

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

WASTE MANAGEMENT DISPOSAL)	
SERVICES OF MAINE, INC.)	LICENSEE’S RESPONSE
CROSSROADS LANDFILL)	TO APPEAL AND
PHASE 14 EXPANSION)	REQUEST FOR PUBLIC
NORRIDGEWOCK)	HEARING
SOMERSET COUNTY, MAINE)	
#S-010735-WD-YB-N)	
(APPROVAL WITH CONDITIONS))	
)	

Licensee, Waste Management Disposal Services of Maine, Inc. (“WMDSM” or “Licensee”), hereby responds to the appeal and request for public hearing of the above-captioned Order filed by Conservation Law Foundation (“CLF” or “Appellant”) dated June 11, 2021.

INTRODUCTION

CLF claims the Department of Environmental Protection (the “Department” or the “DEP”) failed to conduct an adequate review of WMDSM’s License Application for approval to construct and operate an expansion of its solid waste landfill (the “Phase 14 Project,” “Phase 14” or “Project”) at its Crossroads Facility in Norridgewock, Maine (the “Crossroads Facility” or “Facility”). On the contrary, the Department’s determination that the Project complies with all applicable licensing criteria is based upon an exhaustive permitting process, nearly four-years in duration, that is well supported by the record. As discussed below, the process included a six-volume permit application, an adjudicatory public hearing, numerous rounds of agency consultation, and multiple public meetings, all allowing for extensive public comment and input. As a result, the Board of Environmental Protection (the “Board”) should uphold the Department’s decision and deny the request for a public hearing on the appeal.

PROCEDURAL BACKGROUND

The licensing process for the Phase 14 Project began in December 2017,¹ when WMDSM submitted its required Preliminary Information Report (“PIR”) on the feasibility of the site, which was reviewed and accepted by the DEP.² WMDSM subsequently submitted its Public Benefit Determination Application (“Public Benefit Application”) and obtained a positive finding for the Project.³ The public benefit determination process included public notice, a public meeting in August 2018, and the opportunity to comment on the DEP draft public benefit determination.⁴ This process afforded CLF the opportunity to raise many of the same issues that are the subject of its Appeal.⁵ CLF did not participate in the public benefit determination process.⁶

Prior to submitting its Solid Waste Licensing Application for the Phase 14 Project (the “License Application”), WMDSM held a public informational meeting in September 2019 at the elementary school in Norridgewock (the “Town”).⁷ WMDSM also provided public notice of its License Application.⁸ The meeting provided information on many of the same issues that are the subject of this Appeal along with an opportunity to discuss these issues with WMDSM and its project team.⁹ Members of the public and Town attended the meeting.¹⁰ CLF did not attend.

WMDSM’s six-volume Licensing Application was accepted for processing in November 2019.¹¹ Over the course of the intervening almost 18 months, the Department and its technical

¹ For clarification, it should be noted that the PIR was submitted on December 20, 2017, the Department’s first review comments were issued January 29, 2018. WMDSM submitted additional clarification to the DEP on February 21 and March 2, 2018. *See* Order at 7.

² Order at 7.

³ *Id.* at 7-8.

⁴ *Id.*

⁵ 38 M.R.S. § 1310-AA.2; Order at 45-49 (describing provisions of public benefit determination).

⁶ August 30, 2018 Transcript In Re Informational Meeting for Proposed Expansion of the Crossroads Landfill, Phase 14, WMDSM.

⁷ Order at 8-9.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Order at 6.

team reviewed the application, commented on various aspects of the Project, and requested and received responsive information from WMDSM and its project team.¹² The Department maintained a public website and uploaded information regarding the Project on a regular basis.¹³ The Department also held a public adjudicatory hearing on the Project in October 2020.¹⁴ The opportunity for members of the public to participate in the adjudicatory hearing as intervenors was properly noticed.¹⁵ The Town of Norridgewock was the only party to participate as an intervenor.^{16,17}

The adjudicatory hearing was publicly noticed and notice was sent to all interested persons, including CLF.¹⁸ All procedural orders associated with the public hearing were also sent to the interested persons, including CLF.¹⁹ Because of the COVID 19 pandemic, the hearing was held virtually.²⁰ At no point prior to the hearing did CLF object to the virtual format.²¹ Additionally, to facilitate public participation, the Town provided space for members of the public who may have lacked the technology to participate remotely to testify from the Town office.²² CLF testified during the public session of the public hearing and, on the last day for submission of public comment, submitted more than 30 pages of written comments.²³ On June 11, 2021, CLF filed this

¹² *Id.* at 6-13.

¹³ *Id.* at 11-13.

¹⁴ Order at 11.

¹⁵ *Id.*

¹⁶ *Id.* at 9.

¹⁷ It should be noted that one day *after* the 10-day period provided for parties to submit petitions for leave to intervene in the public hearing had expired, CLF requested a one-week extension explaining (after three years of process), the matter had just come to the organization's attention due to COVID-19 constraints. *See* email from Mr. Mahoney to Ms. Butler, March 17, 2020. The Department granted the extension. *Id.* CLF decided not to request intervenor status. *See* email from Mr. Mahoney to Ms. Miller, March 27, 2020.

¹⁸ Order at 11.

¹⁹ *Id.*

²⁰ *Id.*

²¹ *See id.*

²² *Id.*

²³ Public Hearing Transcript (the "Transcript") at 49:7-58:11, Oct. 1, 2020; Comments Submitted by CLF on the Phase 14 Project ("CLF Comments").

appeal with the Board.²⁴ It should be noted that the claims raised in CLF's appeal are nearly identical, and in many instances the actual text of the appeal *is* identical to CLF's comments filed with the Department, which WMDSM previously responded to on multiple occasions in a timely and comprehensive manner and the Department considered prior to issuing its final decision on the Application.

DISCUSSION

I. THE PHASE 14 PROJECT IS FULLY SUPPORTIVE OF THE STATE'S SOLID WASTE MANAGEMENT HIERARCHY AND RECYCLING GOALS

CLF claims the Phase 14 Project, "... undermines the requirements of Maine's Solid Waste Management Hierarchy, State Recycling Goals, and their implementing regulations."²⁵ This claim is categorically false.

