



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Water and Science Administration
Wastewater Pollution Prevention and Reclamation Program
1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708

FINAL

Response to Public Comments

Regarding

Valley Proteins, Inc

State Discharge Permit Application No. 04-DP-0024
NPDES Permit No. MD0003247

INTRODUCTION

Valley Proteins, Inc., 5420 Linkwood Rd., Linkwood, MD 21835, submitted an application for renewal of a permit to discharge an average of 150,000 gallons per day of process wastewater and variable volumes of stormwater from a poultry rendering facility located at 5420 Linkwood Rd., Linkwood, MD to an unnamed tributary to Higgins Millpond and Transquaking River (Use I waters). The applicant has also requested expansion of the process wastewater flow up to a potential average of 575,000 gallons per day.

A virtual public hearing for this permit process was held on October 20, 2021. The tentative determination notice for the virtual public hearing was advertised twice in The Daily Banner, on September 15 and 22, 2021. From that notice, a request was made for an in-person public hearing. The in-person public hearing was held on November 16, 2021. The notice of an in-person public hearing was advertised twice on October 13 and 20, 2021 in The Daily Banner. The close of the comment period for the draft permit was initially Wednesday, December 15, 2021. Upon request by a third party, the comment period was further extended and ended on Friday, January 14, 2022. The draft permit was available for review in the offices of the Water and Science Administration since the initial date of public notice. The Department received both oral and written comments regarding the proposed draft permit. After considering all comments received, the Department has made a final determination to issue the permit.

In the event of any inconsistencies between the final factsheet and this document, this document shall take precedence.

OVERVIEW

The limitations for the permit were derived by comparing the applicable technology and water quality standards and selecting the most restrictive. The facility discharges into an unnamed tributary to the Transquaking River (Transquaking River watershed, Basin Code 02.13.03.08) which flows into the Higgins Millpond and to the Chesapeake Bay. The Transquaking River is listed on the 303 (d) list for nutrients and sediments. The Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester County, Maryland, was approved by the EPA on March 9, 2000. The Transquaking River drains to the Chesapeake Bay through Fishing Bay and is part of the Lower Eastern Shore Tributary Strategy Basin. At the time the TMDL was developed, the single point source discharge was the Valley Proteins facility (formerly Darling International Inc), contributing a major load to the watershed. The facility was characterized as a rendering facility contributing 354,050 lb/yr of nitrogen and 1,825 lb/yr of phosphorus to the basin.

Upon the effective date of the permit, a compliance schedule of three years for implementation of new limitations at Outfall 001 begins. After the compliance schedule expires the permit will contain limits from four different regulatory sources. (1) There will be limits that were carried forward from previous permits that must stay in the permit to comply with the Clean Water Act's (CWA) anti-backsliding provisions. (2) There are water quality-based limits in the permit to protect the local receiving stream from the initial discharge point to Higgins Millpond. (3) There are limits in the permit being maintained to comply with the Transquaking TMDL. (4) Finally, the annual total nitrogen and phosphorus limits are to comply with the Chesapeake Bay TMDL. All of the numerical limits, and how they might change over the course of the permit should the permittee choose to increase the facility's flow, are described in the section below.

The Department has issued the permit with limits on the following parameters at Outfall 001 to be effective upon the permit effective date:

- Dissolved oxygen (5.0 mg/L minimum);
- Total residual chlorine (0.011 mg/L average, 0.019 mg/L maximum);
- pH (range of 6.0 to 9.0);
- Total nitrogen (1,231 lbs/month maximum);
- Total phosphorus (123 lbs/month maximum);
- Ammonia (from Apr.-Nov.: 4.2 mg/L average, 23 mg/L maximum; from Dec.-Mar.: 10 mg/L average, 23 mg/L maximum);
- Biochemical oxygen demand (from Apr.-Nov.: 31 lbs/day average, 39 lbs/day maximum; from Dec.-Mar.: 90 lbs/day average, 180 lbs/day maximum);
- Oil and grease (from Apr.-Nov.: 13 lbs/day average, 20 lbs/day maximum; from Dec.-Mar.: 50 lbs/day average, 100 lbs/day maximum); and
- Total suspended solids (from Apr.-Nov.: 39 lbs/day average, 53 lbs/day maximum; from Dec.-Mar.: 110 lbs/day average, 220 lbs/day maximum).

A maximum limitation of 200 MPN/100mL is proposed for fecal coliform, to be superseded by a proposed maximum limitation of 126 MPN/100mL for E. coli within one year of permit issuance.

With the exception of the E.coli limitation, all of these limits are carried forward from the previous permit, 99DP0024, and will remain in effect throughout the life of the permit unless they are superseded by limits implemented at the end of the compliance schedule. At that time new, more restrictive limits will become effective regardless of the permit flow.

The Department proposes the following more restrictive limitations at Outfall 001 to become effective once the compliance schedule expires:

- Total nitrogen (8,477 lbs/year maximum) - This is a water quality-based loading limit being implemented in particular to comply with the Chesapeake Bay TMDL. The TN limit of 1,231 lbs/month maximum is being maintained because it is required to comply with the Transquaking River TMDL. However, the 8,477 lbs/year maximum limit is derived from the Bay TMDL and is in addition to the limit of 1,231 lbs/month maximum (the monthly limit by itself would allow up to 14,772 lbs/year to be discharged).
- Total phosphorus (315 lbs/year maximum) - This is a water quality-based loading limit being implemented to comply with the Chesapeake Bay TMDL.. The TP limit of 123 lbs/month maximum is being maintained because it is required to comply with the Transquaking River TMDL. However, the 315 lbs/year maximum limit is derived from the Bay TMDL and is in addition to the limit of 123 lbs/month maximum (the monthly limit by itself would allow up to 1,476 lbs/year to be discharged).
- Biochemical oxygen demand (4.0 mg/L monthly average) - This is a water quality-based limit being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. While the initial BOD loading limits are being left in place to prevent backsliding, this new limit will result in a discharge of less BOD¹.
- pH (range of 6.0 to 7.8) - This is a water quality-based limit being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. The upper range of

¹ At a flow rate of 0.150 MGD x 4.0 mg/L x 8.34 conversion factor = 5.0 lbs/day.
At a flow rate of 0.575 MGD x 4.0 mg/L x 8.34 conversion factor = 19.2.0 lbs/day.

this limit is more restrictive. The upper range limit is necessary to allow for TKN to be treated to the required level.

- Dissolved oxygen (6.5 mg/L minimum) - This is a water quality-based limit being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. The limit is more restrictive than and will replace the limit in the initial permit.

Additionally, no later than three years following the permit effective date, the permittee must elect limitations based on a flow rate of 150,000 or a flow rate of up to 575,000 gallons per day (gpd). Each option is associated with a different set of stricter limitations which will become effective upon the election of a flow. Once a flow is selected, it cannot be changed without major permit modification. The terms of the proposed compliance schedule, including interim milestones, are expressed in a narrative condition (Special Condition T.) in the permit.

Should the permittee elect an average flow rate of 150,000 gpd, the following BOD, ammonia, and DO limits will be implemented at Outfall 001:

- Total Kjeldahl nitrogen (3.9 mg/L annual average) - This is a water quality-based concentration limit being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. The previous permit did not contain a TKN limit.
- Ammonia (from Apr.-Nov.: 1.5 mg/L average, 12.2 mg/L maximum; from Dec.-Mar.: 3.3 mg/L average, 12.5 mg/L maximum) - These water quality-based limits are being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. They are more restrictive than and will replace the limits in the initial permit.

Should the applicant elect to increase the average flow rate above 150,000 gpd (up to a potential average of 575,000 gpd), the following BOD, ammonia, and DO limits will be implemented at Outfall 001.

- Total Kjeldahl nitrogen (3.6 mg/L annual average) - This is a water quality-based concentration limit being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. The previous permit did not contain a TKN limit.
- Ammonia (from Apr.-Nov.: 1.4 mg/L average, 12.2 mg/L maximum; from Dec.-Mar.: 3.2 mg/L average, 12.2 mg/L maximum) - These water quality-based limits are being implemented in particular to protect the receiving stream from the point of discharge to Higgins Millpond. These limits are generally more restrictive than the 0.150 MGD post-compliance schedule ammonia concentration limits. They are more restrictive than and will replace the limits in the initial permit.

Any parameters which are not replaced by new limitations following the selection of future flow by the permittee will be effective immediately upon permit issuance.

SUMMARY OF CHANGES FROM THE TENTATIVE DETERMINATION DRAFT

After considering all comments received, the Department has made a final determination to issue the permit with the following changes from the tentative determination:

1. [See Response to Comment #1](#) - For condition I.A.2.: biochemical oxygen demand monthly average now has a year-round limit of 4.0 mg/L; the total Kjeldahl nitrogen annual average limit is 3.9 mg/L; and the dissolved oxygen minimum limit is 6.5 mg/L. For condition I.A.3.:

biochemical oxygen demand monthly average now has a year-round limit of 4.0 mg/L; the total Kjeldahl nitrogen annual average limit is 3.6 mg/L; and the dissolved oxygen minimum limit is 6.5 mg/L all year.

2. [See Response to Comment #17](#) - The final permit contains daily temperature monitoring at Outfall 001 and new language (condition I.V.) to protect the water quality standard for temperature in the receiving stream. Also condition I.V. from the tentative determination, “Stormwater Associated with Industrial Activities,” is now condition I.W. in the final permit.
3. [See Response to Comment #27](#) - The language of condition II.B.2. has been updated to require 24-hour reporting upon acquiring knowledge of any noncompliance with the permit which may endanger human health or the environment.
4. [See Response to Comment #29](#) - The typographical error in the third paragraph of condition I.P.3. has been corrected in the final permit.
5. [See Response to Comment #65](#) - Condition I.T. in the final permit was updated to add two conditions to help ensure that the upgraded wastewater treatment works are adequately staffed.
6. [See Response to Comment #75](#) - The permit language on the cover page was changed to read “an unnamed tributary of Transquaking River.”
7. [See Response to Comment #77](#) - The fifth sentence of the first paragraph under condition I.A.3 was changed to read “...will become active the first day of the month...”.
8. [See Response to Comment #82](#) - The language of condition I.P.1., second paragraph, 1st sentence now reads “Within two months from the effective date of the permit...”.
9. [See Response to Comment #85](#) - Condition I.W.1. in the final permit requires complying with the terms of the General Permit for Discharges from Stormwater Associated with Industrial Activities that is effective at the time of issuance and its successor permits.

All other terms and conditions remain unchanged from the tentative determination.

TABLE OF CONTENTS

[INTRODUCTION](#)

[OVERVIEW](#)

[SUMMARY OF CHANGES FROM THE TENTATIVE DETERMINATION DRAFT](#)

[TABLE OF CONTENTS](#)

[GUIDE TO THE RESPONSES TO SPECIFIC COMMENTS](#)

[COMMENT GROUP - Effluent Limits \(nutrients, N, TKN, pH, flow, loading, residual chlorine, temperature, fecal coliform, metals\)](#)

[1. TOPIC OF MULTIPLE COMMENTS: TKN LIMIT RESPONSE](#)

CHANGES FOR THE FINAL PERMIT

2. TOPIC OF MULTIPLE COMMENTS: RENEWAL PERMIT SHOULD BE MORE RESTRICTIVE

RESPONSE

CHANGES FOR THE FINAL PERMIT

3. COMMENT: Lexine Lowe, DCPG, written comment

RESPONSE

CHANGES FOR THE FINAL PERMIT

4. COMMENT: Dr. Nancy Jo Chapman, virtual public hearing 10/20/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

5. COMMENT (Alan Girard, Chesapeake Bay Foundation, virtual public hearing 10/20/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

6. COMMENT (Alan Girard, Chesapeake Bay Foundation., in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

7. COMMENT (Alan Girard, Chesapeake Bay Foundation, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

8. COMMENT (Dr. Judith Stribling, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

9. COMMENT (Jan Boettger, DCPG, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

10. COMMENT (Charles Denton)

RESPONSE

CHANGES FOR THE FINAL PERMIT

11. COMMENT (Drew Koslow)

RESPONSE

CHANGES FOR THE FINAL PERMIT

12. COMMENT (Drew Koslow)

RESPONSE

CHANGES FOR THE FINAL PERMIT

13. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Chlorine Regulation Should Comply with COMAR 26.08.02.03-2G(1)

RESPONSE

CHANGES FOR THE FINAL PERMIT

14. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Biochemical Oxygen Demand, Total Kjeldahl Nitrogen, Total Suspended Solids, and Dissolved Oxygen Should be Limited to Protect Higgins Millpond

RESPONSE

CHANGES FOR THE FINAL PERMIT

15. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - The Missing 1981 Stream Assimilative Study Cannot Support an Expanded Flow or Protect Higgins Millpond

RESPONSE

CHANGES FOR THE FINAL PERMIT

16. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Permit Conditions Should be Stringent Year-round and not be Relaxed in Winter Months

