing. Certain types of medical waste, including non-hazardous pharmaceutical, pathological waste and chemotherapeutic waste, will not be treated onsite, but will be temporarily stored and transported to off-site disposal.”²

The materials that will not be processed on site include infectious, pathological, non-hazardous pharmaceutical, and chemotherapeutic waste. DRN found information about how long radioactive materials can be stored on site under DEP regulations (5 days) but we consider it important that this project provide the information publicly about how long materials that are not acceptable for processing in the autoclave system at the facility will be stored on site. It should also be made clear if there will be waste stored on site prior to processing at the facility and, if so, the expected storage time. We consider this issue important because storage of waste can provide a pathway for pollution if there is a leak or spill or through venting of the waste from a container. The location of the storage containers and an emergency response plan are provided in the application materials. However, the Radioactive Protection, Action, and Monitoring Plan is dated October 4, 2013; there was no updated plan provided. This plan requires updating, particularly since emergency numbers, contacts and procedures could have changed in the intervening years for dangerous radioactive waste.

Beyond these documents, there is not much information in the documents about any proactive measures, water monitoring, alarms, air monitoring, secondary containment, and other specifications pertaining to the dangerous waste that will be stored on site. It is unclear if there will be regular unannounced inspections by PADEP and Haz Mat audits on a regular basis of the materials and storage methods and the containers. It is also unclear if there will be vents and filters on the vents from the storage containers. If so, there is no air quality plan required by PADEP so there will be no information about what is being vented from this potentially toxic material in storage unless monitoring and reporting is required.

This is proposed to be a very active site with perpetual operations handling a large amount of waste. According to the application: “MED-FLEX is proposing to accept a maximum of 54 tons of medical waste per day. Waste will be received and processed inside the building up to 24 hours per day, and up to seven (7) days per week.” There is a discrepancy, however, with the application that was presented to the Bristol

¹ MED-FLEX, Inc., Waste Processing and Transfer Permit Application, August 2020, Form 1, P. 1; PDF: p. 43 of 95, App 3 of 3.

² Ibid.

Township Zoning Board, which stated that the site would close for the night at 10pm. This needs to be cleared up and the township informed of the correct plans.

It is stated that the facility will start with 25 tons per day, 8 trucks going out with offsite disposal. This translates into 66 truck trips in and out each day for the initial truck traffic that will be generated. The trucks are AASHTO WB-50 or 40 cubic yard packer boxes. WB-50s are very large trucks. The WB-50 has a larger wheelbase (larger than 121”), meaning the wheelbase is spaced farther apart. It is considered an “intermediate” semi-trailer, is 13.5 tall, 8.5 feet wide, 55’ long, with a wheelbase of 14.6’. Questions arise with these types of trucks regarding whether there will be sufficient turning radius on the roads traveled. This is discussed in the application but there are no field tests run or reported. The only statement is that “based on field observations” there should be adequate turning radius³. This must be analyzed by an expert to assess if the approach roads, including Rt. 413, Ford Avenue, and Frost Road, provide sufficient room for these extra-long trucks to turn safely and to do so without causing traffic delays or potential accidents.

DRN requests answers to these questions:

It is unclear when the ultimate projected volume of 54 tons per day will occur and if the ramping up to 54 tons includes the waste that will be stored and not processed. How much waste will be taken off site eventually or will the 54 tons all be processed in the two-autoclave system?

The company owns a New Jersey facility and plans to move all operations to this site. When would this be done? They also have operations in Maryland; it is unclear if those operations will also move to this site. Is there a schedule for ramping up from 25 tons to 54 tons per day?

It is noteworthy that the company operates a relatively small facility in New Jersey and has no experience with a facility of this magnitude. Currently the company processes in New Jersey 2.5 to 3 million pounds of regulated waste per year⁴. Since 2000 pounds equals one ton in weight, the current operations in New Jersey are miniscule compared to the volume of the projected 25 tons per day initially and 54 tons per day ultimately at this facility. It is no exaggeration to say this applicant does not possess the experience of handling a facility anywhere near this magnitude. Considering the dangerous properties of the material to be handled, it cannot be accepted that the company’s experience is transferrable to safely operate the proposed MED-FLEX facility.

DRN requests answers to these questions:

It is also not clear if there will be storage expected of the waste that will be treated. With the expected traffic of incessant trucks coming and going from the site, will there be a waiting line or queue and if there is, where will they park or will they be allowed to park on the roadway if the parking spots are filled that are provided on site?

There is very little space on the site for a queue. Will there be a limit placed on how many trucks and other motor vehicles are allowed to occupy the site? Is there an estimated waiting time for trucks that enter the site are waiting for unloading?

