The Dickerson Resource Recovery Facility

Issues, Concerns and Questions

Submitted by the Montgomery County Sierra Club Group

to the Montgomery County Department of Environmental Protection

April 18, 2017

Objectives

Sierra Club submits this letter in response to short-term and long-term challenges at the Dickerson Resource Recovery Facility (DRRF).

We believe that the Department of Environmental Protection (DEP) and the County Council understand the seriousness of these challenges and will work diligently to address them. The Sierra Club's intention is to work collaboratively with DEP and the County Council to address these challenges.

Primary concern: Recent fires

The series of 2016 fires at DRRF greatly concerns the Sierra Club (as well as many county residents). We are concerned about the environmental and public health consequences of the way that DRRF is currently managed.

- **Requested actions:** We ask that the County investigate carefully and thoroughly the specifics of the recent fires. We further request that the County develop and implement a plan to assure that operational shortcomings are addressed and that we will experience no re-occurrence of such problems.
- Attached to our letter are a set of questions that we urge the County to address as it investigates the fires and
 develops plans for improved DRRF management. DEP's 2017 initial investigation report and an end-of-year
 updated report are the ideal places to address these questions. The Sierra Club thanks DEP for reviewing and
 considering these important requests.



Montgomery County Group

April 18, 2017

RE: Dickerson Facilities Situation

Dear Director Feldt,

The Montgomery County Sierra Club Executive Committee would like to express our deepest concerns about the recent fires at the Dickerson Waste facility. We appreciate the work that the Department of Environmental Protection (DEP) and the Division of Solid Waste Services have done to provide County residents with solid waste disposal and recycling. We also acknowledge that DEP is working hard to investigate the circumstances, and causes of the incinerator fires and DEP is creating additional protocols and procedures to address areas that need improvement.

Over the years, the Sierra Club and our many members have worked closely with DEP on various projects, contributing many hours of volunteer time, assisting with the creation of the County Climate Protection Plan, energy efficiency programs, including the Benchmarking Program, the development of the Green Bank and many other projects and programs that benefit county residents and businesses. Some in our membership and leadership participate formally or informally on the county's advisory committees (SWAC, EAQAC etc.). We respectfully request the information noted in this packet, so that we can analyze and work collaboratively with the County on improving the current solid waste services. Our goal is to work with the County to create more sustainable solid waste services that protect public health and the environment.

Members of our Executive Committee in Montgomery County and a Sierra Club representative from Frederick County attended the December 2016 public meeting near the facility and the Council's February 2, 2017 public briefing. We appreciated the opportunity to hear directly from officials including Department of Environment Protection staff (DEP), a public health officer, the fire and police chiefs, plant managers and others. While we understand the investigation is ongoing, based on the information we have obtained, we want to raise the following short-term and long-term concerns and issues as described below. We would appreciate being directed to any further additional or updated information. Ultimately, we believe a public hearing allowing citizen input should be scheduled upon the completion of your investigation to allow further discussion and dissemination of information.

Fire Prevention, Accountability and Financial Responsibility

We understand that there were five fire incidents requiring a Montgomery County Fire and Rescue Service (MCFRS) response in 2016 including those in July, August, October, November and December, the last of which took nearly two weeks to contain. The Montgomery County fire chief explained that "spontaneous combustion of organic material" is one potential cause of a trash fire. The only way to remove this potential cause is by removing organics from solid waste. Another cause the fire chief identified as a possible source was objects such as a battery coming in contact with metal, generating an ignition spark. An improved solid waste management plan which included more robust recovery, reuse and recycling could also have an impact on this potential cause of a fire.

We are particularly concerned with the amount of material in the pits as this seems to be the area where the primary source of the fires was located. According to the briefing information provided, we understand that there are currently no county or state standards or limits existing, for the amount of material in the pits. Please verify if there is a lack of formal government standards or limits and clarify if there are any temperature monitors or sensors in the pits.

It seems likely that the trash pits will continue to be a major factor to the severity and the ability to prevent the fires, especially if there are no required standards for volume and monitoring in those locations. The briefing material indicates that Covanta has agreed to temporary limits and management practices on pit storage levels. We urge the Council and staff to work with expert consultants and state officials to establish permanent limits on pit storage levels and monitoring requirements and ensure that they are followed. Given the fact that an occupational safety complaint has already been made against the county, we recommend that the county carefully consider the liability and possible consequences of not requesting required standards on pit storage and monitoring from state officials. We also recommend a review of the experiences, regulations and standards required in other states where incinerators are located.