RESPONSE

CHANGES FOR THE FINAL PERMIT

17. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Temperature Should be Limited

RESPONSE

CHANGES FOR THE FINAL PERMIT

18. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Metals and Other Pollutants Should be Verified as Not Present with Regular Quality Control

RESPONSE

CHANGES FOR THE FINAL PERMIT

19. COMMENT (Tom Lilly, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Higgins Millpond

20. COMMENT: William Wrightson, in-person public hearing 11/16/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

21. COMMENT: The Draft Permit Fails to Require Additional Treatment to Address Eutrophication in Higgins Millpond - Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

RESPONSE

CHANGES FOR THE FINAL PERMIT

22. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - The Draft Permit Fails to Ensure Compliance with Water Quality Standards

RESPONSE

CHANGES FOR THE FINAL PERMIT

23. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III -The Draft Permits Fails to Protect and Maintain the Existing Uses of Higgins Millpond

RESPONSE

CHANGES FOR THE FINAL PERMIT

24. COMMENT (William Wrightson, in-person public hearing 11/16/21)

RESPONSE

CHANGES FOR THE FINAL PERMIT

25. COMMENT Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Monitoring and Reporting

26. TOPIC OF MULTIPLE COMMENTS: NEED TO IMPLEMENT MORE RIGOROUS INDEPENDENT THIRD-PARTY MONITORING, DISCONTINUE SELF TESTING

RESPONSE

CHANGES FOR THE FINAL PERMIT

27. COMMENT: Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

RESPONSE

CHANGES FOR THE FINAL PERMIT

28. COMMENT: Mark Wils, in-person public hearing 11/16/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

29. COMMENT: Christina Darby, Nanticoke River, in-person public hearing 11/16/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

30. COMMENT (Tom Lilly, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

31. COMMENT (Charles Denton, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

32. COMMENT (Christina Darby, Nanticoke River, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Compliance Schedule

33. TOPIC OF MULTIPLE COMMENTS: THE CURRENT FACILITY SHOULD NOT BE ALLOWED TO INCREASE ITS DISCHARGE FLOW

RESPONSE

CHANGES FOR THE FINAL PERMIT

34. COMMENT: Richard Bearman, in-person public hearing 11/16/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

35. COMMENT (Charles Denton)

RESPONSE

CHANGES FOR THE FINAL PERMIT

36. COMMENT (Drew Koslow)

RESPONSE

CHANGES FOR THE FINAL PERMIT

37. TOPIC OF MULTIPLE COMMENTS: LENGTH OF COMPLIANCE SCHEDULE

RESPONSE

CHANGES FOR THE FINAL PERMIT

38. COMMENT (Terence McArdle)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Sludge and Removed Substances

39. TOPIC OF MULTIPLE COMMENTS: LAND APPLICATION OF SLUDGE SHOULD BE BANNED

RESPONSE

CHANGES FOR THE FINAL PERMIT

40. COMMENT (Allen Girard, Chesapeake Bay Foundation., in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

41. COMMENT (Charles Denton)

RESPONSE

CHANGES FOR THE FINAL PERMIT

42. COMMENT (Fred Pomeroy, DCPG, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Odors

43. TOPIC OF MULTIPLE COMMENTS: BAD ODOR COMING FROM THE FACILITY

RESPONSE

CHANGES FOR THE FINAL PERMIT

44. COMMENT: Franco Primavesi, virtual public hearing 10/20/2021

RESPONSE

CHANGES FOR THE FINAL PERMIT

45. COMMENT (Betsy LeCompte-Anderson, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

46. COMMENT (Bruce Robson, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

47. COMMENT (Eric Windsor, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

48. COMMENT (Franco Primavesi, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Transquaking River TMDL

49. TOPIC OF MULTIPLE COMMENTS: NEED TO REVISE THE CURRENT
TRANSQUAKING RIVER NUTRIENT TMDLs

RESPONSE

CHANGES FOR THE FINAL PERMIT

50. COMMENT (Margaret Anzalone, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

51. COMMENT (Mr. Zijp, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

52. COMMENT (Diane Miller, DCPG, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

53. COMMENT (Matt Pluta, Riverkeepers & ShoreRivers, letter dated January 14, 2022)

RESPONSE

CHANGES FOR THE FINAL PERMIT

54. COMMENT (Richard Bearman, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

55. COMMENT (Barbara Hale, in-person public hearing 11/16/2021)

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Groundwater

56. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L.
Wrightson III - Groundwater Loads Should Be Assessed and Mitigated

RESPONSE

CHANGES FOR THE FINAL PERMIT

57. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L.
Wrightson III - MDE Should Require Confirmation that All Lagoons are Adequately Lined and
Protect the Groundwater

RESPONSE

CHANGES FOR THE FINAL PERMIT

COMMENT GROUP - Stormwater

[58. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III -Stormwater Controls Should be Site Specific and Rigorous](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[59. COMMENT \(Libby Nagel, in-person public hearing 11/16/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[COMMENT GROUP - Permitting Process](#)

[60. TOPIC OF MULTIPLE COMMENTS: LENGTH OF TIME PERMIT WAS EXPIRED WAS TOO LONG](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[61. COMMENT \(Fred Pomeroy, DCPG, in-person public hearing 11/16/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[62. COMMENT \(Patricia Comella, DCPG, in-person public hearing 11/16/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[63. COMMENT \(Margaret Anzalone\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[64. COMMENT \(Charles Denton\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[COMMENT GROUP - Compliance/Enforcement](#)

[65. TOPIC OF MULTIPLE COMMENTS: COMPLIANCE/ENFORCEMENT](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[66. COMMENT \(Susan Olson, DCPG, in-person public hearing 11/16/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[67. COMMENT \(Charles Stegman, Wicomico Environmental Trust, in-person public hearing 11/16/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[68. COMMENT \(Melody Knox - email on 11/17/2021\)](#)

[RESPONSE](#)

[CHANGES FOR THE FINAL PERMIT](#)

[COMMENT GROUP - Comments from the Applicant](#)

[69. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)

- RESPONSE
CHANGES FOR THE FINAL PERMIT
70. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
71. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
72. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
73. (72)47) COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
74. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
75. COMMENTS (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
76. COMMENTS (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
77. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
78. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
79. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
80. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
81. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE
CHANGES FOR THE FINAL PERMIT
82. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)
RESPONSE

- [CHANGES FOR THE FINAL PERMIT](#)
- [83. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [84. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [85. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [86. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [87. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [88. COMMENT \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [89. COMMENTS \(John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)
- [90. COMMENT \(Robert Vogler, in-person public hearing 11/16/2021\)](#)
[RESPONSE](#)
[CHANGES FOR THE FINAL PERMIT](#)

GUIDE TO THE RESPONSES TO SPECIFIC COMMENTS

This section contains abbreviated comments, the responses to those comments (RESPONSE), and any changes, in detail, that were made in the final permit as a result (CHANGES FOR THE FINAL PERMIT). Each of these three parts is repeated for each comment (or comment set).

Similar comments are also grouped together under the following COMMENT GROUPS in the following order:

- [Effluent Limits](#) - 19 Responses
- [Higgins Millpond](#) - 6 Responses
- [Monitoring and Reporting](#) - 7 Responses
- [Compliance Schedule](#) - 6 Responses
- [Sludge and Removed Substances](#) - 4 Responses
- [Odors](#) - 6 Responses
- [Transquaking River TMDL](#) - 7 Responses

- [Groundwater](#) - 2 Responses
- [Stormwater](#) - 2 Responses
- [Permitting Process](#) - 5 Responses
- [Compliance/Enforcement](#) - 4 Responses
- [Comments from the Applicant](#) - 22 Responses

COMMENT GROUP - Effluent Limits (nutrients, N, TKN, pH, flow, loading, residual chlorine, temperature, fecal coliform, metals)

1. TOPIC OF MULTIPLE COMMENTS: TKN LIMIT

Wade Tanner, Read Engineering Co. Inc., Received 10/29/2021 - *Our preference is to have the permit limits for TKN developed around the model scenario 6 provided in the planning document that is using a BOD of 4.0 mg/L and a DO of 6.5 mg/L.*

John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.) - *The proposed annual average TKN limit of 2.8 mg/L does not adequately account for the concentration of non-biodegradable soluble organic nitrogen that is final effluent from the wastewater treatment plant. The stream model utilized to develop the BOD, TKN, and DO limits assumes all the TKN is biodegradable and therefore has an associated oxygen demand. Non-biodegradable organic nitrogen in the final effluent would not represent the same level of oxygen demand in the stream model as organic nitrogen that is biodegradable. The average soluble organic nitrogen concentration in the final effluent since 2019 has been 2.7 mg/L. Therefore, the proposed TKN concentration of 2.8 mg/L could not routinely be achieved even with the planned high efficient biological nutrient removal wastewater treatment system consisting of a 4-stage biological activated sludge treatment system followed by a tertiary sand filtration system because of the amount of non-biodegradable soluble TKN that will pass through the wastewater treatment system. The stream model should be modified to account for the concentration of non-biodegradable and/or slowly biodegradable organic nitrogen because they will exhibit a lower rate of oxygen reduction in the stream than organic nitrogen in a readily biodegradable form.*

The "Planning Effluent Quality Limits" document that MDE prepared in September of 2019 contained stream modeling options on page 32 that resulted in higher effluent TKN concentration based on a lower BOD concentration and increased effluent DO concentration. Stream model option 6 with an effluent BOD concentration of 4.0 mg/L and a DO of 6.5 mg/L should be utilized to develop the annual average TKN concentration limit. The results of model option 6 at 0.15 MGD resulted in a TKN concentration of 3.9 mg/L and 3.6 mg/L at 0.575 MGD. An effluent TKN of 3.6 mg/L to 3.9 mg/L could be achievable with the planned WWTP Upgrade taking into consideration that approximately 2.7 mg/L of the TKN in the effluent cannot be removed by biological treatment or tertiary sand filtration systems.

RESPONSE

The INPRG² water quality model and the Streeter Phelps³ equation were used to determine BOD₅, TKN, and ammonia concentrations able to retain appropriate water quality in the free flowing stream downstream of the Valley Proteins discharge (to Higgins Millpond). During permit development, the Department determined different combinations of effluent quality (for BOD/TKN/DO) discharged from Valley Protein Outfall 001 that would will maintain the effluent DO above 5.0 mg/L⁴ (i.e maintain stream water quality criteria) during the travel between the outfall and Higgins Mill Pond. The limit sets used in the draft permit were the scenarios that had the lowest TKN.

Streeter-Phelps Equation Model

$$D_t = \frac{k_c L_c}{k_r - k_c} (e^{-k_c t} - e^{-k_r t}) + \frac{k_n L_N}{k_r - k_n} (e^{-k_n t} - e^{-k_r t}) + D_0 e^{-k_r t}$$

Where:

- L_c - initial CBOD at time $t=0$
- L_N - initial NBOD at time $t=0$
- t - travel time based on distance x and stream velocity
- D_0 - dissolved oxygen deficit at distance $x=0$
- D_t - dissolved oxygen deficit at travel time t
- k_c - carbonaceous deoxygenation rate
- k_n - nitrogenous deoxygenation rate
- k_r - stream reaeration rate

This request from the applicant was to use a different combination effluent quality (i.e. a different set of BOD/TKN/DO) limits versus the limit set used for the tentative determination. The results of the Department's modeling show that both the proposed output and the output used for the tentative determination are protective of the free-flowing stream from the outfall to Higgins Millpond⁵. Thus, the Department accepted the permittee's request to set the maximum concentration limits for BOD = 4.0 mg/L, TKN = 3.9 (at 0.150 MGD flow) and 3.6 (at 0.575 MGD flow) mg/L, and the minimum DO equal to 6.5 mg/L at any time versus limits of 12.0, 2.8 and 6.0, respectively, in the draft permit.

² INPRG is a steady state, mathematical model developed by Maryland Department of the Environment (MDE) for simulating free flowing streams for conventional pollutants. This program prepares input data and runs a free flowing stream model based upon the Streeter-Phelps equation. The program is written in FORTRAN IV. This program reads in raw data for tributary drainage area planimeter readings, station elevations, gaging station flow, velocity data, and stream temperature values. It computes a 90th percentile (design) stream temperature, plots regression between flow and stream velocity, and computes elevation differences between stations. The program can independently perform statistical analysis of data sets to obtain average values and predict levels of confidence. It also computes reaeration values for the stream reaches using Tsvoglou's formula. It adjusts all reaction rates in the model to the stream design temperature. The model is also capable of independently computing oxygen production, photosynthesis, and respiration values based upon chlorophyll a concentrations in the stream or estuary.

³The Streeter-Phelps equation is used to calculate dissolved oxygen (DO) concentrations in a stream. The equation uses stream background and point source loadings of carbonaceous biological demand (CBOD) and nitrogenous biological demand (NBOD) as DO sags, and simulates oxygen addition through atmospheric reaeration and photosynthesis.

