

November 16, 2018

Ben Grumbles, Secretary
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

RE: Valley Proteins, Inc. – Sufficiency of Water Quality Protection for the Transquaking River and Watershed

Dear Secretary Grumbles:

The undersigned organizations¹ are writing with concerns and requests regarding the Valley Proteins, Inc. expansion of operations at its Linkwood, Maryland Facility (“Linkwood Facility” or “Facility”) and the associated permitting process. Our concerns about the Linkwood Facility and permitting process include:

1. It is not clear how or whether the Facility has remained in compliance with its now eighteen-year-old discharge permit, or whether the permit is sufficient to cover current operations and comply with applicable TMDLs.
2. Expansion of the facility appears to be going forward without a clear and comprehensive public plan to accommodate the expansion and associated increased discharge in compliance with the Transquaking River TMDL.
3. The issuance of the water appropriations permit to accommodate expansion without public explanation on how the increased discharge volumes from the expansion will be managed seems to negate the obligation of regulators to ensure that water quality is protected.
4. Redirecting some of the rendering Facility’s discharge to land application without a permit would be inconsistent with the requirements of the Transquaking TMDL and put groundwater further at risk.
5. If, in fact, the Facility is producing wastewater or other discharges that are land-applied, then those discharges must be covered by a groundwater discharge permit and appropriate monitoring for groundwater contamination must be included.

It is clear from the 2017 MDE Organization Guide that a number of administrative units can be involved in the permitting process.² What is unclear is how decisions of these administrative units are coordinated and integrated into a coherent and comprehensive picture of how each permit contributes to maintaining the health of the Transquaking River, the Transquaking Watershed and the health of the Chesapeake Bay.

¹ Chesapeake Bay Foundation (CBF), Dorchester Citizens for Planned Growth (DCPG), League of Women Voters of the Mid-Shore of Maryland (LWVMS), and ShoreRivers.

² See [https://mde.maryland.gov/Documents/www.mde.state.md.us/assets/document/mdeguide\(1\).pdf](https://mde.maryland.gov/Documents/www.mde.state.md.us/assets/document/mdeguide(1).pdf)

We request a meeting with Department staff to discuss the concerns described in this letter and to clarify how this industrial expansion can move forward without negatively impacting both water quality in the Transquaking River and the health of the general public living in the Transquaking Watershed. We also request that the Department provide a summary of the history of the NPDES permit renewal process, and all other associated final and pending permits for this Facility, and the intended timeline going forward, including sufficient opportunity for more effective public comment and involvement. Finally, we request that the Department provide a comprehensive overview and analysis of how the impaired local surface and groundwaters will be impacted by potentially increased discharges from the Facility, including how the increased discharge is being managed to protect surface and ground water quality, whether on-site or off-site.

Long-Standing Water Quality Impairments in the Transquaking River and Groundwater

The Transquaking River has been plagued with significant water quality impairments, resulting in the establishment of a TMDL in March 2000. That analysis showed that the River is impaired by nitrogen and phosphorus, causing excessive algal blooms and exceedance of the dissolved oxygen standard. Around that same time, a previous owner of the Linkwood Facility (Darling International, Inc.) was undergoing the permitting process for its discharges of nitrogen and phosphorus, among other pollutants. The Final Fact Sheet for the Facility's permit issued in 2000, Permit Number 99-DP-0024 ("Permit"), noted that groundwater monitoring indicated high levels of nitrates that exceed the groundwater criteria. In order to address the surface and groundwater impairments, it was determined that the Facility needed to undergo an upgrade to meet proposed Permit limits, and also cease land application of pollutants through spray irrigation. The 99-DP-0024 Final Fact Sheet noted that monitoring reports indicated the groundwater conditions required a prohibition on the use of spray fields or "any other method of wastewater application on the ground to avoid additional contamination."³

The Permit remains in effect today, although it expired over twelve years ago in 2006. As required by the Permit, timely application for renewal was filed in 2004. Today (fourteen years later), the renewal decision is still pending and, in 2014, Valley Proteins submitted Permit modification requests for the Facility. During this period, Facility production rates have increased several times, from 1 million pounds per day of raw material processed when the Permit was issued, up to an anticipated 20 million pounds of raw material per week as of 2014.⁴ This increase of production would clearly have an impact on the Facility's discharge of pollutants, but **it is not clear how or whether the Facility has remained in compliance with the now eighteen-year-old Permit, or whether the Permit is sufficient to cover current operations and comply with applicable TMDLs.**

³ Final Fact Sheet Permit 99-DP-0024, page 10, Item R.