The State's Solid Waste Management Hierarchy (the "Hierarchy") recognizes the essential role that projects like Phase 14 play within an integrated waste management system.²⁶ More specifically, as demonstrated in both its License Application and Public Benefit Application, the Phase 14 Project fully supports and promotes a wide range of programs that process materials as high up on the Hierarchy as possible and provide a necessary outlet for materials that cannot be further reused, reduced, recycled or composted.²⁷ Contrary to CLF's claims, the Crossroads Facility and its Phase 14 Project perform the *exact* role landfills are intended to play within the State's Hierarchy and recycling goals, fully consistent with and supportive of both objectives, as further established below.

²⁴ Appeal at 1.

²⁵ Appeal at 12.

²⁶ See 38 M.R.S.A. §2101 (Solid waste facilities are specifically listed as a tier within the Hierarchy performing a critical role in furthering the State's "integrated approach to solid waste management" not overtly undermining the approach as CLF argues); *see also* Order at 43-44 (DEP generally discussing how solid waste facilities serve as an important component of the Hierarchy); Public Benefit Determination Application at 15-22.

²⁷ License Application – Vol. I at 29-35; Public Benefit Determination Application.

First, the vast majority of wastes accepted for disposal at the Crossroads Facility have been processed, recycled, or reduced to the maximum extent practicable and cannot be incinerated.²⁸ The Crossroads Facility provides a critical outlet for these wastes that would otherwise have to be transported at significant economic and environmental costs to more distant disposal locations.²⁹ Moreover, Crossroads also makes other important Maine-based recycling operations possible like Maine Waste-to-Energy (formerly the Mid-Maine Waste Action Corp. (“MMWAC”)) and Penobscot Energy Recover Company (“PERC”), as well as supporting the 115 towns and cities within the Municipal Review Committee (“MRC”).³⁰ CLF entirely ignores WMDSM’s role supporting these recycling operations that promote and support the State’s Hierarchy as well as advancing recycling and composting goals.

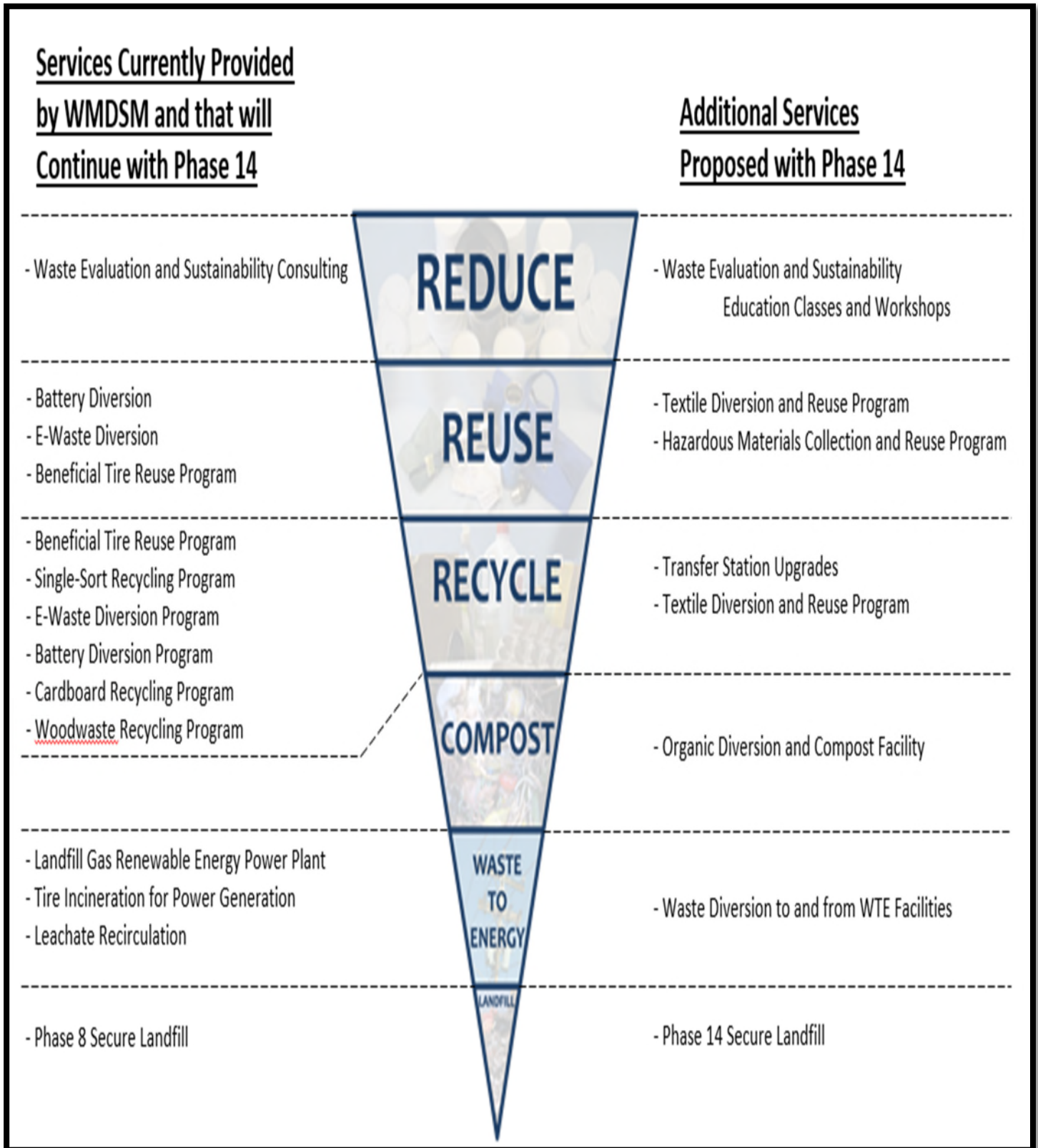
Furthermore, the Phase 14 Project also advances numerous Hierarchy-related and recycling programs that incentivize reduction, prioritize reuse, develop recycling and composting programs, and facilitate renewable energy. Figure A below, first included in WMDSM’s Public Benefit Application and later in its License Application, concisely illustrates each of the programs currently operating at the Crossroads Facility, which are shown on the left side of the figure. The figure also includes additional programs proposed as part of the Phase 14 Project on the right side of the figure.

²⁸ Public Benefit Determination Application at i, 10-12.

²⁹ *Id* at 1-2.

³⁰ Public Benefit Determination Application at 15-17.