⁴ These scenarios were summarized in a document titled VP_FS_Determination of WQ Based Effluent Limit.pdf.

⁵ See the section titled "Scenarios will meet DO Water Quality Criteria" on page 7 of the document titled VP_FS_Determination of WQ Based Effluent Limit.pdf.

CHANGES FOR THE FINAL PERMIT

The permit language of conditions I.A.2. (flow rate of 0.150 MGD) and I.A.3. (flow rate greater than 0.150 MGD and up to 0.575 MGD) has been revised. Specifically the I.A.2. limits changed as follows: biochemical oxygen demand monthly average, for Apr.-Nov., the limit goes from 6.0 to 4.0 mg/L, and, for Dec.-Mar., the limit goes from 12.0 to 4.0 mg/L; the total Kjeldahl nitrogen annual average limit goes from 2.8 to 3.9 mg/L; and the dissolved oxygen minimum limit goes from 6.0 to 6.5 mg/L. The I.A.3. limits changed as follows: biochemical oxygen demand monthly average, for Apr.-Nov., the limit goes from 6.0 to 4.0 mg/L, and for Dec.-Mar. the limit goes from 8.0 to 4.0 mg/L; the total Kjeldahl nitrogen annual average limit goes from 2.8 to 3.6 mg/L; and the dissolved oxygen minimum, for Apr.-Nov., the limit stays the same at 6.5 mg/L, and for Dec.-Mar. the limit goes from 6.0 to 6.5 mg/L.

2. TOPIC OF MULTIPLE COMMENTS: RENEWAL PERMIT SHOULD BE MORE RESTRICTIVE

Sharon Smith, in-person public hearing 11/16/2021 - *MDE is negligent in its duty to protect our environment, and apparently has been negligent for many years. New tougher standards for nitrogen, phosphorus, ammonia and pH should be established for Valley Protein as presented by ShoreRivers at the hearing.*

William Wrightson, virtual public hearing 10/20/2021 - *So it shouldn't surprise anyone that I strongly oppose any permit that continues to jeopardize the healthy environment and health of the historic Higgins Millpond. I urge MDE to tighten the limits and conditions in Valley Protein's permit*

Mark Wilson - *This brings up the issue of what can be done with the water that VP uses to process the chicken renderings. There are most likely best use practices that already exist and are used at other plants that deal with the remnants of chicken processing. These may include water recycling rather than discharges. MDE should seek the cooperation of other regulatory agencies such as the Maryland Department of Agriculture and the large corporations involved in the chicken industry such as Perdue, Mountaire, and others to leverage and help finance the implementation of best use practices to deal with the current unacceptable situation at VP. It is in the best interest of the large producers to see that all parts of the industry are compatible with the environment that surrounds their industry.*

RESPONSE

The permit imposes and implements a number of new and more-restrictive numeric effluent limitations compared with the previous permit. The most significant changes in the final determination's permit, when compared to the previous permit, are the requirements to meet effluent limits designed to protect water quality standards between the discharge point and Higgins Millpond and the new nitrogen and phosphorus limits implemented to comply with the Chesapeake Bay Nutrient TMDL. The permit continues the nitrogen and phosphorus limits implemented to comply with the Transquaking River Nutrient TMDL.

The Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals.

In addition to the numeric limitations and monitoring, the Department also proposes to require chronic whole effluent toxicity testing following installation of the new wastewater treatment, monitoring of groundwater at several locations on the property, proper sludge management (including specific reporting requirements), odor control measures, and a prohibition on ground application of wastewater.

The new permit also contains conditions to address specific citizen concerns about the site. It contains updated groundwater monitoring to address concerns about the leaking infrastructure on the site. The groundwater monitoring conditions allow the Department to examine the causes of groundwater pollution on the site and to assess the need for remediation efforts. The draft permit also contains more specific sludge management plan requirements to ensure proper handling and to better account for disposal.

See the the response to Comment #16.

CHANGES FOR THE FINAL PERMIT

None.

3. COMMENT: Lexine Lowe, DCPG, written comment

Any new discharge permit should contain strictly enforceable limits for pollution release, as well as a clear outline of benchmarks for the restoration of this damaged river.

RESPONSE

To avoid any confusion, the final determination permit is a renewal permit as opposed to a new permit. For information regarding enforceability and limitations, please refer to the responses to Comments #2, #28, and #49.

CHANGES FOR THE FINAL PERMIT

None.

4. COMMENT: Dr. Nancy Jo Chapman, virtual public hearing 10/20/2021

I, number one, wanted to support anything we could do to keep this operation going. In the same line, I have actually done NPDES permitting, and I am very familiar with the process being pretty much whatever the technology can meet, not so much that we know that this is the best finite standard that's the best for the world, but we do need to have them meet the best available technologies for wastewater disposal, so I totally support the strictest NPDES permitting levels we can get. I haven't studied these particularly, but if this is what the technology can get us to, then I would support it.

RESPONSE

The Department has required an Evaluation Study be completed and submitted by a Professional Engineer licensed in the State of Maryland to verify that the proposed wastewater treatment system (WWTS) at the Valley Proteins rendering plant in Linkwood, Maryland can provide adequate, efficient

and reliable treatment capacity for the maximum daily flow volume to comply with more stringent NPDES permit limitations.

The necessary upgrades will be designed to provide at least an advanced biological nutrient removal (BNR)⁶ level of treatment. The upgrades will be phased-in over three years from the date of the permit renewal. The more stringent limits on parameters such as nitrogen, phosphorus, ammonia, total suspended solids, and biological oxygen demand will require substantial capital investment which requires sophisticated engineering and specialized design to place into operation the required upgrades to the WWTS. Please refer to the response to Comment #21 for further details.

CHANGES FOR THE FINAL PERMIT

None.

5. COMMENT (Alan Girard, Chesapeake Bay Foundation, virtual public hearing 10/20/2021)

Number one, updated pollution discharge limits are well overdue at the plant, as you indicated earlier, Michael. Valley is responsible for about 40 percent of the total nitrogen load to the river. As the largest point source discharger in the watershed, it must be held accountable to the pollution it generates. The current permit, last updated in 2006, as you noted earlier, is one of the oldest expired permits in the State, and despite calls for action by community environmental groups for ten years, Valley has not been held accountable until now. With point two, conditions in the draft permit may reduce threats to water quality if they are fully enforced. So our preliminary review of the permit finds that monitoring well as appropriately recited to better detect groundwater contamination, the direct discharges to groundwater prohibited in the permit, better source identification and correction may be possible. The facility upgrade schedule appears to be reasonable. The extent the Department holds the applicant to it, enforcement of the schedule is critical. The draft permit appropriately requires coverage under the general stormwater permit, enforcement of the general stormwater permit will be critical. The draft permit sets forth reasonable biomonitoring requirements to identify toxicity threats. Enforcement of the toxicity violations will be critical. Remove substance requirements, including nutrient management plan provisions, appear to be sufficient. We recommend a prohibition on the application of biosolids anywhere in the Transquaking watershed. So third and final point, given Valley's past violations, enforcement of the new permit is critical. Valley routinely violates its current permit. From July to September 2020, the company exceeded its ammonia limits by more than 25 times. Evidence shows that wastewater leaking from two onsite storage lagoons may be polluting groundwater. And thousands of tons of sludge land-applied or handled offsite have not been properly documented. We encourage MDE to issue a final permit with conditions that are protective of water quality, meet TMDL requirements, and are fully enforced. These are our preliminary comments for the Bay Foundation. More may be shared in person at the in-person meeting in November and in writing by the comment deadline in December.

⁶ BNR Program - Under the BNR Program, established in 1984, Maryland provided 50 percent of capital costs in grant funding to local governments to upgrade the 66 largest wastewater treatment plants (WWTPs) in the state. The design capacity of these plants is 500,000 gallons per day or more and they represent approximately 95 percent of the municipal wastewater discharge into the Chesapeake Bay from Maryland. The goal of the BNR Program is to reduce nitrogen levels in the treated wastewater (effluent) down to 8 milligrams per liter (mg/l). Without BNR, a typical WWTP discharges nitrogen at a level of about 18 mg/l. To date, Maryland has provided funding for this program to upgrade 45 of the 66-targeted facilities with the BNR process. An additional ~\$100 million in State grant funding is needed to complete the remaining BNR upgrades, and the State is committed to providing the funding through annual capital appropriations - <https://mde.maryland.gov/programs/ResearchCenter/eMDE/Pages/vol1no7/enr.aspx>

RESPONSE

Valley Proteins is not currently responsible for 40% of the discharge of nitrogen to the Transquaking River. The Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester County, Maryland, was approved by the EPA on March 9, 2000. At the time the TMDL was developed it contained the following estimates for nitrogen and phosphorus⁷:

“In the Transquaking River watershed, the estimated total nitrogen load is 899,163 lb/yr, and the total phosphorus load is 43,812 lb/yr, for the year 2000 ... The total nitrogen load coming from nonpoint sources is 545,113 lb/yr, and the total nonpoint source phosphorus load is 41,987 lb/yr ... There is one point source, Darling International Inc [Valley Proteins], contributing a major load to the watershed. Darling International Inc is a rendering facility and contributes 354,050 lb/yr⁸ of nitrogen and 1,825 lb/yr phosphorus to the basin.

Valley Proteins was not authorized to discharge 354,050 lb/yr of the total nitrogen to the river under the previous permit, 99DP0024. The Transquaking River TMDL assigned the facility a WLA to reduce its nitrogen contribution to the river. See the response to Comment #49, specifically see the two tables labeled: Table 1, Summary of Phosphorus and Nitrogen TMDLs and Update of Table 1 - Incorporating Valley Proteins Limits as Changes to the WLA. The former shows that the previous permit (99DP0024) implemented the TMDL's WLA and limited Valley Proteins to a maximum of 3.41% of the annual nitrogen load discharging to the Transquaking River. The latter table shows that the renewed permit (04DP0024) will further limit Valley Proteins to a maximum of 1.93% once the Chesapeake Bay TMDL nutrient wasteload allocations are applied in this permit.

See the response to Comment #65 for our response addressing permit compliance.

Special Condition P. (GROUNDWATER MONITORING REQUIREMENTS) in the permit covers the monitoring of groundwater contamination on the site. Per the fact sheet,

“ This special condition is necessary to monitor the presence of contaminants in the groundwater and the effectiveness of the previous compliance plan. The Department will review the results of the sampling and determine what, if any, further corrective measures will be necessary to address the excessive levels in groundwater. These monitoring requirements are updated from the requirements in the previous permit. In particular the renewal permits require installation and re-siting of some monitoring wells. It also requires monitoring for an expanded suite of parameters which include Total Kjeldahl Nitrogen, Ammonia, Nitrate, Total Dissolved Solids, and Fecal Coliform.”

See the response to Comment #39 for our response related to the offsite disposal of sludge via land application.

CHANGES FOR THE FINAL PERMIT

None.

⁷ From the Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester County, Maryland, approved by the EPA on March 9, 2000, Section 2.1, page 4.

⁸ 354,050 is approximately 40% of 899,163.

6. COMMENT (Alan Girard, Chesapeake Bay Foundation., in-person public hearing 11/16/2021)

Number one, the permit as drafted does not guarantee that the Tier I fishable, swimmable water quality standards will be met. It's inappropriate to use the Chicamacomico River as a surrogate to estimate river flow because the Chicamacomico does not contain an impoundment like the Higgins Millpond. The annual average used to estimate residence time in the pond does not account for variable year round flows. The nine day average may result in neurotrophic conditions in summer when residence time is likely to be longer. Higgins Millpond is about a foot and-a-half deep. The permit limits should be keyed to real time flow conditions that are monitored downstream at the facility outfall to ensure that water quality is protected.