⁴ The 2014 Permit Application includes a letter dated April 16, 2014 from Reid Engineering to the Maryland Department of the Environment which states that the "permit modification request is for an increase in the rendering plant raw material (RM) production to 20,000,000 #RM *per week* over 6 processing days per week." (Emphasis added). However, a letter dated January 23, 2017 from Reid Engineering to the Maryland Department of the Environment states that the "proposed WWTP Expansion and Upgrade has been designed for a rendering plant production capacity of 20,000,000 pounds *per day* of raw material processed over 5.5 days per week." It is unclear whether the Facility's expansion would increase production to 20 million pounds per day or per week.

The Facility now also appears to be undergoing expansion, or has had portions of its expansion completed, even though the Permit limits were already at the maximum allowable loading rates under the March 2000 Transquaking River TMDL. The Facility was recently issued an increased water appropriation permit to accommodate the expansion.

Linkwood Facility Expansion

As discussed above, over the extended period of eighteen years since the issuance of the 2000 Permit 99-DP-0024, the Linkwood Facility has increased from an original 1 million pounds per day of raw material processed to a proposed 20 million pounds per week.⁵ This 20 million pounds per week of raw material processing reflects the expansion of the Facility from its original production capacity of 13 million pounds per week. As stated in the MDE response to comments on the water appropriation permit, the loading limits based on the plant's raw material production capacity directly impact the level of pollution being discharged.⁶ In order to control the amount of pollution being discharged, there must be appropriate loading limits on the plant's raw material production capacity. Unfortunately, the issuance of the water appropriation permit without the public release of any draft discharge permit leaves the public without a way to understand whether the increased flow and increased production result in increased pollution to an already impaired waterbody without any assimilative capacity for nutrients. It is also unclear whether the exceedingly outdated 1981 stream assimilative study that was used to support the 2000 discharge permit has been updated to reflect current conditions, especially conditions within Higgins Mill Pond documented since 2000. The Pond has a constrained connection to the tidal segment of the Transquaking River and a history of poor water quality that includes harmful algal blooms.⁷ In addition, when the Transquaking River TMDL was established, the Linkwood Facility was the only point source discharger in the Watershed. Since

⁵ As mentioned above, and as another sign of the lack of transparency around this issue, it is unclear whether the Facility is expanding to reach 20 million pounds of raw material processing per day or per week.

⁶ Maryland Department of the Environment, Water and Science Administration. Response to Comments Received in the Matter of: Water Appropriation and Use Permit Application No. DO195G001/11 for Valley Proteins, Inc. September 26, 2018. "Concentrations of pollutants in the flow can be at many different levels. Consequently, to directly limit the amount of pollutant that is able to be discharged, we limit the amount (i.e. pounds) of that pollutant that may be discharged. Thus, the permit contains both concentration and loading limits. The concentration limits are expressed in milligrams per liter (mg/l). **The loading limits are based on the plant's raw material production capacity and are expressed in pound per day (lbs/day)**" page 5 (emphasis added).