³ MED-FLEX, Inc. Waste Processing and Transfer Permit Application, August 2020, Question 6, Page D-5; PDF p. 146 of 212.

⁴ MED-FLEX, Inc., Waste Processing and Transfer Permit Application, August 2020, Introduction, Page i-1; PDF: p. 8 of 212, App 1 of 3.

Will trucks that are waiting to enter the facility be sent back to their origin until they can be brought through the delivery system? Will there be an organized pacing of trucks through a manifest system that tracks trucks from their origin that are destined to the facility?

This site is not large. It is 3.11 acres but only 2.75 acres are usable because of existing wetlands on the property. Considering the truck traffic, the storage, the parking, truck turning lanes, and the autoclave processing building, the facility's needs are too large and the operations are too extensive for this constrained site. It is located in the Keystone Industrial Park, which, according to reports, already has a lot of truck and other motor vehicle traffic. These trucks are larger than many trucks in current use in the industrial park, as discussed above. Cars will enter from Ford Avenue, trucks through a gated entrance on Frost Road.

Environmental Values

This site has high natural values. The site is one of the most intact forested areas left in the local environment. It appears to be one of the last sites to be developed in the Keystone Industrial Park and has likely been a challenge due to the obvious environmental conditions on the site and the high value of this rare habitat area. The site, according to the application, is mostly wooded, which is evident from google views and from the aerials provided. The PNDI search revealed endangered and threatened species and species of special concern on the property. Serviceberry (endangered), Torrey's mountain mint (endangered), Walter's Barnyard grass (endangered), Dodder (threatened), and swamp dog-hobble (special concern) are all on the property. It is also remarkable that Willow Oak (*Quercus phellos*) (endangered) is on the property. One specimen was located and DEP, under DCNR review, has allowed this one tree to be left where it is, surrounded by a fence, in the pathway of the entrance area for the trucks off Frost Road. Willow Oaks require moist but well drained soil, do not survive well in disturbed or compacted soil and require deep soils for root growth⁵. The application and site plans do not show how much of the natural soils around the tree will be fenced and kept in natural condition and the soil kept moist but well-drained. This research and planning is essential if there is an honest attempt to save this tree. It is shocking that the state would allow this endangered tree to be so perilously exposed to danger from the never-ending truck traffic that will be using this site. There is no evidence that the fence proposed to be placed around this tree will provide the protection it needs to survive and thrive. Frankly, it is disgraceful that this endangered Willow Oak is being put in harm's way, disconnected from its natural habitat, unable to reproduce through acorns or stump growth as it naturally does, vulnerable to the activities at this very active facility. DRN is highly skeptical that this tree will survive and there is no evidence of any plan to insure its health except for a lone fence.

There is a large wetland area in the middle of the property – a total of 11,411 square feet according to the application for the solid waste permit. To build the facility these wetlands would be cut up, with half of the wetlands destroyed and half protected in an area on the northeast corner of the property where the existing wetlands will be added to an artificially created wetland and a rain garden. DRN supports, installs and provides guidance about how to build and maintain a rain garden but we do not support rain gardens as a substitute for natural wetlands and they are not equivalent to wetlands in function, habitat and natural value. The wetlands would be sequestered from the permitted area of the facility, which is important, but it cannot be assumed that the area set aside will replace the wetlands that will be destroyed in the central/southeastern

⁵ https://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_2/quercus/phellos.htm

portion of the site. See discussion below under Site Development regarding the encroachment of waste storage components on the wetlands, an error that must be corrected.

Creating wetlands is very difficult to accomplish and requires expertise and proper management. If the area set aside for the created wetlands in the northeast portion is hydrologically connected and similar in properties to the remaining wetlands, the new wetlands could possibly survive here but there is not enough information provided about the wetland characteristics to support a conclusion that wetlands can be successfully created and added to this location. The proposed MED-FLEX operations, the removal of trees and forest environment on the property, the constant truck and car traffic, with the roadway abutting two sides of the set-aside wetlands area, all mitigate against the successful creation of a healthy habitat and wetland environment at this location.

According to the application, there are protected species of concern on the property dependent on the existing habitat. “The Pennsylvania Fish and Boat Commission review letter specified that potential habitat for three (3) species of concern may exist within the proposed limit of disturbance for this project. The species of concern include *Kinosternon subrubrum subrubrum* (Southeastern Mud Turtle), *Pseudacris kalmi* (New Jersey Chorus Frog), and *Lithobates sphenoccephalus/kauffeldi* (Coastal Plains Leopard Frog).”⁶ It is unclear if the required additional evaluations have been done; there was no report in the Right to Know records that DRN received. It is essential that these species be evaluated as required by the PA Fish and Boat Commission as it can be expected these species will be extirpated from this site and perhaps the region if they are not protected. If the wetlands and forested habitat will be removed to the point where these species cannot survive, as it appears, the applicant should be required to relocate these species to the nearest similar ecosystem to save these individuals.