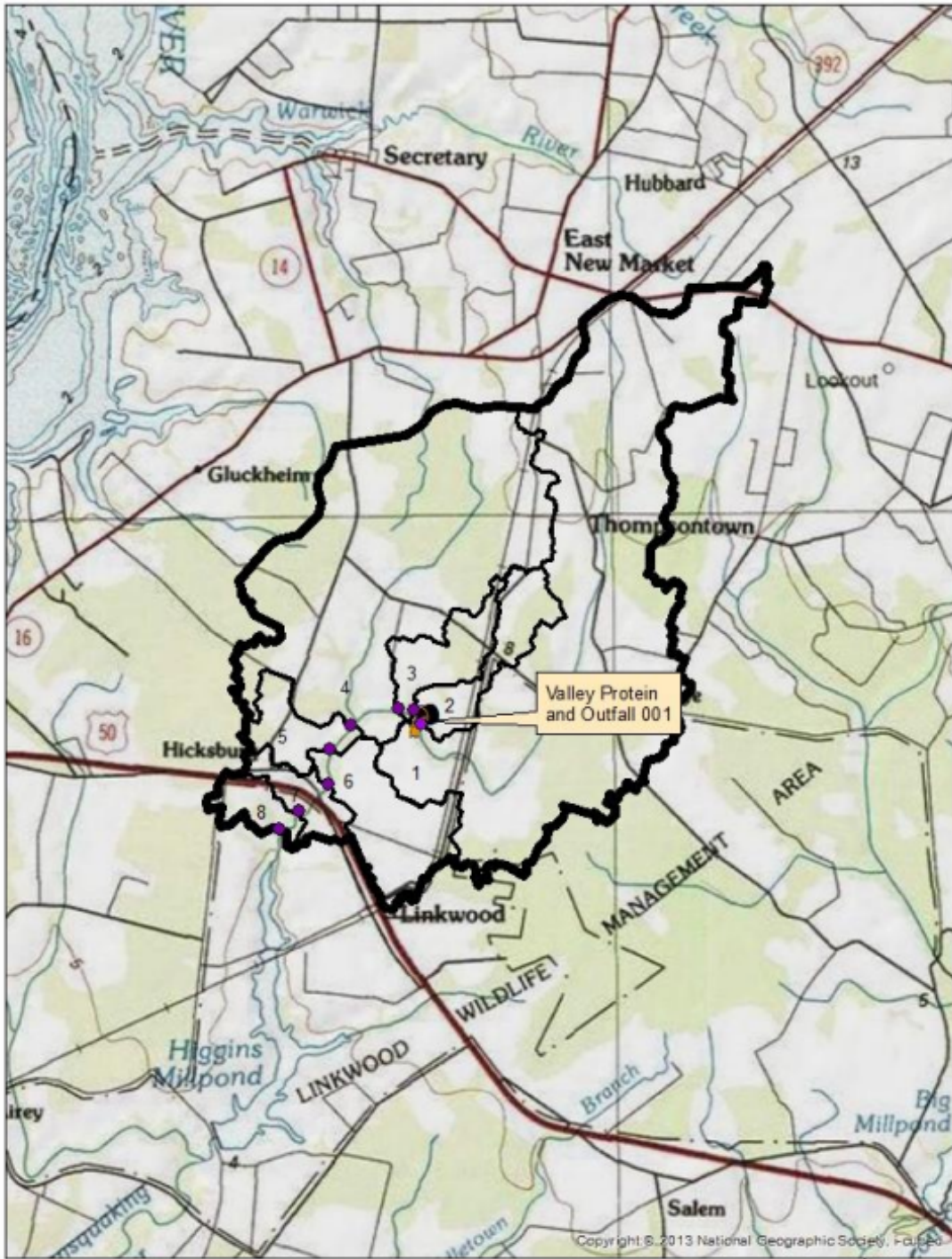
RESPONSE

There is not an USGS station on the Transquaking above Higgins Millpond. The USGS station 1499000 at Chicamacomico River near Salem, MD was determined to be the most appropriate substitute. The watershed characteristics of this USGS station are similar to that of the Transquaking above the pond. The Chicamacomico data was only used to aid in modeling the free-flowing portion of the Transquaking River above Higgins Millpond. This data was not used to model the conditions in the impoundment (Higgins Millpond). Velocity, flow rate and temperature were obtained from the USGS water resource division discharge measurements for Chicamacomico River near Salem 1973 to 1998. Data from AQWMS⁹ was also used for: temperature, BOD, and Total Kjeldahl Nitrogen (TKN) from 1998 to 2011.

The map below titled "INPRG Model Stations Locations" shows locations of the 8 virtual monitoring stations that we created for the modeling effort. The map also shows the location of Valley Proteins and its process effluent outfall (001).

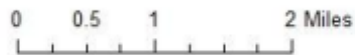
Also, please refer to the responses to Comments #1, #33, and #34 for additional responses pertinent to the comment.

⁹ Ambient Water Quality Monitoring System (AWQMS) - The AWQMS System is used to collect, enter and QA/QC data collected by Maryland Department of the Environment and its partners. All this data is sent to the National Storet Database via the Water Quality Exchange (WQX). This information can be retrieved from the Water Quality Data Portal. Water Quality Portal - <https://mde.maryland.gov/programs/Water/TMDL/MD-AWOMS/Pages/awqmslogin1.aspx>
The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). It serves data collected by over 400 state, federal, tribal, and local agencies.



Maryland
Department of the Environment

INPRG Model Station Locations



Map Created 3/22/2019

CHANGES FOR THE FINAL PERMIT

None.

7. COMMENT (Alan Girard, Chesapeake Bay Foundation, in-person public hearing 11/16/2021)

Number two, the permit conditions that manage downstream pollution impacts may be ineffective. The permit does not specify whether the 4,000 pound target load reduction for phosphorus will result from existing off-site BMPs or ones to be installed to achieve the target. If the latter, the permit must clarify how, when and where BMPs will be installed and verified to meet TMDL limits. Downstream monitoring requirements should be updated to show that Tier 1 water quality standards in Higgins Millpond are being met. Pollution levels upstream and downstream of the pond should be monitored so that stronger discharge limits are triggered when there is a difference between the two.

RESPONSE

The Transquaking River TMDL drives the protection of water quality in the river. The annual nitrogen and phosphorus loading limits in this final permit are below the WLA specified in that TMDL. The final determination permit does not control BMPs that nonpoint sources were encouraged to implement as part of the TMDLs implementation plan.

The phosphorus limits in the permit are applied at the end-of-pipe. They are not predicated on implementation of off-site BMPs.

The load reductions will be achieved as a combination of the much-reduced concentration limits of all parameters. Further, the loading limits on nutrients in the tentative determination are much lower than in previous permit and will provide additional control over pollution quantity (when coupled with the reduction in concentration limits noted above).

The rest of the nutrient allocations in the watershed are attributable to nonpoint source and atmospheric deposition, of which mixed agricultural use is a major contributor and not regulated by the Clean Water Act or this permit.

The Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals.

See the response to Comment #49 for additional information regarding the TMDL.

CHANGES FOR THE FINAL PERMIT

None.

8. COMMENT (Dr. Judith Stribling, in-person public hearing 11/16/2021)

I am Professor Emerita of Biological Sciences at Salisbury University. And I'm a past president of the Friends of the Nanticoke River, on whose behalf I am speaking. Our chief mission is conservation of the Nanticoke River watershed. And the Valley Proteins liquid rendering facility discharges into the Transquaking and Fishing Bay, which are tidally adjacent to the Nanticoke. Therefore, the Linkwood facility directly affects the public and the environmental health of our members and other neighbors. We welcome MDE's recent proposal of the tentative discharge permit determination from the Linkwood facility after a decade-and-a-half of administrative continuance. It is urgent to finalize an outdated permit, given the facility's repeated unauthorized contamination of already impaired waters and its failure to comply with numerous requirements of its permit. My remarks tonight will focus on our concerns about compliance history and requirements. This new permit is not written on a blank slate, as shown by the notice of intent served by our sister organizations. Valley Proteins has already failed to comply with many of the requirements of its 20 year old permit. It has a record of service discharges significantly exceeding permitted effluent limitations. Valley Proteins is storing some removed substances in unlined lagoons at the facility, which MDE believes is causing the persistently extensive groundwater nitrate levels detected there. The notice of intent concludes it is also likely that it is contaminating an unconfined aquifer below the site and the adjacent Transquaking River. Yet Valley Proteins has often failed to report results from the required tests and its seven required monitoring wells. There's no indication that Valley Proteins has even analyzed and tracked or made -- has ever analyzed and tracked or made its contractors and subcontractors track and remove substances from its site, as required by its permit. Required reports have been inconsistent, incomplete or inaccurate, leaving no clear record of the content or the fate of the removed substances. Given this long record of noncompliance, it is clear that MDE needs to strengthen the compliance requirements of the new permit. Adequate compliance data must be captured and promptly reported and published, and the new permit must include measures to ensure this. It should include, at a minimum, addition of the reporting requirements needed to plug loopholes; an increase, not a decrease, in the frequency of reporting as it's proposed to remove substances; the automatic application of all reporting requirements without an affirmative request from MDE; more frequent reporting if Valley Proteins misses more than two deadlines by more than 15 business days; a posting of all reports of the documents to the public ECHO website upon receipt, to further promote accountability; and, finally, requiring monitoring and testing by an independent party, as others have mentioned. In addition, we suggest that any renewal of the permit be for an additional period of only two years, to permit evaluation of their compliance.

RESPONSE

Please see the responses to Comment #26 and Comment #65 regarding monitoring and compliance history, respectively.

With respect to groundwater contamination see the responses to Comments #56 and #57.

CHANGES FOR THE FINAL PERMIT

None.

9. COMMENT (Jan Boettger, DCPG, in-person public hearing 11/16/2021)

Besides representing DCPG tonight, I am speaking for my family. My husband and son are partners in a fine woodworking and home building business that has served many Dorchester County residents. In working with local homeowners, especially those whose properties drain into the rivers of Dorchester County, that woodworking has to meet many standards put in place to ensure that water quality is not

harmed by new construction. As small businesses can be adversely affected by burdensome regulations as they apply for permits and conform to building codes, our business does its best to meet very high standards of construction and to do business with integrity and honesty. In contrast, it seems that a big business like Valley Proteins is often given a pass when they ignore deadlines for reporting and violate water quality standards. I feel strongly that industrial operations, because of their size and potential to harm the environment, should be subjected to more scrutiny, not less. MDE's mission statement says its purpose is to protect and restore the beings of all Marylanders. They have certainly not fulfilled this mission when it comes to this industrial operation in Linkwood. That is why DCPG joined with Shore Rivers, the Chesapeake Bay Foundation, and the Chesapeake Legal Alliance in filing a notice of intent to sue Valley Proteins over the continued violations of clean water standards. It's a real shame that ordinary citizens like us have to threaten a lawsuit in order to get the attention of the MDE. I'm a Dorchester Countian and mother of two young adults and grandmother of four young children. I find that as an older citizen, you become more concerned about the quality of life that will be experienced by those who come after you. I joined the DCPG because I believe in doing my part by working at the local level to help save our beautiful countryside and waterways for the benefit of future generations. I urge MDE to do the right thing and force Valley Proteins to conduct its operations in a way that will quickly and positively bring a halt to the harm they are doing to the natural resources and people of Dorchester.

RESPONSE

Please see the response to Comment #65 regarding compliance history at the site.

CHANGES FOR THE FINAL PERMIT

None.

10. COMMENT (Charles Denton)

How does the public know the effluent limitations are achievable permit requirements and not aspirational goals?

RESPONSE

Permits contain effluent limitations and other conditions that comply with both Federal and State law, including the U.S. Clean Water Act, the Environment Article of the Maryland Code, and the Code of Maryland Regulations.

CHANGES FOR THE FINAL PERMIT

None.

11. COMMENT (Drew Koslow)

The discharge of 8,477 lbs of nitrogen into The Transquaking River and Higgins Mill Pond, will cause further degradation of these waters and fails to meet the Water Quality Standards established under COMAR 26.08.02. Research at UMBC has found that nitrate levels above 30 mg/l directly contribute to cyanobacterial blooms... blooms that have been regularly documented in the Transquaking River and Higgins Mill Pond. These blooms violate Maryland Water Quality Standards for primary water contact

and water clarity as they often result in major blooms of blue-green algae and river closures to all primary water contact, including boating and fishing. Nitrate is a pollutant that can be easily removed from the waste stream by running effluent water through a denitrifying bioreactor. This is a passive system that uses biological processes to convert nitrate to Di-Nitrogen gas.

RESPONSE

The Chesapeake Bay TMDL WLA based loading limitations in the final determination are more restrictive than the limits required by the Transquaking River TMDL and more restrictive than previous permits. At 8,477 lbs/year, the total nitrogen concentration (which includes nitrates, nitrites, ammonia, and organic nitrogen) could not exceed 18.38 mg/L at 0.15 MGD or 4.8 mg/L at 0.575 MGD. Both of these concentrations are beneath the 30 mg/L noted in the comment.

The Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals.

See also the response to Comment #49 for additional discussion about the Transquaking River nutrient TMDLs.

CHANGES FOR THE FINAL PERMIT

None.

12. COMMENT (Drew Koslow)

The fecal coliform limits proposed by the Department, also violate Maryland Water Quality Standards for primary water contact. Because the flow of the Transquaking is impeded by the dam at Higgins Mill Pond, pollutants such as fecal coliform do not dissipate as in a free-flowing stream, but accumulate allowing colonies to grow, particularly in summer when water temperatures exceed 80 degrees F. Additionally, the limits proposed by the Department nearly double EPA's criteria limit for primary water contact. How is the mixing zone defined? How many stream miles are sacrificed as a result of this permit decision?

RESPONSE

The unnamed tributary to Transquaking River and Higgins Millpond is identified as Designated Use Class I, per COMAR 26.08.02.03-1. Per COMAR 26.08.02.03-3A(1)(a), the water quality criteria for water contact recreation and protection of non-tidal warm water aquatic life is a geometric mean of 126 MPN/100 mL. The Department has proposed this value as an end-of-pipe limitation at Outfall 001 in the tentative determination. There is no mixing zone proposed for meeting this limitation.