We are also concerned about the planned transfer of responsibility for ash recycling, non-processable waste disposal and bypass waste disposal, from the county to NWMDA on July 1, 2017. Please provide the details and name of the planned contractor. Since Covanta did not take adequate measures to prevent the series of fires described above, the Sierra Club is concerned about additional responsibilities being requested of, or awarded to Covanta under the current circumstances. Please also indicate any additional costs to county residents for the transfer of this responsibility.

The Sierra Club respectfully requests that the county conduct a full accounting of how the facility was operated and maintained during 2016 and provide a full report to county residents of any violations of the operating permits. We also acknowledge the Maryland Department of Environment's (MDE) site complaint. Montgomery County should hold accountable the Dickerson facility and all contractors and vendors that operate on the site for any transgressions that occurred. It was partially clarified at the public briefing who would be responsible for the costs incurred to manage the fires and their aftermath. The planned investigative report needs to include how these costs will be covered. Please fully clarify in the investigation specifically which costs Covanta and/or other contractors will be responsible for and which costs will be incurred by the residents of Montgomery County.

Notification of Local Residents and Public Health and Safety Issues

At the December 2016 public meeting, several residents complained that they had not been properly notified of the recent fire by county officials. It was noted at the meeting that approximately 31 households that had landline phones were notified. We understand that the fire burned trash for over 10 days, and the emissions from this fire were apparently not processed through the incinerator filter equipment, which is designed to remove toxic substances. As a result, during this time, there was an increase in particulate matter released into the air, and the emissions may have included dioxins, sulfur dioxide, lead and mercury; as well as a toxin called polycyclic aromatic hydrocarbons. These substances are prominent in open trash fires and have been linked to serious health outcomes.

It was indicated at the meeting in Dickerson that two monitors for particulate matter had been set up in an effort to monitor air quality after the majority of toxic emissions were released. It was also indicated that there was an effort underway to obtain more monitors. Please provide information on whether air quality monitoring equipment will be installed permanently for continuous monitoring or whether the equipment will be available for on-site monitoring in the event of a similar emergency.

Regarding notification, it is critical that local residents be notified when an emergency occurs. We ask that you expand your efforts to notify residents living in the area of the facility to include contacts by cell phones, text, email and any other means necessary to ensure that local residents can respond, ensure their safety and protect their health during these events. Attendees at the Dickerson meeting noted they experienced eye, nose and throat irritation which can occur as a result of formaldehyde and other organic gases being released into the airshed.

The Washington Post reported that smoke from the blaze prompted the county to warn residents living within a mile of the plant to stay indoors or leave the area if they had asthma or other lung or heart health challenges. The briefing material indicated that residents within 1.5 miles were notified. What scientific evidence ensures that those beyond the 1.5-mile radius are not at risk in terms of hazards to their health? An effective science-based notification range is another area that needs to be explored and determined to ensure the safety of residents in the future. We strongly encourage both long and short-term studies to determine the impact of the facility on the safety and public health of all county residents.

Protocols for Emissions and Substance Monitoring

We understand that there is some monitoring of air quality, facility emissions, soil and water including the Potomac River. However, it has come to our attention that the current level of monitoring may not be adequate especially when there are fire and substance emission events. At the December 2016 public meeting in Dickerson, we understood that the soil is only tested on a quarterly basis and it is unclear if there is any special testing conducted during a substance emission event. Increased monitoring of land, air, water and plant emissions during and after a fire event should be considered to inform us of ongoing operations at the facility and help improve public health.

The Sierra Club respectfully requests that the county conduct a full review of the current monitoring regime and complete a transparent and prompt report of any and all deficiencies related to current monitoring practices and frequency of testing. We specifically request that the county consider continuous monitoring of emissions from the Dickerson facility on a daily basis. Such monitoring could capture what emissions are occurring during real time and could provide assurances that the emissions are within the allowable levels established by the EPA. Such monitoring also could give the Health Department valuable insight into what substances have been emitted and at what levels. Greatly increased and informed guidance could be provided to emergency

personnel, residents, public health professionals and medical personnel so they can respond more effectively and better determine what actions may need to be taken.