The Neshaminy Creek is located within one mile. There is an intermittent stream just to the north of the Keystone Industrial Park that flows to the Neshaminy that is not shown on any mapping prepared for this application; this tributary appears to be a few hundred feet away from the site and should be mapped and measured accurately; this may provide habitat for species. There are also two public parks – Hilltop Park, which is 900 feet away, and Newport Park, which is 3000 feet away. These two parks are noted in the application but there is no evidence as to protections that would be provided to these public amenities that are used for recreation and the species that live there from wind dispersion of emissions from the facility, from the added truck and car traffic emissions, from the introduction of noise and lighting, or other impacts. There is also no discussion of the negative impacts of noise, lighting, and facility activity on the species of concern on the site. The application assumes there will be no negative impacts without support for this conclusion.

Environmental Justice Evaluation

The application includes an evaluation of environmental justice as required by regulations. It is stated “EARTHRES searched PA DEP eMapPA database for areas defined as environmental justice census tracts. Census tracts of concern have a 30% or greater minority population or 20% or greater population at or below the poverty level as defined by the U.S. Census Bureau. The enhanced public participation provisions

⁶ MED-FLEX, Inc., Waste Processing and Transfer Permit Application, August 2020, Environmental Assessment Form D Narrative Response, Page D-8, PDF: P. 139 of 212, App 1 of 3 and August 2020 letter from PA Fish and Boat Com., PDF: P. 14 of 231.

of the policy apply to census tracts of concern located within the half-mile area of concern from the proposed facility. Since the proposed facility lies entirely within Census Tract No. 1003.04, the environmental justice guidance requirements apply to the MED-FLEX facility.”⁷ There is no further discussion about what enhanced public participation was conducted or how the public was given full and fair access to information about the project by DEP. There is no assessment of the potential impacts from this facility on the environmental justice communities that will be impacted. The nearest residence is only 800 feet away and there are neighborhoods within about ¼ mile. The proposed facility is located in an Industrial Park but the Park is nestled adjacent to large neighborhoods. This is not an isolated industrial location, it is adjacent to homes, businesses, and other commercial operations.

Site Development

There appears to be an error in the siting of waste storage proximate to the protected wetlands, according to the Site Plan.⁸ It is stated: “No waste storage within 100 feet of existing wetland to remain and replacement wetlands.”⁹ However, both the radiation isolation area and the office waste dumpster are adjacent to the remaining sliver of natural wetland in the southeast corner. The scale on the map says that 1 inch equals 30 feet and both of those features are about an inch (or 30 feet) from the remaining natural wetland. This requires correction so that the NOTE #9 prohibiting storage within 100 feet is implemented.

DRN notes that the impervious surface of this site will be increased beyond what the Comprehensive Plan for Bristol Township allows due to action by the Zoning Hearing Board.¹⁰ The impervious surface is allowed to be increased to 87% rather than the 65% normally allowed. This results in more and greater velocity of stormwater runoff and less infiltration of precipitation. The areas protected from disturbance outside of the permit limits will absorb precipitation but it will be much less than previously absorbed; the survival of the site’s vegetation, including the Willow Oak tree, is threatened by this reduced absorption and infiltration. DRN also notes that the disturbance of 94% of the woodlands was approved by the Zoning Board decision rather than the 50% limit in the Township’s Comprehensive Plan. Trees that are being replaced according to the plan will have conditions with less friable soil, less replenishment of groundwater, and less natural ecological support.

DRN has questions related to the site plans, specifically Drawings D-001 and D-002 regarding the wetlands and the “off limits” areas and storm flows from the developed site.

DRN requests answers to these questions:

How will the stormwater be routed into the existing stormwater conveyance system in Frost Road¹¹? It is stated that the rate, volume, and quality of the stormwater will be examined by DEP and apparently, there is a NPDES permit in place. Has an analysis been done of the potential for flooding and the impact to water quality from the deposition of air pollution from the facility onto surface water, vegetation, and wetlands and the release of pollutants to water from spills, leaks or accidents on the site?

⁷ MED-FLEX, Inc., Waste Processing and Transfer Permit Application, August 2020, Environmental Justice Evaluation; PDF: p. 119-120 of 212, App 1 of 3.

⁸ MED-FLEX, Inc., PNDI Review, Site Plan, Attachment C, Drawing #D-001, PDF: P. 4 of 231, App 2 of 3.

⁹ Ibid, NOTE #9.

¹⁰ MED_FLEX Application before Bristol Township Zoning Hearing Board, PDF: page 36 of 231.