CHANGES FOR THE FINAL PERMIT

None.

13. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Chlorine Regulation Should Comply with COMAR 26.08.02.03-2G(1)

The Draft Permit would allow grab samples for chlorine to be reported as non-detect at 0.1 mg/l, effectively making that reported value the limit (applying the “non-detect” definition under COMAR 26.08.03.06). Exh. 49 at 5, 9, 14. However, for this location, COMAR imposes a daily maximum limit of 0.019 mg/l, and a monthly average limit of 0.011 mg/l. Exh. 49 at 2, 6, 11; COMAR 26.08.02.03-2G(1) (establishing ambient water quality criteria for toxic substances based on the maximum allowable concentration for protection of aquatic life in freshwater). Maryland regulations require that the “more stringent of these criteria or the discharge requirements in COMAR 26.08.03.06 shall be used as the basis for determining discharge permit limitations.” COMAR 26.08.02.03-2G(1), Footnote 2. The limits under COMAR 26.08.02.03-2G(1) are more stringent and should be monitored and reported at 0.019 mg/l (daily maximum) and 0.011 mg/l (monthly average). Further, the chlorine in the discharge may become an issue if the flow volume increases, particularly if the 0.1mg/l non-detect reporting value (which exceeds the ambient water quality criteria) is retained in the permit. This is another reason not to allow an increased flow and to test to ensure that the discharge is not toxic to biota in the receiving tributary and pond.

RESPONSE

See the response to Comment #76.

CHANGES FOR THE FINAL PERMIT

None.

14. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Biochemical Oxygen Demand, Total Kjeldahl Nitrogen, Total Suspended Solids, and Dissolved Oxygen Should be Limited to Protect Higgins Millpond

MDE modeled certain values, including the following, to protect the stream between the outfall and Higgins Millpond: Biochemical Oxygen Demand (BOD), Total Kjeldahl Nitrogen (TKN), Total Suspended Solids (TSS), and Dissolved Oxygen (DO). Such modeling of the referenced “stream” may assume a flushing and flow rate that is not representative of the pond. There is no indication that MDE’s model protects Higgins Millpond, which has suffered from low dissolved oxygen and high BOD, and receives too much nitrogen in the form of TKN. Regarding TSS, MDE has also noted that the Transquaking River watershed is listed as impaired for TSS, but that TMDL to protect the tidal waters has yet to be completed. Exh. 24 at 9. The limits for the above-listed parameters have not been demonstrated to be sufficiently stringent to protect Higgins Millpond.

RESPONSE

A model was used to determine limits for the free-flowing portion of the Transquaking River above Higgins Millpond¹⁰ and another model used for Higgins Millpond. For the free-flowing stream, the

¹⁰ The free-flowing portion of the receiving stream for modeling purposes was the portion from the discharge point to Higgins Millpond. See the document titled, *VP_FS_Determination of WQ Based Effluent Limit*.

INPRG model was used. The INPRG model is a steady-state model, developed within MDE for the impact assessment of point source pollutant loads that exert oxygen demand in free-flowing streams.

It is likely that technologies required for phosphorus reduction in Valley Proteins' wastewater treatment will also reduce the loading of other pollutants such as nitrogen, BOD, and TSS¹¹. As noted to the response to Comment #4 the Department has required an Evaluation Study be completed and submitted by a Professional Engineer licensed in the State of Maryland to verify that the proposed wastewater treatment system (WWTS) at the Valley Proteins rendering plant in Linkwood, Maryland can provide *advanced* BNR treatment capacity for the maximum daily flow volume to comply with more stringent NPDES permit limitations. The current treatment works at the facility already has biological nutrient removal. Thus the necessary upgrades will be designed to provide an advance over the current level of treatment. Typically with every increase in removal of nitrogen or phosphorus all of the pollutants in the discharge tend to be reduced¹².

The ammonia limits were determined by calculating the ammonia toxicity criteria for freshwater¹³. Then those results were used to establish the total ammonia limits for discharge. See the document titled, *VP_FS_Determination of WQ Based Effluent Limit* for a summary of the derivation of these models.

The wasteload allocations (WLA) in the Transquaking Nutrient TMDL detail discharge loads that would be protective of water quality in the Transquaking River. See the tables in response to Comment #49. Specifically look at the tables titled "[Table 1, Summary of Phosphorus and Nitrogen TMDLs](#)" and "[Update of Table 1 - Incorporating Valley Proteins Limits as Changes to the WLA](#)". Those tables show that the annual total nitrogen and phosphorus loads implemented in the permit are far below the loads allowed by the TMDL. TSS limits will be added after the TMDL for TSS is completed.

For Higgins Millpond the Vollenweider Model was run. The Vollenweider Model predicts the degree of a lake's eutrophication as a function of the areal phosphorus loading. The results of that model confirmed that adding restrictions to the Valley Proteins discharge **alone** would not prevent eutrophication within Higgins Millpond. Monitoring and eventually an assessment of Higgins Millpond is ongoing. This assessment is to determine the contributing sources to the nutrient impairment and the nutrient reductions needed to prevent eutrophication in Higgins Millpond. Should those results conclude additional controls are warranted, this will be addressed in future permit renewals.

Further rationale for all limits can also be found in the fact sheet.

CHANGES FOR THE FINAL PERMIT

None.

15. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - The Missing 1981 Stream Assimilative Study Cannot Support an Expanded Flow or Protect Higgins Millpond

¹¹ https://mde.maryland.gov/programs/water/BayRestorationFund/Pages/evolution_enr.aspx

¹² https://mde.maryland.gov/programs/water/BayRestorationFund/Pages/evolution_enr.aspx

¹³ The ammonia water quality standard (acute or chronic) at any particular point in a water body are dependent on numerous factors - salinity, temperature, pH, and the presence of certain aquatic life (fish early life stages, mussels, and/or salmonids) could all need to be evaluated. See [COMAR 26.08.02.03-2](#). Sections H. - J. pertain specifically to ammonia.

MDE states that it is relying on a 1981 stream assimilation study for loadings limits for certain parameters, including BOD, Oil & Grease, and TSS. Exh. 24 at 11, 13; Exh. 39 at 8. The commenter learned on December 1, 2021 that MDE does not have the 1981 study. Email from M. Richardson, MDE, to P. Marks (Dec. 1, 2021), Exh. 51. The missing study entirely evades scrutiny. For instance, the 1981 study may pertain only to the stream between the outfall and the pond, without addressing assimilative capacity of a pond that has been shown to be overwhelmed by Valley Proteins' pollution. Flow has increased since the date of that study, so may no longer apply to any receiving waters. Anti-backsliding precludes weaker limits. But the relevance of a 1981 study to support the adequate protection of water quality in Higgins Millpond cannot be presumed under current flows. Further, a missing 1981 study absolutely cannot provide any reasonable foundation for permitting a quadrupled flow, and any expanded flow must be denied for lack of any reasonable supporting record.

RESPONSE

The 1981 study was not at all relevant to flow limitations in the final determination permit. Instead, the study was used in the 1981 permit iteration to determine loading limits for total suspended solids, biochemical oxygen demand, and oil & grease, all on a lbs per day basis. To comply with the CWA's anti-backsliding provisions, those limitations have been carried forward in every permit to date, including the final determination permit. The study results effectively represent a monthly ceiling for these legacy loading limits, which cannot be removed without violating the Clean Water Act's anti-backsliding regulations. However, in this permit the Department is *also* requiring additional loading limitations for BOD on a monthly average concentration basis. The 1981 study has no bearing on the loading limits based on monthly average concentrations.

More importantly, the Department has implemented a number of new water quality based limits based on new modeling done to determine the appropriate protection for the near and far field receiving waters. The new modeling was done to determine the limits needed to protect the free-flowing portion of the stream from the discharge point to Higgins Millpond. These new water quality-based limits being implemented in the final determination permit are not derived in any way from the 1981 study. The limits derived from the 1981 study are being kept in the permit for anti-backsliding purposes.

See the response to Comment #14 for more information about the new water quality modeling done to derive new limits for the final determination permit. Rationale for all limits can also be found in the fact sheet.

CHANGES FOR THE FINAL PERMIT

None.

16. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Permit Conditions Should be Stringent Year-round and not be Relaxed in Winter Months

In light of both the history of excessive loadings into Higgins Millpond, and the damage that needs to be reversed, and because the pond does not flow like a stream and pollutants can accumulate in the pond environment, no aspect of Valley Proteins' pollutant discharge concentrations should be less stringent in winter months. Instead, the most stringent limits should apply year-round. This comment applies to all parameters, including but not limited to the subset that the Draft Permit proposes to vary by season (such as ammonia, BOD, oil and grease).

RESPONSE

The parameter of concern governing eutrophication in Higgins Millpond is the amount of phosphorus loading the waterbody receives per year. The Vollenwieder model predicts the degree of a lake's eutrophication as a function of the areal phosphorus loading. The model was derived by assessing a large number of lakes and established a linear relationship between the log of the phosphorus loading (L_p) and the log of the ratio of the lake's mean depth (H) to hydraulic residence time (t_w). This method is advantageous for a number of reasons: It is based on real data collected from a wide range of lakes; its application is conceptually simple and does not require the assumptions of many unknown parameters; and it is recognized by the scientific community as a reasonable method of predicting the trophic status of lakes. Thus the model determines the threshold loading accordingly to protect the lake's water quality. Per the model, phosphorus loading per year is what needs to be limited to protect the lake. The loading's effect does not change with the seasons.

The seasonal concentration limits (mg/L) for BOD₅, TKN and DO changes were derived via the INPRG model to protect the free-flowing portion of the stream between the discharge and Higgins Millpond. The INPRG model is a steady state model, developed within MDE for the impact assessment of point source pollutant loads which exert oxygen demand in free-flowing streams.

Further rationale for all limits can be found in the fact sheet.

CHANGES FOR THE FINAL PERMIT

None.

17. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Temperature Should be Limited

The average summer effluent temperature is reported in Valley Proteins' application as 30° C (86° F), without a report as to the maximum or whether, at times, the temperature exceeds regulatory limits or contributes to harm to water quality. Exh. 24 at 5, Table C. Rendering plants operate by cooking the offal, a process that uses heat. MDE should limit the maximum allowed temperature of any permitted wastewater discharge. MDE should not allow any increase in temperature beyond the ambient conditions of the receiving stream and Higgins Millpond under the circumstances of this pond system, where temperature can add to eutrophication, and where the health of the pond is so fragile. COMAR 26.08.02.03(B)(3) (General Water Quality Criteria) (prohibiting pollution from high temperature that interferes directly or indirectly with designated uses or are harmful to human, animal, plant or aquatic life). A maximum temperature greater than 32° C (90 F°) is not allowed. COMAR 26.08.02.03-3(A)(3). Temperature should be closely monitored, reported, and limited. Among the multiple potential consequences of increased temperature could be exacerbation of HABS. See You et.al., Temperature effects on growth and buoyancy of Microcystis aeruginosa, Journal of Plankton Research, Volume 40, Issue 1, (Jan.-Feb. 2018) at 16–28. Regarding proposed increased flows, there is no record to support that any expanded plant operations, with increased cooking and processing, will comply with the temperature requirements. The consequences to the pond from any higher flow of even a slightly higher temperature would be proportionately more serious than at lower flows. Permittee's request for expanded flow should be denied.

RESPONSE

There was a typographical transcription error in the fact sheet. The fact sheet misplaced that value in the average column (versus the maximum column). The number was simply pulled from Section V. Part A. of application Form 2 C. Row “h” (Temperature, Summer) shows a value of 30 °C (86 °F) in the Maximum Daily Value columns. The temperature of 86°F was one sample collected in summertime, which should have been listed in the “Maximum” column of fact sheet Table C. COMAR 26.08.02.03-3A(3) specifies a water quality standard of 90°F for the receiving waters.

Because the permittee uses lagoons as part of its treatment, solar heating could occur prior to discharge. Given that the one temperature sample collected was just a few degrees beneath the water quality standard, the Department has determined that additional requirements are warranted to ensure discharges are not impacting the in-stream standard. As a result, the final permit includes daily effluent monitoring for temperature as well as a specified “action level” of 90°F. New Special Condition V specifies that the permittee must evaluate any existing control measures and take corrective actions to put in place additional control measures should any discharge exceed the action level. Should the action level be exceeded, the permittee must notify WSA Compliance within 30 days and include a summary of exceedances and documentation of corrective actions taken. Should significant corrective actions be needed which will take longer than 30 days, the permittee must propose actions, justify why they will take longer than 30 days, and propose a schedule which completes the actions as soon as practicable and no later than 180 days after the exceedance has occurred. No corrective action is permitted to take longer than 180 days unless express written approval is provided by the Department.