Occupational Safety of First Responders

The Sierra Club acknowledges the concerns expressed by those required to respond to the recent fires and other hazards related to operation of the Dickerson facility. We understand that Local 1664 of the International Association of Firefighters filed a complaint indicating the county did not adequately evaluate the hazards of the site and as a consequence, the firefighters did not have adequate protective gear.

We note these concerns expressed by Local 1664 related to injuries and health effects sustained by those responding to this event, and urge a review of the process involved to evaluate hazards of this facility. We ask that all laws and regulations, including occupational safety and health standards related to the Dickerson facility be reviewed and strictly enforced as they relate to employees of the facility and those responding to fires and other hazards at that location. The facility and all contractors and vendors should meet the highest standards in this area and they should be held accountable by county officials when these standards are not met. The reporting of violations of standards should be prompt and transparent. We also ask the county to develop and provide specialized training for first responders, related to the operation of the incinerator and fire prevention/containment within the incinerator.

The Future of the Dickerson Facility

The Sierra Club does not consider long-term incineration of trash an acceptable energy solution. Instead we favor aggressive progress towards zero waste solutions, including food waste recovery programs, greatly expanded composting of organic materials and overall, reduction of all forms of waste. The briefing material indicates that approximately 62 percent of the county's residential waste is currently diverted. We ask that the county set a higher diversion goal of 75-80 percent or more over the next several years and take aggressive steps to meet that goal with increased diversion rates from commercial sources as well. Such a shift would help promote public health and decrease the impact on climate change. Removal of organics could decrease a significant percentage of current solid waste processed at Dickerson. The decrease would also help lower the significant and increasing maintenance costs at the facility and reduce the probability of a fire resulting from spontaneous combustion.

Although the Environmental Protection Agency (EPA) defines trash incineration as, "renewable" the Sierra Club supports the continued development and expansion of clean renewable energy sources such as wind and solar energy which do not pollute the environment and contribute to climate change. We believe that the continued development of truly clean sources of energy are essential to power our economy and address the clear encroachment of climate change globally and in our region as well. We continue to urge the County Council and county government to expand and enhance recycling, to move towards a zero waste and zero emission future, to rapidly expand clean renewable energy sources and to develop a long-term plan for the retirement of the aging Dickerson facility.

The information provided at the county's February 2017 public briefing indicates that the long-term bonds for the facility have been paid off which includes a savings in the budget of over \$19 million in FY2017. Other county revenue sources related to environmental sustainability include the energy tax, renewable energy credit revenue from Dickerson and landfills, the county's plastic bag tax, styrofoam ban enforcement fees and enforcement fees from other county laws. We also note the significant cost savings obtained through the

Department of General Services efforts to improve energy conservation across the county's properties, programs and services. We urge the Council to review these sources of revenue and determine which portion of those funds no longer need to be directed towards bonds or administrative and program costs. We ask that the Council instead direct those funds to important investments in strategies such as larger scale composting of food waste and other materials for a county that now has a population of more than a million residents.

The Sierra Club supports the recent Bill 28-16 Strategic Plan to Advance Composting, Compost Use and Food Waste Diversion. Diverting food waste from the solid waste stream not only can have the benefit of reducing fire risks, composting organic materials has significant agricultural and environmental health benefits. Composting food waste is also part of the overall sustainability plans noted within the goals of the County Climate Protection Plans.

We support Montgomery County's plans to conduct a full review of the current governance and management of the Dickerson facility. We add our voice to those who believe the current management programs do not provide enough county oversight over the Dickerson facility's operations. Please provide a complete analysis and recommendation in the county's forthcoming recommendations. Please consider any additions of staff, training and programming needed to accommodate increased oversight in the FY18 and future budgets. We urge the county to ensure that all third-party reviews have sufficient oversight by the county Council and staff and that all potential conflicts of interests or special interests related to any review of the Dickerson facility's operation and future are avoided. County residents must have full confidence in the objectivity of results and recommendations related to the facility so that the best decisions in the public interest will be made.