¹¹ MED-FLEX, Inc., Waste Processing and Transfer Permit Application, August 2020, Environmental Assessment Form D Narrative Response, Page D-3, PDF: P. 134 of 212, App 1 of 3.

Air Emissions

DEP has deemed this project exempt from air quality plan approval and operating permit thresholds. DEP issued this decision on 05/21/2020: “Because the autoclave is sealed and vents indoors, estimated PTE are not provided for this RFD application. This source does not include operations that would result in fugitive or dust emissions. This source is exempt from plan approval requirements pursuant to Trivial Activity #36 under Air Quality Permit Exemptions – ‘Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam’.”¹² DEP states that the processing units vent indoors so there are no outside emissions.

The autoclave is “a machine that uses high pressure steam for a very specific period of time and temperature to kill pathogens, such as bacteria or viruses. This process disinfects the waste prior to final disposal.”¹³ The removal of air under pressure is a key action in the disinfection process. DRN points out that that even though the processing building is closed, it can be expected that emissions that will escape. The bays are open when the trucks move into place, the entrance for trucks to drive in is large and open, releasing emissions from inside to the outdoors when a truck drives in. Considering the large amount of truck traffic and the round-the-clock processing, there should be a calculation of the amount of time that bays and the drive-in will be open to provide truck access and egress. The materials being handled and processed at this facility are potentially dangerous for human health. The lack of an air quality permit or plan means that there will be no air monitoring and no way to track if, in fact, there are emissions of substances that can negatively impact public health and the environment. The Request for Determination (RFD) submitted by the applicant acknowledges that Hazardous Air Pollutants will be emitted. The applicant’s RFD states that there will be emissions from the Boiler: Particulate matter, PM10, PM2.5, SOX, CO, NOX, VOCs and Hazardous Air Pollutants¹⁴. Additionally, the dust and truck emission are not included in the analysis.

Odorous compounds could be handled at the facility and the autoclave process can emit odors. It is stated in an email from DEP that the main complaint at a similar facility at Marcus Hook, PA is poor odor control. DEP SE Regional Office staff state in the email dated January 19, 2021 that this facility will use a shredder and the Marcus Hook facility does not. This needs further analysis and verification to assure that odors will not be a problem at this facility. Odors are not only a nuisance, which is a significant adverse impact, but odors can also indicate dangerous emissions.

DRN requests answers to these questions:

Will there be any fans, blowers, air exchangers, heating and cooling system, or ventilation provided for the building to the outside? How will emissions for these be controlled?

Since there are no fugitive or dust emissions expected, and the facility operations vent indoors, how will air quality be monitored at this site?

Will workers be required to wear protective gear and will they be monitored for radiation exposure?

Will storage containers of unacceptable waste that will not be processed at this facility be vented? How will emissions be controlled from these containers?

Are the estimated emissions in the RFD based on the ultimate operating level?

¹² Ibid, PDF: p. 59 of 212.

¹³ <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/sterilization/steam.html>

¹⁴ Ibid, PDF: p. 64 of 212.

Radioactive Materials Handling

The permit application contains information on the handling of radioactive waste and the monitoring system on the site. Only certain medical materials will be allowed to be processed. Details are provided for the scanning of vehicles as they enter the site by radiation monitors. It should be affirmed if Health Physics Associates would be retained; the documents state only that they “may be retained to perform radionuclide characterizations at the site when an alarm occurs”.¹⁵ The Radioactive Protection, Action, and Monitoring Plan is dated 2013 and should be updated.

DRN requests answers to these questions:

What is meant by this statement in the Radioactive Protection, Action, and Monitoring Plan: “Waste identified as containing detectable radioactive material acceptable for disposal under the PA DEP regulations will be stored for decay and not processed until the radioactivity at contact with the container is below 10 μ R/hr.”¹⁶ It is stated elsewhere that storage time cannot exceed 5 days. Is this an exception?

If the radioactive materials are undergoing decay while stored on site, where do the “daughter” breakdown materials go and how are they handled and disposed of safely?

Will there be radiation monitors within the building to monitor for cumulative levels of radioactive materials within the structure?

Will there be continuous monitoring of the containers that store radioactive materials?

Will there be scanning of processed material as it leaves the site?

Will there be scanning of unprocessed material as it leaves site?

Thank you for the opportunity to comment on this permit application and this proposed project.



Maya van Rossum
the Delaware Riverkeeper



Tracy Carluccio
Deputy Director
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¹⁵ “Radioactive Protection, Action and Monitoring Plan”, MED-FLEX, Inc., Bristol Twp., Bucks County, October 4, 2013, Rev 1, p.5.

¹⁶ “Radioactive Protection, Action and Monitoring Plan”, MED-FLEX, Inc., Bristol Twp., Bucks County, October 4, 2013, Rev 1, p.3.