These requirements will ensure that the discharges from the facility, even if they would represent a dominant flow, are not going to cause water quality standards to be violated in the receiving waters. It must be noted that exceeding the action level is not considered an effluent violation, but failing to implement a corrective action to address any action level exceedances would constitute a violation.

CHANGES FOR THE FINAL PERMIT

The final permit contains daily temperature monitoring at Outfall 001 and new language (condition I.V.) to protect the water quality standard for temperature in the receiving stream. Also condition I.V. from the tentative determination, “Stormwater Associated with Industrial Activities,” is now condition I.W. in the final permit to maintain consistency with other industrial NPDES permits (where stormwater is addressed in the final special condition). Consequently, conditions I.A.1., A.2., and A.3. all now include daily monitoring for temperature. A new footnote (#9 in condition I.A.1. and #10 in conditions I.A.2. and A.3.) specifies an action level of 90°F and refers to the new condition I.V., which lays out the terms of the action level.

For convenience, the special condition language that was inserted in the final permit is provided below.

New Condition I.V.:

V. ACTION LEVEL FOR TEMPERATURE

1. *Special Conditions A.1, A.2, and A.3 specify an action level of 90°F at Outfall 001. Should any effluent temperature exceed this action level, the permittee must take corrective actions, as outlined in Parts 2 and 3 of this condition, to ensure that the in-stream water quality standard (90°F) is not exceeded. Exceedance of the action level of 90°F shall not be considered a permit violation. However, failure to complete*

corrective actions and reporting required by this special condition shall be considered a permit violation.

2. *Immediate Actions: When the discharge temperature exceeds the action level, the permittee must immediately (within 24 hours) take all reasonable steps necessary to minimize the thermal levels in the discharge until the results drop below the action level. "All reasonable steps" means that the permittee has taken initial actions to assess and correct the cause of action level exceedance, possibly including making arrangements for additional actions to be implemented in the future.*
3. *Initial Reporting: Within 30 days of an action level exceedance, the permittee must submit a report to the Water and Science Administration, Compliance Program which details all exceedances (date, time, recorded temperature), documents any immediate actions taken, and proposes any subsequent actions (see Part 4 of this condition).*
4. *Subsequent Actions: If the permittee determines that more significant actions are required than can be implemented per Part 2 of this condition (above), the actions should be completed within 30 days. If that is not feasible, the permittee must include a schedule in their initial report which would complete the actions as soon as practicable, but not later than 180 days after the initial action level exceedance. The report must also justify why additional time is needed beyond the initial 30 days. Should the permittee believe corrective actions are necessary that will take longer than 180 days to complete, they must expressly request approval from the Department in their initial report and must obtain written approval to maintain compliance with this condition. A full justification, including proposed schedule, must be provided in the request for approval.*

18. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Metals and Other Pollutants Should be Verified as Not Present with Regular Quality Control

The Draft Permit and accompanying fact sheet do not mention metals. No quantity of metals is allowed to be discharged. The recent EPA studies of the MPP industry sector notes that metals were responsible for 11% of impairments, with most common metal impairment related to mercury or lead. Exh. 29 at 8. The permit should make clear that discharges of metals are not authorized, and require the Valley Proteins plant to confirm its compliance. The same applies to other potentially harmful pollutants. The rendering plant is collecting offal that is a waste in the eyes of the suppliers, and is vulnerable to inconsistent quality and tainting with any number of other wastes. Any permit should require Valley Proteins to demonstrate to MDE on an ongoing basis that the offal it collects (with unknown controls in place to ensure quality) is not contaminated with other types of untreated wastes that may be passed along through the process, and discharged to Higgins Millpond. MDE should require regular screening of the offal and wastewater for unauthorized materials. Even if this is occurring to some extent, the permit should explicitly require quality controls and monitoring that prevent unauthorized pollutants.

RESPONSE

The referenced document, *Analysis of the Impairment Status of Waters Receiving Meat and Poultry Product Effluent Memorandum*, does not show a causal relationship between Meat and Poultry Products (MPP) and either mercury or lead. The document specifically says:

“Monitoring for most individual parameters is not required, however, under the current ELG¹⁴, and thus available discharge monitoring data is limited. Additional information would help to further clarify linkages between MPP wastewater discharges and surface water impacts.”

EPA’s 2004 Technical Development Document for the Meat and Poultry Products Point Source Category listed a number of pollutants of concern for meat processing and poultry process facilities, and neither list includes either mercury or lead.¹⁵ A long list of metals, including mercury and lead, was initially considered as possible parameters of concern, but EPA ultimately concluded that they would not regulate metals under the ELG.¹⁶

Additionally, the permit application contained a priority pollutant¹⁷ scan for all metals, reporting each as “ND” or non-detect, including for mercury.

Lastly, as denoted in Section IX of the tentative determination fact sheet, the receiving stream for this facility is not identified as impaired for lead or mercury.

For all of the above reasons, the Department has determined there is no reasonable basis to require monitoring for mercury or lead in the final permit. See also the response to Comment #28.

CHANGES FOR THE FINAL PERMIT

None.

19. COMMENT (Tom Lilly, in-person public hearing 11/16/2021)

I’d like to make one other comment if I have time. You know, the Chesapeake Bay is our State’s most treasured natural resource and it’s impaired by nitrogen pollution and oxygen starvation, as I think everybody in this room knows. Our fish and wildlife are just a shadow of what they were 20 years ago. There are many causes for this problem. And one example is being discussed right here tonight. Let’s not sugarcoat the problem, let’s not do that. There’s a question here of responsibility, because to enjoy the benefits of the Bay each of us needs to accept the responsibilities of the Bay, and this applies whether you’re a crabber or an integrated poultry producer on the Eastern Shore of Maryland. We are seeing here that the worst of the byproducts of that industry that are not acceptable to a municipal treatment plant are being handed over to Valley Proteins and being partly disposed of in the waters of the State, in a crude and largely unsupervised manner.

RESPONSE

The purpose of water quality targets (concentration and loading limits) in the renewal permit is to protect or restore beneficial uses of the Bay and its tributaries and to protect human health. These targets include state/federal numerical water quality standards and narrative standards, i.e. within the range of

¹⁴ Under 40 CFR 432 Neither mercury nor lead monitoring is not required under the current ELG ([40 CFR 432](#)).

¹⁵ *Technical Development Document for the Final Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Point Source Category (40 CFR 432)*. 2004. U.S. EPA. EPA-821-R-04-011. p. 7-17 to 7-19.

¹⁶ *Ibid* at 7-16.

¹⁷ The Priority Pollutants are a set of chemical pollutants EPA regulates, and for which EPA has published analytical test methods. The current list of 126 Priority Pollutants can be found at 40 CFR Part 423, Appendix A.

"natural" conditions. Nonpoint source discharges (e.g. agriculture) are generally in a voluntary compliance scenario and out of scope of our permitting controls.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Higgins Millpond

20. COMMENT: William Wrightson, in-person public hearing 11/16/2021

So MDE described percent reductions under the proposed permit, but they're comparing today's proposed limits to the actual old permit. As such, MDE uses the wrong points of comparison. They are comparing old limits under a long-expired permit, with the newly proposed permit limits. These old limits undoubtedly require extensive updating of their scale. But the comparison needs to go further, because for the most part Valley Proteins has actually been discharging below allowable loads under the old permit. And those loads still, even though they're lower than the permit, have allowed harmful algal blooms to flourish and are causing harm in the pond. The history shows that Valley Proteins actual loads need to be reduced, not just from the much higher outmoded limits. And if you take it a step further, if you compare Valley Proteins' actual loads according to their own reports, with the MDE's newly proposed limits, you'll find that MDE is actually proposing no reduction at all. The new limits would actually allow Valley Proteins to somewhat increase its loads. The total loads are what matter to a pond, not percent concentrations. MDE's proposed permit does not require the needed reductions.

RESPONSE

The Department considered setting TN and TP limits based on historical discharge. However, such a methodology proved unworkable because such limits would be arbitrary, i.e. they would not be either water quality or technology based. Potential limits were evaluated based on water quality and technology. Also see the response to comment #22. For discussion of the different limit evaluations done see responses to comments #7, #21, #25, and #49.

CHANGES FOR THE FINAL PERMIT

None.

21. COMMENT: The Draft Permit Fails to Require Additional Treatment to Address Eutrophication in Higgins Millpond - Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

MDE must require that "wastewaters containing nutrients which cause or contribute to eutrophication be: (a) Given advanced waste treatment before discharge; (b) Disposed of by spray irrigation on land; or (c) Disposed of by other practicable procedures which will avoid direct discharge to surface waters." COMAR 26.08.03.01.C(3) (emphasis added). As discussed above, Valley Proteins' current operations have contributed to violations of the water quality standards and eutrophic conditions in Higgins Millpond and will continue to do so under the terms of the Draft Permit, which allows Valley Proteins to

discharge similar or more nitrogen and phosphorus than it is currently discharging. As a result, MDE has an obligation to require additional treatment and to take one or more steps outlined in COMAR 26.08.03.01.C(3) to address and minimize eutrophication. The treatment must effect significant reductions to protect water quality.

Even though additional treatment options were determined to be effective, those options and the associated reductions in nutrients are not required by the Draft Permit. The Draft Permit is not transparent regarding the technology to be installed, but it appears that Valley Proteins will not be pursuing the types of most effective options that are available to substantially reduce pollutant loads. See Exh. 30 (“...Valley Proteins no longer plans to install enhanced nutrient reduction technology at the plant — a project with a \$15 million price tag, said Michael Smith, vice chair and co-owner of the company. Company officials will, however, fund other, smaller improvements in an effort to meet the state’s new requirements once they’re finalized, Smith said.”). MDE can and should require the above effective (and/or similarly effective) additional treatment options for the current flow of 150,000 gallons per day, as required by COMAR 26.08.03.01.C(2) and COMAR 26.08.03.01.C(3). If the unspoken arrangement is that Valley Proteins will significantly upgrade treatment only in exchange for increased flows, that approach should be rejected. Adequate treatment should not be contingent on increased flows from this plant. Increased flows would cancel out the needed benefits of additional treatment. Therefore, as discussed further below, the improvement to technology should be required for a maximum flow of the currently permitted 150,000 gallons per day; no increase in flow should be allowed.

RESPONSE

COMAR 26.08.03.01C(3) requires the State to require discharges to surface waters that are eutrophic or are approaching eutrophic conditions to treat the discharge as necessary to reduce eutrophic effects. The regulation specifies the following “treatment “ as acceptable:

- (a) Advanced waste treatment before discharge;
- (b) Disposal by spray irrigation on land; or
- (c) Disposal of by other practicable procedures which will avoid direct discharge to surface waters.

The final determination permit satisfies COMAR because it requires advanced treatment of the effluent before discharge for the purpose of protecting both near and far-field water quality. The existing facility has BNR-level treatment. The renewed permit will likely require the upgrade of the existing treatment system to come into compliance with more stringent discharge limits. The wastewater treatment plant design will provide additional wastewater pretreatment; expand the capacity of the existing multi-stage biological nutrient removal activated sludge treatment system; provide increased final clarifier capacity; provide a new tertiary filtration effluent polishing system; and provide a new UV final effluent disinfection system for the increase in production capacity and expanded wastewater flow volume.

The Department included a compliance schedule of three years for upgrading the wastewater treatment and implementation of new limitations at Outfall 001. The value of the new limitations in terms of concentration will be determined by the future flow volume chosen by the applicant. Limits become more restrictive if the permittee chooses a higher flow.

1. One of the most significant changes in the final determination permit, when compared to the previous permit, are the requirement to meet effluent limits designed to protect water quality from the point of discharge to Higgins Millpond, in the Transquaking River and in the Chesapeake Bay. The new limits on nutrients (nitrogen and phosphorus) will include loading

limits that are much lower than existing limits. Annual total nitrogen loading limits drop by 44% and phosphorus pound limits drop by 79%. Since those limits do not increase with higher volumes of wastewater discharge the limits become more restrictive as flow increases. Since the reason the Transquaking River watershed is impaired involves nutrient loading, the new permit addresses that issue by requiring much reduced loading from the Valley Proteins facility.

CHANGES FOR THE FINAL PERMIT

None.

22. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - The Draft Permit Fails to Ensure Compliance with Water Quality Standards

Federal and state law require MDE to ensure that each discharge permit it issues meets “all applicable water quality standards.” 40 C.F.R. § 122.44(d)(1)(vii)(A); Md. Code, Envir. § 9- 324(a)(1); COMAR 26.08.04.02.A(1)(b); see also MDE v. County Commissioners of Carroll County, 465 Md. 169 (2019) (“The EPA’s regulations require that a water quality-based effluent limitation be derived from the applicable water quality standard, without referring to a practicability test. Permitting agencies ‘shall ensure that [t]he level of water quality to be achieved by [water quality-based effluent limitations] on point sources . . . is derived from, and complies with, all applicable water quality standards.’”). The water quality standards that are applicable to the Valley Proteins discharge permit include, among others:

- *prohibiting waters from being polluted by “[s]ubstances attributable to ... industrial waste ... that [a]re unsightly, putrescent, or odorous, and create a nuisance,”*
- *prohibiting waters from being polluted by “[a]ny material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to ... [c]reate a nuisance;”*
- *maintaining dissolved oxygen above 5.0 mg/L, and;*
- *protecting the water for “contact recreation, fishing, aquatic life, and wildlife.”*

(See COMAR 26.08.02.03B(1)(a), 26.08.02.03B(2)(d), 26.08.02.03-2H & 2I, 26.08.02.03-3A(2), & 26.08.02.07A. See also MDE, Overview of Proposed Permit Conditions (Oct. 20, 2021), Exh. 39, at 11.)