⁷ At one time the Pond was "used as a source of drinking water." (Watershed Report for Biological Impairment of the Transquaking River Watershed in Dorchester County, Maryland: Biological Stressor Identification Analysis Results and Interpretation (FINAL Report. 2012, p.10)). Currently, on the Drawbridge Road bridge across the Pond, the Maryland Department of Health and Mental Hygiene (DHMH) has posted a sign warning that "Harmful Algae May Be Present" in the Pond. If algae blooms are visible (e.g., unnatural yellow-green color), the sign advises the following: "Don't Swim; Don't Drink the Water; Keep Children and Pets Away; Clean Fish Well and Discard Guts; and Avoid Areas of Algae Scum When Boating." The sign provides a DHMH Environmental Help Line telephone number and a website URL and advises persons to "contact your doctor or veterinarian if you, a family member, or a pet experiences unexplained illness that may be a sign of exposure to Harmful Algae." It should be noted that effluent from the poultry rendering processing at the Linkwood Facility flows from "Facility Outfall 001" into "an unnamed tributary of the Transquaking" and, thence, into the Pond.

then, at least two more point sources have been permitted in the Watershed, and the additional pollution from those facilities must be factored into the limits for the Facility's permit.⁸ The Beaver Run Mobile Home facility currently operating under a groundwater discharge permit is reported by MDE to contribute nitrogen pollution to surface waters, further substantiating the need to fully account for all permitted discharges in a Valley Proteins discharge permit final determination.⁹ Finally, MDE should also evaluate whether additional agricultural dischargers, such as Confined Animal Feeding Operations (CAFOs), have increased the application of nutrients to land and therefore have increased the non-point source loads to this system.

It is very troubling to the undersigned that **the expansion appears to be going forward without a clear and comprehensive public plan to accommodate the expansion and associated increased discharge in compliance with the Transquaking River TMDL.** The Linkwood Facility was the only point source polluter in the Transquaking River watershed when the TMDL was established and already was permitted for the maximum amount of the wasteload allocation under that TMDL. Given the expansion and the additional point source dischargers that have been permitted since the TMDL, effluent limitations will need to be adjusted accordingly. As discussed in more detail below, diverting any portion of this increased discharge to land application would threaten groundwater quality and present an end-run around the TMDL allocations.

Increased Water Appropriation Approved for Linkwood Facility

The lack of transparency and public confusion about the Facility has been increased by the piecemeal permitting process. Save for a public informational meeting in October 2014 on the proposed treatment process upgrades, the discharge permit application has languished for fourteen years without the provision of adequate information to the public that the upgrades (and expansion) would require approval of a permit to increase water appropriations for the Facility sufficient to accommodate the upgrades and expansion. It was not mentioned at the October 2014 informational meeting that issuance of a water appropriations permit would be a key component of the upgrade and expansion process. In February 2018 an informational hearing was held on the water appropriation permit application. That informational hearing did not include discussion of issues involving increased wastewater discharge. In sum, the increased water appropriations permit that accommodates the expansion was issued recently without mention in these public informational meetings as a key component of the process. **The issuance of the appropriations permit to accommodate expansion without public explanation on how the increased discharge volumes from the expansion will be managed seems to negate the obligation of regulators to ensure that water quality is protected.** The piecemeal approach also gives the impression that the expansion is being accommodated without answering the important questions of how increased discharges will avoid further impairment to the Transquaking River and/or the contaminated groundwater should large volumes of effluent be land-applied, even under a nutrient management plan. In fact, the water

⁸ Dorchester Lumber Company, Inc., Permit Number 09-DP-2596, MD0063681.

⁹ "The proposed groundwater discharge permit conditions for 45 mobile homes require the effluent disposed of at the sandlined trench/drip dispersal field to meet TN<8mg/l which results in 38.6 lb/yr nitrogen load to groundwater **and 19.3 lb/yr to the surface water** based on a 160 lb/acre/yr vegetation uptake in the drip dispersal field and a 50% delivery ratio to surface water" (emphasis added). MDE Response to Public Comments Regarding Beaver Run Mobile Home Park State Discharge Permit Application No. 14-DP-3811, Page 3.

appropriation permit documents indicate that the Facility is already running new boilers. Due to the lack of transparency, it is unclear to the undersigned or the public whether the Facility is already increasing production, or whether the upgrades that were required eighteen years ago to comply with the Facility's 2000 Permit were completed and sufficient to handle increased production.