Figure A. Consistency of Phase 14 With State Hierarchy and Recycling Goals



When taken together, these programs promote and foster a comprehensive approach to managing solid waste that supports and furthers opportunities at the top of the Hierarchy as well as the State's recycling goals.³¹ While the argument that landfills undermine the State's Hierarchy and recycling goals may be a helpful talking point for CLF, it is not supported by the facts. As Table A demonstrates, and as the Department appropriately concluded, the Phase 14 Project is consistent with and fully supportive of the State's Hierarchy and recycling goals.³²

A. Phase 14 Supports Numerous Recycling Programs At Crossroads And Throughout The State

CLF claims that the Phase 14 Project does not support the State's Hierarchy and recycling goals because it does not collect and process recyclable material from 32 communities within its disposal network.³³ CLF ignores the fact that WMDSM does not collect recyclable materials from these municipalities *because they already have recycling programs in place*.^{34, 35} Some municipalities run their own recycling programs.³⁶ Other municipalities contract with other commercial providers.³⁷ In either case, it is clear that the 32 municipalities not receiving recycling services from WMDSM *are not* landfilling recyclables at Crossroads, as CLF suggests.^{38, 39} CLF's

³¹ It should be noted that each of these programs is discussed in significant detail in WMDSM's License Application, which incorporates WMDSM's Public Benefit Determination Application.

³² To the extent CLF challenges the Department's Phase 14 Public Benefit Determination, it cannot do so here. The Public Benefit Determination was issued in December 2018 and was not appealed by CLF or any other party. Moreover, 38 M.R.S. § 1310-N(3-A)(B) expressly provides that the public benefit determination is not subject to review by the DEP or the Board as part of the solid waste licensing process. 38 M.R.S. § 1310-N(3-A)(B).

³³ Appeal at 14.

³⁴ Public Benefit Determination Application – Response to Department Review Comments, Sept. 14, 2018, at 3; *see also* Public Benefit Determination Application – Response to Department Review Comments, Oct. 31, 2018, at 2-3.

³⁵ It should also be noted that WMDSM also provides recycling services to large commercial customers including, Colby College, Sappi, Sugarloaf Mountain Corp., and Unity College. License Application – Vol. I at 29.

³⁶ Public Benefit Determination Application – Response to Department Review Comments, Sept. 14, 2018, at 3; *see also* Public Benefit Determination Application – Response to Department Review Comments, Oct. 31, 2018, at 2-3.

³⁷ *Id.*

³⁸ Conversely, it is also important to note that WMDSM provides reduction, reuse and recycling services to many locations or entities where it does not collect MSW. Recycling services such as the Beneficial Tire Reuse Program and its Waste Evaluation and Sustainability Consulting are provided to customers throughout the State of Maine. Programs such as BatteryTracker, eScrapTracker, LampTracker and BallastTracker operated by Waste Management are also available for participation by residents throughout Maine. Public Benefit Application at 28.

³⁹ Appeal at 14-15.

assumption is inaccurate and illustrates an overly simplistic view of the solid waste market in Maine.

CLF goes on to claim that in 2019, based on MSW disposal figures,⁴⁰ Crossroads recycled 1.5% of the municipal solid waste (“MSW”) landfilled at the Facility.⁴¹ Again, CLF bases its calculations on the same false assumption identified above. While WMDSM does not provide recycling services to all of its MSW customers, this does not mean recyclables are not removed from MSW prior to arriving at Crossroads.

For example, WMDSM accepts MSW from Maine Waste-to-Energy (formerly MMWAC) when it reaches processing capacity.⁴² Recyclable materials are removed from the MSW at the local level; however, this diversion is not reflected in annual volumes of redirected materials tracked by Crossroads.⁴³ CLF’s reliance on overly simplistic math deflates these figures leading to an inaccurate and misleading portrayal of the Facility and its recycling efforts, and its claim that WMDSM recycled 1.5% of the MSW entering the Crossroads Landfill is categorically false.

As demonstrated in both its License Application and its Public Benefit Application, WMDSM is committed to advancing all of its recycling programs including Single-Sort.⁴⁴ WMDSM plans to enhance its Airport Road Transfer Station to maximize the volume of materials reused and recycled at the facility and to minimize contamination and disposal.⁴⁵ In addition, WMDSM has developed and introduced an initiative within its Single-Sort Recycling Program to further enhance recycling efforts.

⁴⁰ As the Department is aware, 2019 MSW disposal volumes at Crossroads were atypical. Crossroads provided critical disposal services to the MRC during the many delays experienced by the Fiberright/Coast Resources Facility. While the Crossroads Facility accepted 187,000 tons of MSW in 2019, the five-year MSW average (2012-2017) was 82,183 tons. Public Benefit Determination Application at 12.

⁴¹ Appeal at 14.

⁴² Public Benefit Determination Application at 12.

⁴³ See 2019 WMDSM Annual Report at Appendix B and C.

⁴⁴ License Application – Vol. 1 at 29-32; 34-35; see also Public Benefit Determination Application at 30-32.

⁴⁵ *Id.*

For more than three years, WMDSM has operated a targeted initiative aimed at reducing contamination within its Single-Sort Recycling Program.⁴⁶ Each load of recyclable materials entering the Crossroads Material Recovery Facility is inspected to determine general contamination levels. Loads with significant amounts of contamination are flagged and photographed for documentation purposes. WMDSM then works constructively with identified customers to develop a strategy for reducing contamination in future recycling loads. Following this initial step, WMDSM staff then separate and remove as much contamination as possible from the load significantly reducing overall contamination rates prior to shipment. WMDSM's decontamination initiative has proven highly effective. Recycling loads shipped from Crossroads to ecomaine have seen significant improvements in contamination rates. Since inception, WMDSM's initiative has effectively reduced and almost entirely eliminated all fees assessed by ecomaine for loads with greater than 6% contamination originating from the Crossroads Facility. WMDSM's initiative has also helped its customers keep recycling costs as low as possible at a time when the market rate for recycling continues to climb.

WMDSM also provides its municipalities and commercial customers with educational materials and technical expertise to further promote an increase in reuse and recycling rates.⁴⁷ The circulation of these materials often leads to constructive conversations between WMDSM and its customers about recycling best practices and the general state of the recycling market.⁴⁸ WMDSM stands ready to offer insights and expertise from its parent company, the nation's largest residential recycler, to assist the State of Maine and specifically, the DEP, navigate the challenges presented

⁴⁶ License Application – Vol. 1 Response to DEP Comments, Mar. 31, 2020, at 12.