These water quality standards will not be achieved under MDE’s Draft Permit. The current discharges of nitrogen and phosphorus from Valley Proteins already create nuisance conditions, contribute to low dissolved oxygen levels in Higgins Millpond, and adversely impact the use of the water body for contact recreation, fishing, aquatic life, and wildlife. (See Exhs. 14– 17; DNR, Transquaking River Water Quality Data (2008-13), Exh. 40; DNR, Water Quality Report Key, Exh. 41; Exh. 1; Exh. 2.) Rather than requiring Valley Proteins to reduce discharges to a level that will maintain water quality standards, MDE proposes a permit that will allow the plant to discharge at the same as or even higher amounts of nitrogen and phosphorus. The below table summarizes pertinent data showing the increased available loads.

The below table summarizes pertinent data showing the *increased* available loads.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Parameter	Current Permit	Proposed (DRAFT)	Improvement per MDE (Effluent Quality)	Current Discharges per Discharge Data (average annual loading 2007 to 2020)	Draft Permit Changes from Current Loads
Total Nitrogen	14,965 lbs/yr (41 lbs/day)	8,477 lbs/yr* (23 lbs/day)	44% Reduction	7,206 lbs/yr	Will allow for 18% Increase
Total Phosphorus	1,497 lbs/yr (4.1 lbs/day)	315 lbs/yr** (0.86 lbs/day)	79% Reduction	272 lbs/yr	Will allow for 16% Increase

NOTE: The table (Column 6) shows the percent increase in available loads, by comparing current discharges (Column 5) with the Draft Permit limits (Column 3). See Exh. 1. Shaded columns are as presented by MDE in Draft Permit related materials. Exh. 39, at 19.

Exh. 1.13 Discharges allowed under the Draft Permit will not be reduced, and as explained under multiple lines of evidence set forth in Gregory Schnaar, Ph.D. Expert Memorandum (Exh. 1) and incorporated fully herein, will continue to impair Higgins Millpond and fail to achieve applicable water quality standards. Because MDE is required under federal and state law to set effluent limitations at a level that will achieve water quality standards, MDE must decline to issue a final permit with the proposed effluent limitations. For any final renewal permit that MDE may ultimately issue, MDE should impose more stringent limitations and conditions, as discussed below, to give Higgins Millpond's ecological system a fighting chance of recovering.

RESPONSE

The Department considered setting TN and TP limits based on historical discharge. However, such a methodology proved unworkable because such limits would be arbitrary, i.e. they would not be either water quality or technology based. Potential limits were evaluated based on water quality and technology. For discussion of the different evaluations done see responses to comments #7, #21, #25, and #49.

Please see the Department's response to Comment #25 for a thorough discussion on the phosphorus annual limit.

For total nitrogen, as the fact sheet stated, the limit came from the Chesapeake Bay TMDL (approved by USEPA on 12/29/2010). The limit is from the requirements for insignificant industrial discharges at segment FSBMH (Fishing Bay Mesohaline) calculated at Edge of Stream (EOS). In the aggregate waste loads JCR Enterprises (currently known as Valley Proteins) was allocated a load of 8,477 lb/year.

TN is limited in general to prevent eutrophication. However, analysis for Higgins Millpond determined that phosphorus was the key nutrient to address eutrophication in the pond. The parts of TN play different roles in water quality. Of particular importance in this discharge scenario was the limiting of Total Kjeldahl Nitrogen (TKN) to prevent oxygen depletion. The INPRG water quality model and the Streeter Phelps equation were used to determine the TKN that could be discharged from Valley Protein Outfall 001 that would will maintain the effluent DO above 5.0 mg/L (i.e maintain stream water quality criteria) during the travel between the outfall and Higgins Mill Pond. Ammonia is limited to prevent toxicity. Meanwhile, monitoring for nitrates is appropriate to provide accurate TN information (TN = nitrate + nitrite + TKN). The Department has added an annual average limitation for TKN and revised limitations for ammonia for the final determination permit renewal.

Water quality assessment is ongoing for Higgins Millpond. In performing the assessment, the Department will confirm if there was an impairment and if so the contributing sources to the nutrient impairment and the nutrient reductions needed to meet water quality standards in Higgins Millpond. Should those results conclude additional controls are warranted, this will be addressed in future permit renewals.

CHANGES FOR THE FINAL PERMIT

None.

23. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III -The Draft Permits Fails to Protect and Maintain the Existing Uses of Higgins Millpond

MDE also has an obligation under the State's Anti-Degradation Policy to ensure that Higgins Millpond is protected. Under the Anti-Degradation Policy, Higgins Millpond "shall be protected and maintained for existing uses and the basic uses of water contact recreation, fishing, protection of aquatic life and wildlife, and agricultural and industrial water supply." COMAR 26.08.02.04.A (emphasis added). See also 40 C.F.R. §131.12(a). The Draft Permit acknowledges that Higgins Millpond is "protected for water contact recreation, fishing, aquatic life, and wildlife" and the accompanying Fact Sheet states that the "permit has been constructed to protect and maintain the receiving streams existing uses and the basic uses of water contact recreation, fishing, protection of aquatic life and wildlife, and agricultural and industrial water supply." Tentative Determination Draft Permit (NPDES NUMBER MD0003247 / Application Number: 04-DP-0024) for Valley Proteins, Inc. (Sept. 14, 2021), Exh. 49, at 1; Exh. 24 at 9. Despite this language, MDE fails to explicitly provide limitations in the Draft Permit that will protect these uses. The record shows that the limits will fail to do so, and need to be more stringent. As discussed above, the Draft Permit will allow Valley Proteins to discharge levels of nitrogen and phosphorus that are similar to or exceed current discharge levels. Continuing with these same or higher loads will not improve water quality or achieve the required uses. Exh. 1 Instead, these current discharge levels have contributed to, and will continue to exacerbate, conditions in Higgins Millpond that violate the Anti-Degradation Policy, as evidenced by eutrophication, the loss of fish and aquatic life, the repeated presence of toxic algae, government posted warnings against water contact, the tragic death of two family pets, and the loss of human recreational uses. Exh. 1; Exh. 2 and attachments; Exh. 9; Exh. 13. Because the proposed limits will allow discharges above current levels, and fail to require significantly reduced loads, those potential discharges will likely lead to violations of the Anti-Degradation Policy as well. Therefore, MDE must adopt more stringent permit limits to protect Higgins Millpond for water contact recreation, fishing, aquatic life, and wildlife.

RESPONSE

The State's Antidegradation regulations do not apply here. These regulations pertain to the protection of a waterbody's existing water quality when it exceeds the water quality for that waterbody's designated use.

CHANGES FOR THE FINAL PERMIT

None.

24. COMMENT (William Wrightson, in-person public hearing 11/16/21)

We want MDE to impose the most advanced technology and insist that this plant be the cleanest and least environmentally disruptive, so it can stop impairing water quality if it's going to have a permit at all. A permit that allows no meaningful reductions in pollution loads falls far short and needs to be much more stringent. In conclusion, thank you for listening. The proposed permit does not protect water quality at Higgins Millpond or the Transquaking watershed. MDE is obligated to protect this water quality, you said so on your slide, 18 thus the proposed permit should be revised to impose rigorous restrictions, even if Valley Proteins would need to make a financial investment to accomplish the required standards.

RESPONSE

See the response to Comment #49 regarding TMDL status and responses to Comments #1, #7, and #22 regarding protection of water quality. Portions of other responses may address water quality limitations as well.

CHANGES FOR THE FINAL PERMIT

None.

25. COMMENT Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

With respect to the Chesapeake Bay TMDL, MDE must ensure that Valley Proteins does not exceed the TMDL allocation in order to protect tidal portions of the Transquaking River (under its TMDL), as well as the broader Chesapeake Bay. However, as MDE has confirmed, the TMDL does not address or protect Higgins Millpond, a lentic, non-tidal pond. See MDE, Excerpted 2014 Integrated Report of Surface Water Quality, (Apr. 16, 2015), Exh. 42, at 180-82 (acknowledging that “none of the assessments or TMDLs completed to date have addressed nutrients, or HABS in the non-tidal flowing waters or in any impoundment within the Transquaking watershed” and that MDE “does not have an assessment record for Higgins Millpond.”). Thus, in the present situation, while the TMDL allocation serves as a “ceiling” or maximum that Valley Proteins may not exceed, the Transquaking River TMDL does not shield the permittee from the obligation to comply with more stringent requirements and applicable water quality standards in order to also protect the water quality of Higgins Millpond. MDE must impose permit limitations that go beyond the TMDL allocation to address localized impacts that were not considered by the TMDL, and to ensure that water quality standards are achieved. See, e.g. EPA, Permit Limits – Permitting to Meet a Total Maximum Daily Load, <https://www.epa.gov/npdes/permit-limits-permitting-meet-total-maximum-daily-load-tmdl>, Exh. 43, at 3 (“because TMDL WLAs are often based on watershed loadings analyses and may not have considered localized impacts, supplemented concentration-based WQBELs may be appropriate to prevent a discharge from causing localized impacts in critical low-flow stream segments within the watershed.”); see also MDE v. Anacostia Riverkeeper, 447 Md. 88 (2016) (explaining that TMDLs and the wasteload allocations thereunder are “informational tools” and “still require translation into permit limits.”).

RESPONSE

Supplemental concentration-based WQBELs to address Higgins Millpond were not included in the final permit. As noted above, for Higgins Millpond the Vollenweider Model was run. The Vollenweider

Model predicts the degree of a lake's eutrophication as a function of the areal phosphorus loading. The results of that model confirmed that adding restrictions to the Valley Proteins discharge alone would not achieve water quality standards within Higgins Millpond. The Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals.

The loading limit for total phosphorus was determined by considering the applicable TMDLs: the Chesapeake Bay TMDL (Bay TMDL) and the Transquaking River TMDL. Both TMDLs apply to the Valley Proteins discharge. The facility was included as part of the aggregate wasteload allocation (WLA) for the insignificant industrial discharges in the Bay TMDL. The facility was also given a WLA under the Transquaking River nutrient TMDL. We also conducted additional analysis. In response to this comment, we will describe the analysis which led to the annual phosphorus limit.

The Transquaking River TMDL allowed for a phosphorus discharge from Valley Proteins of 123 lbs/month (the point source waste load allocation in that the TMDL is 1,496 lbs/year). To maintain compliance with the Transquaking River TMDL the phosphorus limit of 123 lbs/month was continued from the previous permit. The Department recognized that the Bay TMDL requirement would be more restrictive than a requirement derived from the Transquaking River TMDL. Valley Proteins is defined in the Bay TMDL as a "insignificant industrial" facility^{18 19}, meaning its wasteload allocation was part of an overall aggregate load. The goal for insignificant industrial facilities in Maryland's Phase I Watershed Implementation Plan (WIP) for the Bay TMDL was to reduce nutrient loads by 23.5% from baseline loadings²⁰. Since the Bay TMDL was developed in 2010, the baseline loading for Valley Proteins was calculated using annual loads from 2004 (the first full operation year of a treatment plant upgrade) to 2009. The average annual load for total phosphorus during this time period was 412 lbs/year. Reducing this load by 23.5% yields a target load of 315 lbs/year. The Phase II and Phase III WIPs did not pose to require any additional reductions of total phosphorus for insignificant industrial facilities (the focus was on total nitrogen for these facilities) due to the level of reductions that had already occurred^{21,22}. Therefore, 315 lbs/year was the annual loading limit applied by the Department in the tentative determination draft.

The Department then used modeling to determine if this limit was appropriate. For reference, below, we've pasted Table 3²³ from the VP_FS_Determination of WQ Based Effluent Limit document²⁴. The table does not include loads from Valley Proteins. It shows that if all the nonpoint source best management practices (BMPs) required by the Transquaking River TMDL (a best case scenario) are implemented in the Higgins Millpond watershed, the NPS phosphorus load discharging to the pond will

¹⁸ Insignificant Industrials are called "minor industrial" strategy in Maryland's Phase I Watershed Implementation Plan for the Chesapeake Bay Total Maximum Daily Load. December 3, 2010

¹⁹ Maryland's Phase I Watershed Implementation Plan for the Chesapeake Bay Total Maximum Daily Load. December 3, 2010, Appendix C, page 14. NPDES # MD0003247, JCR Enterprises is a former name for the facility that is Valley Proteins.