Potential Land Application of Facility Discharges

The most concerning detail about the proposed expansion and other operational changes at the Facility is the potential for increased discharges that cannot achieve the Transquaking TMDL or ensure groundwater is protected. There appears to be underway an effort to locate, on a farm within the Transquaking Watershed and not too far from the Linkwood Facility, a 3-million-gallon storage tank that would hold a byproduct of protein processing from the Facility. According to the report of the Dorchester County Board of Appeals Staff, Case # 2635, dated October 16, 2018, the owner of the farm had applied to the Dorchester Planning and Zoning Commission to request "approval of a liquid byproduct storage use. The applicant would like to receive upwards of 3 million gallons of 'chicken sludge' from the Valley Proteins rendering plant in Linkwood. The 'chicken sludge' is the liquid byproduct of the processing of poultry waste. The 'sludge' would be used as fertilizer on farm fields on and off the site. The 'sludge' would be stored in an open top, above ground, steel tank approximately 25 feet high and 143 feet in diameter... The composition of the liquid byproduct produced at the Valley Proteins processing Facility is unknown, but it is the result of an industrial process." Our concern is that given the insufficient information provided, the use by farmers of the sludge for land application has the potential to violate groundwater quality standards and further exacerbate impairment of the overall health of the Watershed and its inhabitants.

The only appropriate way to handle point-source pollution discharges like those generated by this Facility is through permits that ensure the discharges don't exceed water quality standards. It is well documented that the groundwater underlying the area of the Facility is impaired and experiencing high levels of nitrates that are also causing eutrophication of the receiving stream, which is "an unnamed tributary" of the Transquaking that flows into Higgins Mill Pond.¹⁰ Previously, when discharges were being land-applied, groundwater monitoring wells were required to monitor nitrates and certain wells became contaminated with nitrates at concentrations more than 700 mg/l based on Valley Proteins' own monitoring reports. It took years for groundwater nitrate concentrations to return to ambient levels, all the while no doubt contaminating nearby surface water to which that

¹⁰ See, e.g., Department of the Environment Water Management Administration. *Summary Report and Fact Sheet: State Application No 99-DP-0024, EPA No. MD0003247. 2/23/2000.* ("Groundwater monitoring reports indicate high levels of nitrates that exceed the groundwater criteria. In addition, the nitrates can also cause eutrophication of the receiving stream").

aquifer is connected.¹¹ Groundwater monitoring reports from 2016 demonstrate that some wells remain above the EPA's maximum contaminant level for nitrates.¹²

Again, the lack of transparency around the expansion and increased discharges and the absence of a comprehensive approach to managing impacts to water quality hinder our ability to understand how wastewater and other discharges are being adequately managed. The lack of public understanding about the relationship between the storage structure, the proposed use and management of its contents, and increased effluent produced at the Facility provide great uncertainty about the adequacy of water quality protection measures that the State is obligated to verify.

Redirecting some of the rendering Facility's discharge to land application without a permit would be inconsistent with the requirements of the Transquaking TMDL and put groundwater further at risk. The 2014 permit application indicates that the Facility is discharging at the maximum wasteload allocation allowed under the TMDL. The 2014 permit application also requested removal of the groundwater monitoring wells. **If, in fact, the Facility is producing wastewater or other discharges that are land-applied, then those discharges must be covered by a groundwater discharge permit and appropriate monitoring for groundwater contamination must be included.** The impact to groundwater from land application of the Facility's waste would be no different from the impact when the Facility itself was using spray irrigation to dispose of wastewater.

The appropriate way to handle the Facility's point source discharges is through the issuance of permits. To the extent that discharges would currently exceed the Transquaking TMDL or groundwater standards, the amount of discharge must be treated or adjusted to come into compliance with these standards. These are the regulatory controls under which other poultry-processing facilities in Maryland operate, and they are equally as necessary in this case to ensure protection of the impaired surface and groundwaters.

Should the excess discharge from the Facility be land-applied, there is a serious concern that the permit application does not mention this discharge or explain how the concentrations in that discharge would be monitored, especially for any migration to nearby surface waters. Land application, even under a nutrient management plan, requires the applicator to know the concentrations of pollutants of concern in order to comply with the plan's limits and with groundwater standards. Any land application must be informed by required monitoring that ensures the discharge is at the expected concentrations of pollutants.