⁴⁷ *Id.* at 11.

⁴⁸ *Id.*

by the ongoing recycling crisis.⁴⁹ Phase 14 also allows new recycling programs such as Textile Recycling, Household Hazardous Material Collection, and Organics Diversion to launch.⁵⁰

Moreover, as mentioned above, Crossroads makes other important Maine-based recycling operations possible. For example, Crossroads supports the 115 towns and cities within the MRC by accepting bypass and residuals from the Coastal Resources or Fiberight Facility.⁵¹ Fiberight's innovative technology intends to divert both recyclables and organics from MSW at industry-leading rates.⁵² CLF entirely ignores WMDSM's role in supporting these recycling operations that promote and support the State's Waste Hierarchy as well as advancing its recycling and composting goals.

Finally, once again, the vast majority of wastes accepted at the Crossroads Landfill cannot be incinerated or further processed, recycled or reduced.⁵³ Such wastes include special waste, construction and demolition debris and materials or waste used as alternative daily cover.⁵⁴ The Crossroads Facility provides a critical outlet for these wastes, which would otherwise have to be transported at significant economic and environmental cost to more distant locations.⁵⁵

CLF also misrepresents a number of facts regarding WMDSM's recycling and diversion programs. First, CLF claims Electronic Waste, Tire Reuse and Battery Diversion programs are offered only once per year at the Airport Road Transfer Station.⁵⁶ Instead, these recycling services are *provided every day of the year* the transfer station operates, which is typically four days a week, year-round.⁵⁷ CLF also suggests WMDSM launch additional hazardous material collection

⁴⁹ *Id.*

⁵⁰ License Application – Vol. 1 at 34; *see also* Public Benefit Determination Application at 25-26.

⁵¹ Public Benefit Determination Application at 16.

⁵² *Id.*

⁵³ Public Benefit Determination Application at i, 10-12.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ Appeal at 14.

⁵⁷ License Application - Vol. V, *Site Operations Manual*, at 2 (Dec. 31, 2016); *see also* Vol I, at 30-31.

programs.⁵⁸ However, collection programs *already exist* within WMDSM's disposal network such as the Androscoggin Valley Council of Governments' annual event serving the Androscoggin, Franklin and Oxford counties region.

Finally, CLF also claims WMDSM recycling efforts at the Facility itself are "very limited."⁵⁹ CLF's statement is yet again misleading and inaccurate. It overlooks important and telling examples such as personnel at the Crossroads Facility carefully monitoring wastes coming into the landfill to help identify and divert materials that can be reused or recycled.

In 2017, Crossroad's personnel identified a significant volume of unaccounted for glass in specific loads of waste material.⁶⁰ WMDSM worked directly with the customer, one of the State's largest glass distributors, to develop a process at its facility for diverting the glass from its waste. WMDSM utilized its national recycling network to locate an out-of-state recycler that could accept and process the glass that had previously been difficult to recycle in-state. In an 18-month period, nearly 6,000 tons of glass were diverted from the landfill and recycled. Similar volumes of glass have been diverted annually since then. It is unclear how CLF argues WMDSM recycling efforts are "very limited" when multiple examples like this exist within the administrative record.

B. The Administrative Record Contains Significant Detail Regarding The Phase 14 Organics Diversion and Compost Program

CLF argues that the Phase 14 Organics Diversion and Compost Program is nothing more than a promise to build a facility.⁶¹ It is difficult to understand how CLF takes this position when evidence in the administrative record contains significant detail regarding numerous aspects of the program, including construction and program launch timelines,⁶² a proposed regional organics

⁵⁸ Appeal at 14.

⁵⁹ *Id.*

⁶⁰ License Application – Vol. 1 at 31, fn. 5; Public Benefit Determination Application at 33.

⁶¹ Appeal at 14.

⁶² Order at 47, "Organics Diversion and Reuse" Section.

collection network that will include nine municipalities, local businesses and schools,⁶³ educational opportunities including site tours for local students, citizens and State and municipal officers,⁶⁴ close collaboration with the Department's Compositing Coordinator,⁶⁵ and a readily available supply of finished compost for local residents throughout the year free of charge.⁶⁶ As indicated above, while many important details of the Crossroads Organics Diversion Program are in place, CLF's claims that a program at this stage of development should set and be held to specific numeric targets such as diversion figures well before the collection facility has yet to be constructed is highly premature and impractical. As with all of its Hierarchy-related and recycling programs, WMDSM intends to collect, tabulate and evaluate data from its Organics Diversion and Compost Program when the program achieves an operational baseline.

CLF also fails to acknowledge the efforts WMDSM has *already* undertaken to assist the Town of Farmington with the launch of its Compost Cooperative. WMDSM has supported the Farming Compost program through financial and logistical support both in Farmington and at the Crossroads Facility. WMDSM's effort further demonstrates its ongoing commitment to both its own Organics Diversion and Compost Program as well as efforts within its disposal network to divert organic material from the Crossroads landfill.⁶⁷ Finally, CLF's additional compost-related arguments, such as general source separation are misguided, should be directed to the Legislature or agency rulemaking, and are not the basis for conditioning or denying this license.⁶⁸

⁶³ Public Benefit Determination at 14-15, "Organics Diversion and Reuse" Section; *see also* License Application at 31.

⁶⁴ Public Benefit Determination at 15.

⁶⁵ Public Benefit Determination Application at 34.

⁶⁶ Public Benefit Determination at 15.

⁶⁷ Order at 47; *see also* Public Benefit Determination at 15.

⁶⁸ Appeal at 14-15.

WMDSM is enthusiastic about the launch of its new compost initiative and looks forward to adding this program to its other Hierarchy-related programs at the Crossroads Facility and helping to advance the State's composting goals.