We ask that the county utilize the forthcoming report and study to assess whether the recommended improvements will meet the health and safety requirements necessary to protect county residents. We also ask the Council to consider resources for critical investments which could greatly reduce the amount of waste transferred to the aging facility and help prevent future fires. This is a critical time in the decision-making process for the future of this facility, for sustainability in our county in general and for our planet. We sincerely hope and ask that Montgomery County make significant progress in these areas before the Dickerson facility's permit comes up for a renewal decision in 2021.

In addition, we commend the County Council and county government for supporting the growth and development of clean energy industries and jobs, and we urge the county to expand these programs. This should include ongoing workforce training, continuing education programs, and other support for individuals and families in economic transition.

In closing we thank the County Council and county government for your efforts to address these concerns and look forward to forthcoming studies and solutions to the concerns related to the Dickerson incinerator. Again, upon the completion of the county's investigation we want to emphasize the need for a public hearing with citizen input to begin the process of developing a long-term sustainable waste management plan for Montgomery County. We look forward to continuing our working relationship towards our common goals.

Best Regards,

David W. Sears, Ph.D. Chair, and the Montgomery County Sierra Club Group Executive Committee

Contact person: Linda Andrews, Lead of Montgomery County Sierra Club Group Zero Waste Program (swimandrews@yahoo.com)

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Key Investigation Questions

Sierra Club urges the County to address the following key questions in its investigation of the recent fires. If these are not addressed in DEP's April 2017 report then we suggest they be answered separately.

- 1. For each fire, what was the source?
- 2. For each fire, how did the fire evolve?
- 3. For each fire, how did the temperature monitors and sensors work? (Note: If there are no temperature monitors or sensors please include that information in the response.)
- 4. For each fire, why did the temperature monitors and sensors not alert personnel in a timely manner in order to prevent the fire?
- 5. For each fire, did the functioning of the temperature monitors/sensors meet applicable County and State standards? (Note: If there are no County or State standards existing please include that information in the response.)
- 6. For each fire, what role did the amount of material in the pit play in contributing to the fire?
- 7. For each fire, did the amount of material in the pit meet applicable County and State standards?
- 8. For each fire, what were the total costs (that is, additional costs due to the fire)?
- 9. For each fire, how were the total costs allocated among stakeholders (Covanta, other contractors, County government, other)?
- 10. Based upon an analysis of the fire investigation (above), how does the County intend to improve the use of the temperature monitors/sensors at DRRF? For instance, are updated monitors needed? Is more frequent reading of monitors needed? Do new County and/or State standards need to be established? Do DRRF personnel need to be trained to better understand how to use these monitors?
- 11. Based upon an analysis of the fire investigation (above), how does the County intend to improve the monitoring of the amount of material in the pit? For instance, when a pit is deemed full, will further additions to the pit be prohibited? How would such a prohibition be implemented? Do new County and/or State standards need to be established?
- 12. Based on an analysis of the fire investigation (above), can the County document any violations of the DRRF's operating permits? If there are any such violations, what is the County's plan a) to levy penalties; and b) to assure that such violations will not re-occur?
- 13. Beyond the temperature monitors/sensors, what is the current situation in terms of monitoring of air, water, and soil? Is the current monitoring adequate? Is air quality monitored daily; if not, why not? Are sufficient monitors in place? Is such monitoring in compliance with applicable Federal, State and County standards? If any shortcomings exist, how does the County intend to improve its monitoring of air, water, soil?
- 14. How well has the County done in informing the general public re: the fires; and (more broadly) the current situation at DRRF? How does the County plan to make improvements in providing such information?
- 15. How well has the County done in notifying the residents living near the DRRF a) about the short-term dangers re: the fires; and b) the longer-term health implications (e.g., air contamination during normal DRRF operations)? How does the County plan to make improvements re: such notification?
- 16. How well has the County done in providing training for first responders in terms of the unique characteristics of handling a fire at DRRF? How does the County intend to make improvements re: such training?
- 17. What does the County need to do at the macro level to improve the management of DRRF? For instance, what changes in staffing and/or training at DEP and/or at DRRF are needed to assure no re-occurrence of the fires?
- 18. What additional oversight does the County need to provide of DRRF operations?
- 19. The Sierra Club understands that, as of July 1, 2017, a new contractor will be responsible for ash recycling, non-processable waste disposal, and bypass waste disposal. Which contractor has been selected?