Conclusion

The lack of transparency, coherency and integration surrounding this extended permitting process has exacerbated the substantive concerns detailed above about additional pollution that may be

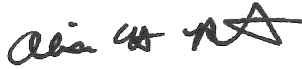
¹¹ See, e.g., USGS Delaware Agricultural Shallow Groundwater Monitoring Network studies demonstrating that groundwater in shallow unconfined aquifers are susceptible to contamination from land application and contribute to surface water nitrates: https://www.usgs.gov/centers/md-de-dc-water/science/delaware-agricultural-shallow-groundwater-monitoring-network?qt-science_center_objects=0#qt-science_center_objects

¹² Valley Proteins, Inc. Linkwood, MD. State Discharge Permit No: 99-DP-0024 Quarterly Groundwater Monitoring Report. August 5, 2016.

reaching the Transquaking River as a result of the Linkwood Facility expansion. Construction is happening at the Facility before the public has been able to review and comment on a renewed discharge permit, and there has been no evidence of a comprehensive plan to address the expansion without further degrading the impaired local surface and ground waters. There is also a lack of transparency around whether or how the discharge permit renewal, the increased water appropriation permit, and the proposed three-million-gallon poultry processing byproduct storage tank relate to each other. To our knowledge, there has not been any public comprehensive plan that reports the full impact of current Facility operations and the proposed expansion, and how operations and expansion may impact local waters. Finally, policy that enables different units within MDE to determine how to advertise public informational meetings has resulted in confusion and uncertainty among citizens as to how to appropriately engage in the permitting process. While instructions on how to request an informational meeting published by the Water Management Administration in a Cambridge newspaper in 2014 resulted in a well-attended public meeting, similar instructions published by the Air and Radiation Administration in an Easton newspaper in 2016 went virtually unnoticed. To effectively communicate how the public can make air quality complaints, Dorchester Citizens for Planned Growth at great effort obtained the correct contact information and made that information available to residents at its website <https://www.dcpgonline.org/>.

We request a meeting with Department staff to discuss the concerns described in this letter and to clarify how this industrial expansion can move forward without negatively impacting both water quality in the Transquaking River and the health of the general public living in the Transquaking Watershed. We also request that the Department provide a summary of the history of the NPDES permit renewal process, and all other associated final and pending permits for this Facility, and the intended timeline going forward, including sufficient opportunity for more effective public comment and involvement. Finally, we request that the Department provide a comprehensive overview and analysis of how the impaired local surface and groundwaters will be impacted by potentially increased discharges from the Facility, including how the increased discharge is being managed to protect surface and ground water quality, whether on-site or off-site.

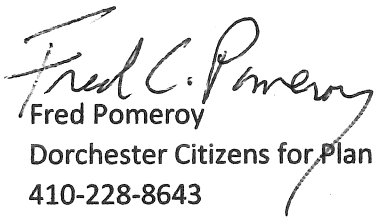
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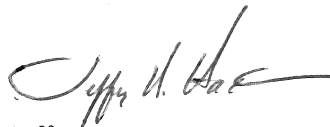
Alison Prost
Chesapeake Bay Foundation
410-268-8816



Patricia Comella
League of Women Voters of the Mid-Shore
410-228-1671



Fred Pomeroy
Dorchester Citizens for Planned Growth
410-228-8643



Jeff Horstman
ShoreRivers
443-385-0511

Cc: Jeannie Haddaway-Riccio, Deputy Chief of Staff, Office of the Governor
Joeseph Bartenfelder, Secretary, Maryland Department of Agriculture
Michael Richardson, Wastewater Permits Program Chief, Maryland Department of the Environment
Ricky Travers, President, Dorchester County Council
Libby Nagel, Member Elect, Dorchester County Council
Steve Dodd, Director, Dorchester County Planning & Zoning
Reed Parks, General Manager, Valley Proteins
Robert Vogler, Director of Environmental Affairs, Valley Proteins