II. THERE IS NO BASIS FOR IMPOSING AN ANNUAL LIMIT ON DISPOSAL

CLF argues that without an annual disposal limit for Crossroads, Phase 14 could be filled in 14 years.⁶⁹ First, the calculation underlying CLF's argument is misleading, as it cherry-picks data from 2019, a year in which waste disposal volumes were atypically high.⁷⁰

As the Department was aware, 2019 disposal volumes at Crossroads were atypical. In total, the Facility received more than 550,000 tons of material, including alternative daily cover. However, this number was driven up primarily by Crossroads' efforts to accommodate the MRC during the many delays experienced by the Fiberight/Coastal Resources Facility. Typically, the annual volume of MSW received at the Facility is considerably lower and consistent with Phase 14's projected annual fill rate of 450,000 tons per year.⁷¹ Based upon that figure, WMDSM is confident Phase 14 will provide 17 years of capacity and remain operational until at least 2040.

CLF also claims an annual fill rate or cap on disposal volumes should be imposed on Phase 14. A disposal cap, however, is ill-conceived, counterproductive, and would potentially create highly problematic consequences for the region and State. First, Crossroads is the only viable disposal option in the northwestern and central region of Maine and a cap could force municipalities, businesses, and colleges to haul wastes long distances, and potentially with very little notice, presenting both a logistical and financial nightmare. Moreover, assuming hauling waste from the region is even possible, the carbon emissions associated with loading and moving

⁶⁹ Appeal at 13.

⁷⁰ *Id.*

⁷¹ The five-year MSW average (2012-2017) was 82,183 tons as compared to the 187,000 tons accepted in 2019. Public Benefit Determination Application at 12.

the waste, in some instances, more than one hundred miles, would also have a significant detrimental impact on the environment.⁷²

Furthermore, as the Department has recognized, annual disposal rates can fluctuate, sometimes significantly, based upon a multitude of factors, including economic growth and activities occurring in the waste management industry.⁷³ To provide the flexibility a critical component of the State's waste disposal infrastructure needs to respond to and address fluctuations, such as the Fiberright example discussed above, any cap on disposal rates would be counterproductive. Moreover, Phase 14's Public Benefit Determination already includes a condition that the Project must "[p]rioritize for disposal ... Maine generated solid waste...."⁷⁴ This language mirrors a condition in the Phase 8 Public Benefit Determination that has already proven highly effective over time.

Finally, WMDSM has historically emphasized careful and prudent engineering and operational procedures at the Crossroads Facility. This approach has fostered environmental stewardship by conserving critical airspace for Maine businesses, municipalities, and residents. WMDSM's emphasis on this type of stewardship has achieved clear results: Phases 8, 9, 11 and 12 have all significantly exceeded initial site life projections. Perhaps the most notable example is Phase 8 which was originally projected to reach capacity in 2012 but is now projected to remain available for waste disposal through 2024; an addition 12 years of capacity life. WMDSM will employ the same careful and prudent engineering and operational practices historically utilized at the Crossroads Facility to maximizing disposal capacity for Phase 14.

⁷² It should also be noted that, as CLF acknowledges in its Public Hearing testimony, well-established constitutional principles prohibit limits on the acceptance of out-of-state waste. Testimony at 53; 14-16.

⁷³ Public Benefit Determination at 6.

⁷⁴ Public Benefit Determination at 24.

For the reasons set forth above, there is no demonstrated basis for imposing an annual limit on disposal volumes, nor would such a limit benefit the Maine businesses and communities that rely on the Facility for cost-effective disposal options.

III. THE PHASE 14 PROJECT IS FULLY PROTECTIVE OF GROUNDWATER

CLF objects to the Department's finding that the Phase 14 Project will not pose an unreasonable risk to a groundwater aquifer.⁷⁵ The sole basis for CLF's challenge to the Department's finding, however, is its mistaken interpretation of the results of a pumping test conducted in July 2020.⁷⁶ Specifically, CLF states that the results of the pumping test suggest a "hydrogeologic regime that is deeply integrated and very sensitive to small system changes" and on that basis, the Board should reverse the Department's finding and deny the License.⁷⁷ In fact, the pumping test *confirms* the isolated nature of the groundwater within the till and bedrock.

Mr. Macdonald testified on the comprehensive investigations undertaken to study the geology and hydrogeology of the site, the time of travel calculations, and the groundwater monitoring program,⁷⁸ which collectively demonstrate that the Phase 14 Project will be fully protective of groundwater.⁷⁹ The results of the pumping test further indicate the following:

- No hydraulic response was observed in the silty fine sand during the pumping test, confirming the lack of hydraulic connection between these surficial materials and the underlying units (i.e., the Presumpscot clay, glacial till, and bedrock).⁸⁰
- The vertical hydraulic conductivity of the Presumpscot clay is low with an overall geometric mean vertical hydraulic conductivity of 2.17E-07 cm/sec.⁸¹ The low vertical hydraulic conductivity of the Presumpscot clay and the lack of drawdown observed in

⁷⁵ Appeal at 15-18.

⁷⁶ *Id.* at 16-17.

⁷⁷ *Id.*

⁷⁸ Mr. Macdonald's testimony also confirmed the limited effect drought would have on groundwater-related calculations within Phase 14. Testimony at 75.

⁷⁹ Hearing Testimony at 46:22-65:3; *see also* Phase 14 Landfill: Groundwater Protection PowerPoint Slides filed Sept. 14, 2020.

⁸⁰ License Application, Supplemental Geologic and Hydrogeologic Report, July 31, 2020 ("Supplemental Geologic and Hydrogeologic Report") at 13.

⁸¹ Supplemental Geologic and Hydrogeologic Report at 16.

the overlying silty fine sand unit during the pumping test supports the conclusion that clays function as an aquitard, impeding meteoric recharge and creating confined conditions in the underlying glacial till.⁸²

The observed hydraulic influence of the pumping well is consistent with the confined conditions of the till and bedrock and the confining nature of the clays. Hydraulic stress of any type (e.g., pumping, recharge, barometric changes etc.) imparted on a confined hydrologic unit will be transmitted further than in an unconfined hydrologic unit. The hydraulic response in the till and bedrock to pumping confirms that the hydrostratigraphic units beneath the clay are well protected from development above the clay.

Accordingly, the results of the pump test demonstrate that the Department correctly found that the Phase 14 Project design is fully protective of groundwater.

IV. THE PHASE 14 LINER SYSTEM AND GROUNDWATER MONITORING PROGRAM IS FULLY PROTECTIVE OF THE ENVIRONMENT

CLF devotes significant effort in its Appeal to the arguments that Maine Law should be changed to require a double liner and ongoing leak detection system.⁸³ In support of its arguments for what would constitute a change in the law, CLF mischaracterizes the existing state of technology and regulatory framework. Furthermore, the state-of-the-art, multi-layered liner system, the natural geologic conditions beneath Phase 14, and the proposed leak detection survey and ground water monitoring program, provide multiple redundancies that are fully protective of the environment. Finally, the claims raised by CLF in its Appeal regarding liner design, leak detection, and groundwater monitoring, are nearly identical to those raised during the licensing process, which both WMDSM and the Department fully evaluated and responded to in a comprehensive manner.⁸⁴

⁸² *Id.*

⁸³ Appeal at 18-20, 22.

⁸⁴ Applicant's Response To The Post-Hearing Comments Of CLF at 4-7; Order at 58-62.

A. The State-of-The-Art Liner System Is Fully Protective Of Groundwater

First, the Phase 14 Project will be constructed with a thoroughly engineered, multi-layered liner system.⁸⁵ The multi-layered liner will consist of the following layers, from top to bottom.

- A sand and geocomposite drainage layer
- A high density polyethylene (“HDPE”) geomembrane
- A geosynthetic clay liner (“GCL”)⁸⁶

The sand and geocomposite drainage layer will be engineered to efficiently collect any leachate generated in the landfill. The HDPE and GCL clay liner are designed to ensure that leachate within the landfill is not released to the subsurface.⁸⁷

Adding additional environmental protection, the Phase 14 liner system will be constructed on top of a thick layer of natural in-situ clay, which has a hydraulic conductivity less than or equal to 1×10^{-7} cm/sec.⁸⁸ As described in significant detail in the License Application, the Phase 14 area provides ideal conditions for the Project because of the underlying glaciomarine clay referred to as the Presumpscot clay.⁸⁹ The Presumpscot clay is very fine-grained and has a very low permeability. Given these characteristics, the clay is an aquitard, meaning it is almost impermeable and greatly impedes flow to the underlying till and bedrock.⁹⁰ WMDSM also agreed to scarify and compact a portion of the underlying clay in select portions of the Phase 14 footprint to add additional protections to the design as requested by the Department.⁹¹ In the highly unlikely event that a release was to occur from Phase 14, the bedrock would be protected by this naturally

⁸⁵ License Application – Vol. I at 26 and Vol. III, Secs. 4 and 5.

⁸⁶ *Id.*; Order at 59

⁸⁷ *Id.*; Order at 59-60.

⁸⁸ Order at 59.

⁸⁹ License Application – Vol. I at 26 and Vol. III, Secs. 4 and 5.

⁹⁰ *Id.*

⁹¹ Order at 61.

occurring Presumpscot clay aquitard beneath the engineered liner system.⁹²

Finally, DEP specially evaluated the concern raised by CLF that “all liners leak.”⁹³ After a comprehensive evaluation of the Project’s engineering design information, including material characteristics and installation requirements, the Department concluded “...the potential for leakage is unlikely.”⁹⁴

B. The Electrical Leak Detection Survey And Groundwater Monitoring Network Provide Additional Environmental Safeguards

In addition to the multi-layered liner system and clay aquitard described above, WMDSM will perform Electrical Leak Detection Survey testing for each cell of the Phase 14 liner system.⁹⁵ The testing will be performed in general accordance with American Society of Testing and Materials (“ASTM”) standards for liner construction and leachate collection systems.⁹⁶ Testing will take place prior to waste placement in each cell to ensure its effectiveness.⁹⁷ Once performed, the testing will provide an additional assurance of the Phase 14 Project geomembrane liner integrity and the Project’s overall protection of the environment.

Furthermore, the Department specially evaluated the design, installation, and assessment of the proposed Phase 14 leak location survey and made the following findings, which are discussed in detail in its Order.⁹⁸

- Testing of the Phase 14 liner prior to waste placement is the most appropriate time period for the assessment.
- The ASTM standards applied to the Project’s liner system specifically evaluate integrity-related specifications like stress cracking.

⁹² License Application – Vol. I at 26 and Vol. III, Secs. 4 and 5.

⁹³ Order at 59.

⁹⁴ *Id.* at 59-60.

⁹⁵ *Id.* at 59.

⁹⁶ *Id.* at 60.

⁹⁷ *Id.* at 59.

⁹⁸ *Id.* at 59-60.

- The Phase 14 design eliminates liner penetrations for piping.
- Piping and hydraulic pressure on the Phase 14 liner system is minimized by following the natural sloping contour of the land to the leachate sump.
- The potential for impacts from environmental exposure will be mitigated in the Phase 14 Project by covering of the geomembrane with a drainage geocomposite and sand layer.
- Continuous site inspections by qualified and independent quality assurance personnel will further ensure the integrity of the Phase 14 geomembrane.⁹⁹

The Department concluded that these design attributes ensure the potential for leakage from the Phase 14 liner system is unlikely.¹⁰⁰ Finally, and of particular relevance to CLF's claims regarding the need for an ongoing leak detection system for Phase 14, the Department evaluated this specific claim and found, for the reasons stated above, "...a dedicated leak detection system is not required..."¹⁰¹

Furthermore, like all the landfills at the Crossroads facility, groundwater quality at Phase 14 will be routinely monitored in accordance with DEP requirements.¹⁰² The comprehensive network of groundwater monitoring wells will be located downgradient of Phase 14 in areas specifically chosen for their rapid notification potential.¹⁰³ Through this monitoring, any changes to groundwater quality will be identified and corrective measures implemented as necessary.¹⁰⁴

The engineered liner systems, the natural geologic conditions, and the groundwater monitoring network proposed for Phase 14 are very similar to those at the other Crossroads facility landfills, which have proven highly effective in the past and will do so as well for Phase

⁹⁹ *Id.* at 59-60.

¹⁰⁰ *Id.* at 60.

¹⁰¹ *Id.* (emphasis added).

¹⁰² License Application – Vol. I at 26.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

14.¹⁰⁵ As such, these measures ensure that the Phase 14 Project is fully protective of the environment.

C. CLF's Claims Regarding Liners Are Outdated And Without Merit

CLF's claim that the Board should require a double liner ignores the site-specific characteristics that support use of the engineered liner approved for use in Phase 14 and is premised on the outdated assumption that all landfills and all landfill liners leak.¹⁰⁶ CLF relies primarily on a 17-year-old paper by R. Kerry Rowe ("Rowe paper") and ignores the significant advances that have occurred since then and the practices that avoid the pitfalls identified in that paper. WMDSM provided a complete response to the issues identified in the Rowe paper.¹⁰⁷ In summary, the problems identified by Rowe reflect many outdated aspects of liner technology and application that are not relevant to the state-of-the-art liner system that will be used for Phase 14.

Finally, current law reflects the fact that a modern single-liner system, when combined with appropriate site conditions, is fully protective of the environment. In 1998, following a comprehensive, public process, Maine's solid waste regulations were amended to allow for single-liner systems in MSW landfills. Those regulations, which are consistent with RCRA Subtitle D, remain in place and govern the Phase 14 application.¹⁰⁸ It should also be noted that Phase 8, which was permitted in 2002 and consists of four cells (Phases 8A, 8B, 8C', and 8C'') was constructed as recently as 2019 with a single composite liner.¹⁰⁹ The older Phases 7, 9, 10, 11, and 12 were permitted with double liners because the Maine Regulations required double liners at the time of permitting.¹¹⁰

¹⁰⁵ *Id.*

¹⁰⁶ Appeal at 18, 20.

¹⁰⁷ Applicant's Response To The Post-Hearing Comments of CLF, at 5-6.

¹⁰⁸ 40 C.F.R. Parts 257 and 258.

¹⁰⁹ See Board Solid Waste Order (Phase 8 License - #S-010735-WD-UW-N)) at 34-35.

¹¹⁰ *Id.*

Accordingly, the design of Phase 14's multi-layered liner system with multiple protective redundancies, including a leak location survey and comprehensive network of groundwater monitoring wells, meets and exceeds DEP standards, and is fully protective of the environment.

V. CROSSROAD'S FIRE PREVENTION AND PREPAREDNESS PROGRAM IS FULLY PROTECTIVE OF THE FACILITY AND SURROUNDING COMMUNITY

First and foremost, CLF does not dispute that WMDSM complies with Maine DEP's Chapter 401 standard for prevention and control of fire.¹¹¹ The language of CLF's appeal makes it clear that it has conceded this point.¹¹² Instead, CLF argues that WMDSM should be required to *exceed* the standard set forth in Chapter 401 § 4(C)(15). CLF once again, however, fails to review relevant material within the administrative record demonstrating that WMDSM *already* exceeds the relevant regulatory requirements established by the Department. WMDSM's comprehensive prevention and fire control plan is described in significant detail within Volume V of its License Application. The Department also specifically evaluated fire-related concerns during the licensing processes concluding Crossroad's prevention plan complies with all applicable standards.¹¹³ The Crossroad's fire prevention plan and the Department's findings are both summarized below to respond to CLF's misleading appeal claims.

WMDSM's relationship with the Norridgewock Fire Department, its primary first responder, is very strong.¹¹⁴ In fact, WMDSM's Site Operations Manual lists the cell phone number for the Fire Department Chief as the primary contact number for emergency situations. This practice clearly demonstrates WMDSM's compliance with the Chapter 401 requirement to "[a]rrange for a nearby fire department to provide emergency service whenever called."¹¹⁵

¹¹¹ Appeal at 22.

¹¹² *Id.*

¹¹³ Order at 33-34.

¹¹⁴ See License Application – Vol. V (Operations Manual) at 133.

¹¹⁵ *Id.* at 55.

However, not only does WMDSM arrange for emergency services, it also regularly provides its personnel with training exercises related to fire response, including emergency notification processes and procedures. WMDSM's personnel are trained to carry out written response protocols by contacting the Norridgewock Fire Department immediately after a situation arises requiring emergency responders.^{116,117}

Further, Crossroads has ample fire response and control equipment in place at the Facility. WMDSM's on-site equipment and response capabilities clearly demonstrate that it meets and exceeds the Chapter 401 requirements to "[p]rovide sufficient on-site equipment for minor fires..." and to "[m]aintain a soil stockpile sufficient to suppress small fires."¹¹⁸ For example, the commercial transfer station has its own fire suppression system in place capable of releasing 30,000 gallons of water that also automatically contacts the Norridgewock Fire Department.¹¹⁹ The main office, scale house, maintenance facility, transfer station, and attendant buildings are all also equipped with detectors and extinguishers and phones for contacting emergency personnel. Fire extinguishers are also available in all WMDSM hauling vehicles and landfill equipment.¹²⁰ Soil stockpiles are available to suppress a fire if necessary. WMDSM can also utilize two water trucks for suppression along with on-site foams.^{121,122} Not only does Crossroads have fire response

¹¹⁶ *Id.* at 66; *see also Id.* at Sec. 8.6 ("Fire Response").

¹¹⁷ It should also be noted that while not in WMDSM's Operations Manual, on an annual basis WMDSM provides the Norridgewock Fire Department with a facility tour in preparation for emergency response, including equipment compatibility-checks. The Norridgewock Fire Department also has 24-hour access to the site via drop box keys located at the Facility. WMDSM also maintains mutual aid agreements with four other surrounding communities that are prepared to assist the Norridgewock Fire Department should a need arise.

¹¹⁸ 06-096 C.M.R. ch. 401 §4(C)(15)(b) and (c); *see also* Order at 34-35

¹¹⁹ *See* License Application – Vol. V (Operations Manual) at 133; *Id.* at 59.

¹²⁰ *Id.* at 114.

¹²¹ *Id.* at 169.

¹²² It should be noted that foams stored on site at the Facility for emergency use do not contain PFAS compounds.

and control equipment in place, its personnel are regularly trained in the use and maintenance of the equipment to ensure appropriate response should the need arise.¹²³

Finally, Crossroads employs comprehensive best management practices to prevent fires from occurring at the Facility. It should also be noted that the procedures enacted and employed by the Crossroads Facility *already* account for the measures recommended by CLF in its appeal.¹²⁴ For example, Crossroads prohibits all customers from disposing of potentially hot materials in the landfill.¹²⁵ Any customers knowingly or unknowingly violating this prohibition are identified through an investigation and potentially barred from future use of the Crossroads Facility. WMDSM takes enforcement of this prohibition seriously and has utilized the provision in the past to bar violators.¹²⁶ In addition, landfill personnel are trained to identify and investigate any material being placed in the landfill that even potentially appears to contain hot material. Any suspected materials are placed in a designated area on a paved section of Phase 12 far from combustibles and a significant distance from the Phase 14 landfill.¹²⁷ Contrary to CLF's claims, WMDSM already has and utilizes temperature probes at the Facility for active monitoring of materials.¹²⁸ As discussed at length above, WMDSM's relationship with the Norridgewock Fire Department further ensures emergency responders will respond to, contain, and extinguish a fire as quickly as possible. Regular and routine training exercises and coordination ensure appropriate measures for the prevention and control of fires at the facility are carried out on a routine basis.

¹²³ See License Application – Vol. V (Operations Manual) at 45.

¹²⁴ See Appeal at 23-24.

¹²⁵ Order at 34.

¹²⁶ It should be noted that in general, fires at the Facility are very rare and may have only happened twice over the lifetime of the facility. The two fires referenced by CLF were both linked to a single customer that has been prohibited from disposing of material at the Facility. Training sessions with WMDSM personnel and local responders took place following the events to ensure future occurrences do not take place.

¹²⁷ Order at 34; *see also* Landfill Application – Vol. V. at 8.

¹²⁸ See Landfill Application – Vol V. at 176.

Accordingly, ample evidence within the record demonstrates that the Phase 14 Project fully complies with Maine DEP's Chapter 401 standard for prevention and control of fire.

VI. CLF'S REQUEST TO REQUIRE PRE-TREATMENT OF LEACHATE IS NOT SUPPORTED BY THE EVIDENCE

CLF raises concerns about the presence of Per- and polyfluoroalkyl substances ("PFAS") in the environment, and WMDSM shares those concerns. CLF has not, however, identified any evidence that leachate from the Crossroads Facility contains significant levels of PFAS *or* that it is threatening water quality in the Kennebec River, and therefore there is no basis for its request that the Board require pre-treatment of leachate.

First, CLF asserts without citation to any evidence (record or other) that leachate from the Crossroads Landfill contains high levels of PFAS.¹²⁹ The Department should not establish permit conditions and require pre-treatment for discharges to licensed facilities if those wastewater treatment facilities do not otherwise require it under their approvals. Moreover, and as noted in the Order, the Department will soon begin testing of landfill leachate for PFAS statewide.¹³⁰ At that point there will be data on whether and to what extent PFAS may be present in leachate from the Crossroads Facility.

Second, CLF's claims are premised entirely on its concern that waste discharge licenses issued under the authority of the Clean Water Act do not require monitoring or set limits for PFAS.¹³¹ These arguments constitute a collateral attack on those licensed discharges and this proceeding cannot be used as a forum for challenging those licensed discharges.¹³² Moreover, CLF

¹²⁹ Appeal at 25.

¹³⁰ Order at 13; *see also* Pub. L. 2021 c. 478, §3. (requiring testing of landfill leachate for PFAS substances at each licensed solid waste landfill within 90 days of the effective date of the Act).

¹³¹ Appeal at 24-25.

¹³² *E.g., Sold, Inc. v. Town of Gorham*, 2005 ME 24, ¶ 10, 868 A.2d 172, 176 (one statute cannot be used to challenge a permit issued under a separate and distinct statutory scheme); *Town of Boothbay v. Jenness*, 2003 ME 50, ¶ 25, 822 A.2d 1169, 1177 (party precluded from collaterally attacking prior permitting decision in separate proceeding).

has not presented any data (speculative or otherwise) on the relative significance of PFAS that may be present in leachate from other sources of PFAS that may be present in authorized discharges to the river. In short, CLF's policy issues regarding regulation of PFAS in licensed discharges should be addressed at a statewide level based on actual data and evaluation of competing policy considerations, as opposed to the ad hoc approach advocated by CLF.

In summary, CLF has not identified any evidence that leachate from the Crossroads Facility contains significant levels of PFAS or that potential PFAS in the leachate presents risks to water quality in the Kennebec River. CLF's policy arguments concerning regulation of discharges from wastewater treatment plants more generally should be directed to the laws governing those discharges and proceedings in which those limits are established.

VII. THE BOARD SHOULD DENY CLF'S REQUEST FOR A PUBLIC HEARING

CLF's request that the Board hold a public hearing on the appeal should be denied. First, CLF failed to comply with the process for requesting a public hearing. An Appellant is required to submit an offer of proof regarding testimony and other evidence that would be presented at a hearing. That offer of proof must include a statement of the substance of the evidence, its relevance to the issues on appeal, and whether any expert or technical witnesses would testify.¹³³ CLF has provided no such offer of proof and therefore its request should be denied on that basis alone.

Second, the DEP already held an adjudicatory public hearing on the Project in accordance with all applicable procedural requirements. CLF has not and cannot claim that the public hearing was improper, not properly noticed, or otherwise was legally deficient. There was ample opportunity for interested persons to request intervenor status (CLF did not) and to participate as interested persons in the hearing (which CLF did). Comment from the public was also accepted

¹³³ 06-096 CMR 2 § 24.B.(4).

throughout the review process. CLF's sole justification for holding a second public hearing is the unsubstantiated claim that the virtual format of the hearing limited public participation.¹³⁴ CLF has not identified anyone who claims to have been unable to do so. Moreover, the virtual hearing format was explicitly authorized by state statute and met all applicable conditions and CLF cannot demonstrate otherwise.¹³⁵

Finally, as conceded by CLF, the Town made special arrangements for persons to come to the Town Office to testify using the Town's internet connection and technology.¹³⁶ This provided an additional opportunity for persons to participate who may, as CLF assumes, otherwise had limited ability to do so. In short, CLF has not identified a procedural or substantive basis for the Board to hold a second public hearing, the sole purpose of which appears to be to allow CLF to argue the same points it presented during the public hearing and then again with its comments on the draft license.

CONCLUSION

As demonstrated by the foregoing, CLF's claims are without merit and WMDSM respectfully requests that the Board deny CLF's request for a public hearing and uphold the Department's Order.

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¹³⁴ Appeal at 27.

¹³⁵ 1 M.R.S.A. §403-A; *see also* Executive Order 2019-56 (2019 ME EO 19-56) effective June 3, 2020 related to the COVID-19 State of Emergency.

¹³⁶ Appeal at 27.