²⁰ Maryland's Phase I Watershed Implementation Plan for the Chesapeake Bay Total Maximum Daily Load. December 3, 2010. p.2-6

²¹ Maryland's Phase II Watershed Implementation Plan for the Chesapeake Bay TMDL. October 2012. Appendix A, pp.A-4 and A-5

²² Maryland's Phase III Watershed Implementation Plan to Restore Chesapeake Bay by 2025. August 23, 2019. Appendix B. p. B-50.

²³ from the document titled - VP_FS_Determination of WQ Based Effluent Limit, Appendix: Determination of Higgins Millpond TP Loading Budget, Table 3 Calculation of TP Load for each Identified Land Use based on Area and TP Coefficient Load Rate.

²⁴ This document summarizes the derivation of the new water quality modeling based limits in the permit.

be 4,652 lbs/year. The baseline NPS load being discharged was 6,289 lbs/year. (See the Vollenweider Model Analysis table excerpt below.) In the Transquaking River nutrient TMDL, Valley Proteins was allocated 1,496 lbs/year of phosphorus. Thus, we estimate that, in the TMDL, Valley Proteins was allocated a load which represents 19-24%²⁵ of the phosphorus load which our model indicates is going to Higgins Millpond. The annual phosphorus limit in the tentative determination draft permit caps Valley Proteins at 4-5%²⁶ of the load going to Higgins Millpond.

excerpt from the Transquaking TMDL²⁷

The annual TMDLs for Transquaking River, equated with illustrative allocations, are:				
For Nitrogen (lb/yr):				
TMDL	=	LA	+	WLA
438,853	=	410,729	+	14,954
				+ MOS
				+ 13,170
For Phosphorus (lb/yr):				
TMDL	=	LA	+	WLA
31,746	=	29,298	+	1,496
				+ MOS
				+ 952
Where:				
		TMDL = Total Maximum Daily Load		
		LA = Nonpoint Source		
		WLA = Point Source		
		MOS = Margin of Safety		

Table 3, below, was derived during modeling for the final determination permit renewal as representative of actual sources contributing to Higgins Millpond

²⁵ 19% ~ 1496/(1496+6289); 24% ~1496/(1496+4652)

²⁶ 4% ~ 315/(1496+6289); 5% ~315/(1496+4652)

²⁷ Excerpt from page 19 of the TMDL -

https://mde.maryland.gov/programs/water/TMDL/DocLib_Transquaking_02130308/transquaking_tmdl.PDF

Table 3 Calculation of TP Load for each Identified Land Use based on Area and TP Coefficient Load Rate.

Land use of Drainage area at Higgins Millpond dam	Square Miles	Acres	TP Coef Load Rate for EOS (lbs/acre/year)	TP Load for EOS Based on Coef x Acres (lbs/year)
No BMP scenario				
Urban IMP	0.07	44.00	0.728	32.03
Urban Perv	0.45	290.00	1.007	292.03
Ag Pasture	1.78	1,136.00	1.194	1,356.38
Ag Crop	4.64	2,967.00	1.165	3,456.56
forest	2.48	1,584.00	0.084	133.06
water/wetland	2.60	1,663.00	0.613	1,019.42
Sum	12.01	7,684.00		6,289
2018 Progress BMP scenario				
Urban IMP	0.07	44.00	0.727	31.99
Urban Perv	0.45	290.00	1.005	291.45
Ag Pasture	1.78	1,136.00	1.002	1,138.27
Ag Crop	4.64	2,967.00	0.688	2,041.30
forest	2.48	1,584.00	0.082	129.89
water/wetland	2.60	1,663.00	0.613	1,019.42
Sum	12.01	7,684.00		4,652

Vollenweider Model Analysis table excerpt ²⁸

Higgins Millpond Watershed: TP load coefficients	4,652 lb/yr total for BMP scenarios 6,289 lb/yr total for no BMP scenarios	Chesapeake Bay Model (Chesapeake Assessment and Scenario Tool (CAST)-17d version Land Use data from 2018 for Dorchester County for nutrient contributions for the pond drainage area.
Drainage Ratio	1.191 cfs/sq miles	USGS flow and drainage area
Average Inflow	13.57 cfs	Drainage Ratio and drainage area
Effluent Flow from Valley Protein facility	0.15 mgd and 0.575 mgd	Based on permit application
Hydraulic Residence Time (HRT): Higgins Mill Pond	9.86 day with 0.15 mgd 9.41 day with 0.575 mgd	Based on total flow (ambient plus facility flow)
Pond Overflow rate (qs)	16.9 m/yr 0.15 mgd 17.7 m/yr 0.575 mgd	Based on depth and HRT of the pond
Recommended Annual Phosphorus Load	466 lb/yr 0.15 mgd 481 lb/yr 0.575 mgd	Based on qs value at the boundary of oligotrophic zone (See Vollenweider Loading plot below)

Higgins Millpond is a man-made pond. The Higgins Millpond Dam creates the pond behind it on the river. The existence of the dam causes this region of the river to have a low flushing rate. The low flushing rate is the primary reason that phosphorus inputs to the pond need to be so much lower than the Transquaking River TMDL WLA. The Vollenweider model analysis shows that the loads just from non-point sources exceed the model’s Recommended Annual Phosphorus Load by 867% to 1,250% ^{29 30}.

The conclusion from our model is that Higgins Millpond will continue to be eutrophied and impaired even if the Valley Proteins discharge did not exist at all. Perhaps most significant is that the non-point (NPS) source load impact is not marginal. The NPS load is many multiples (again 867% to 1,250%) above the load which the model indicates the pond should receive in order to not experience eutrophic conditions. The existence of the Valley Proteins discharge is not the primary culprit behind the impairment, nor does the permit load represent the difference between whether or not the pond is impaired. However, the modeling efforts for the permit were not enough to establish what additional protections might be necessary. Our efforts were limited to evaluating possible limits for the Valley Proteins discharge. It was beyond the scope of the permit process to establish what should happen to all discharges into the waterbody.

²⁸ from the document titled - VP_FS_ Determination of WQ Based Effluent Limit, Page 9 and excerpt from the table labeled Vollenweider Model Analysis for Reservoir Eutrophication Status.

²⁹ At a Valley Proteins discharge flow rate of 0.150 million gallons per day the Vollenweider recommended annual phosphorus load to the pond is 466 lbs/year. At this load the non-point loads exceed the recommended TP load of 466 lbs/year by over 898%, (4652-466)/466, to 1,250%, (6289-466)/466.

³⁰ At a Valley Proteins discharge flow rate of 0.575 million gallons per day the Vollenweider recommended annual phosphorus load to the pond is 481 lbs/year. At this load the non-point loads exceed the recommended TP load of 481 lbs/year by over 867%, (4652-481)/481, to 1,207%, (6289-481)/481.

Thus, the Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals. Consequently, the lowest applicable water quality limit was the annual load from the Chesapeake Bay TMDL, 315 lbs/year phosphorus.

The Department also examined the potential for a lower technology based limit. To determine possible technology based limits we considered limits that have been imposed at the same or similar facilities and the feasibility of those potential limits. We conducted a nationwide search for NPDES permits for similar facilities. Valley Proteins falls under the Meat and Poultry Products Effluent Limitation Guidelines³¹ (ELG) at 40 CFR Part 432. This ELG was last updated by EPA in 2004. Subpart J of that ELG applies to discharges of process wastewater resulting from the production of meat meal, dried animal by-product residues (tankage), animal oils, grease and tallow, and in some cases hide curing, by a renderer. This subpart was unchanged in the 2004 ELG update because EPA determined that any updates to the standards were not economically appropriate. The ELG limits do not include phosphorus, and so were not useful to determine phosphorus limits. However, the ELG did assist in categorizing the specific type of facility whose permits would be appropriate for comparison.

We focused our search on rendering-only facilities, reviewing approximately 60 facilities in EPA’s ECHO database. Upon reviewing the permits for these 60 facilities we found that they rarely contained phosphorus limits. Three individual NPDES permits stood out as good ones for comparison. The three were Darling Ingredients, Hamilton, MI (NPDES # MI0054771), Valley Proteins, Strawberry Plains, TN (TN0005371), and Valley Proteins, Terre Hill, PA (PA0082066). The lowest of the TP limits in the permits found was 1 mg/L in the Darling, Michigan facility. See the table below for the full comparison. Upon reviewing the Rendering-Only Facilities permit we concluded that 1 mg/L was a feasible technology basis for a permit limit.

Rendering-Only Facilities search findings

Parameter	Darling (MI) (MI0054771)	Valley Proteins (TN) (TN0005371)	Valley Proteins (PA) (PA0082066)	Valley Proteins* (MD0003247)
Total Phosphorus	1.0 mg/L (AA)	N/A	2 mg/L (MA) 4 mg/L (DM)	with a load of 315 lbs/year ³²

AA= Annual Average, MA= Monthly Average, DM= Daily Maximum

³¹ EPA identifies the best available technology that is economically achievable for that industry and sets regulatory requirements based on the performance of that technology. The Effluent Guidelines do not require facilities to install the particular technology identified by EPA; however, the regulations do require facilities to achieve the regulatory standards which were developed based on a particular model technology. - [https://www.epa.gov/eg/learn-about-effluent-guidelines#:~:text=CWA%20section%20304\(b\)%20requires,to%20section%20304\(m\).](https://www.epa.gov/eg/learn-about-effluent-guidelines#:~:text=CWA%20section%20304(b)%20requires,to%20section%20304(m).)

³² back calculated annual average concentration maximums - 0.69 mg/L @ 0.150 MGD; 0.18 mg/L @ 0.575 MGD

**Limits to be effective following 3-year compliance schedule*

Also, Subpart K of the Meat and Poultry Products ELG contains the “Poultry First” category. This category applies to discharges of process wastewater resulting from the slaughtering of poultry, further processing of poultry and rendering of material derived from slaughtered poultry. Process wastewater includes water from animal holding areas at these facilities. This subpart was of interest because it included rendering of material derived from slaughtered poultry as part of the overall wastewater contribution and because it was noted that more stringent limits were added during the 2004 review of the ELG.

During our search for Valley Proteins equivalent facilities we examined three poultry first facilities from Virginia: Perdue Foods, Accomac (VA0003808), Tyson Foods, Glen Allen (VA0004031), and Tyson Foods, Temperanceville (VA0004049). These three permits were of particular interest because they were in the same region as Valley Proteins (on the Delmarva peninsula) and they had phosphorus limits. The lowest of the TP limits in the permits found was 0.1 mg/L in the Tyson Foods-Glen Allen facility. See the summary table below.

“Poultry First” Facilities (Virginia) search findings

Parameter	Perdue (VA0003808)	Tyson (G.A.) (VA0004031)	Tyson (Temp.) (VA0004049)	Valley Proteins* (MD0003247)
Bay TMDL?	No	Yes	Yes	Yes
Total Phosphorus	0.1 mg/L (MA)	0.1 mg/L (AA) 0.3 mg/L (MA) 0.5 mg/L (DM)	0.3 mg/L (AA)	with a load of 315 lbs/year ³³

AA= Annual Average, MA= Monthly Average, DM= Daily Maximum

**Limits to be effective following 3-year compliance schedule*

Upon reviewing the Poultry First Facility permits we ultimately concluded that their discharges were not comparable to Valley Proteins. In the three permits examined the rendering waste was only approximately 10-15% of the effluent. We also noticed differences in the development of the ELG limitations. The treatment at the rendering-only versus the poultry first facilities were based on different technologies for treatment. This indicates that EPA likely determined there were factors which made the poultry-first standards and technologies inappropriate to require for rendering-only facilities. We also did not find any indication that the additional treatment required of poultry first facilities would be successful for rendering-only facilities. We concluded that the 0.1-0.5 mg/L limits in these permits were not likely a feasible technology basis for Valley Proteins.

Thus, 1 mg/L was the strictest TP limit we found in a permit for a rendering-only facility. This limit equated to allowing a load of just over 457 lbs/year³⁴. The 315 lbs/year water quality based limit from

³³ back calculated annual average concentration maximums - 0.69 mg/L @ 0.150 MGD; 0.18 mg/L @ 0.575 MGD

³⁴ 1 mg/L x 8.34[conversion factor] x 0.150 MGD x 365 Days/year = 457 lbs/year

the Bay TMDL is more restrictive than a technology limit based on 1 mg/L. Thus we concluded that the limit(s) in the permit of 315 lbs/year was still appropriate.

NPDES permits are issued for 5-year terms to allow for re-evaluation of the data at that interval. The limit applied in the final determination permit has been determined to be appropriate based on current data, regulations, and analysis. If there are future changes to the background stream, applicable TMDLs, and/or other governing information, they will be addressed by future permits via this iterative process.

See the full response to Comment #49, as well as the response to comments #7, for additional details relevant to this response.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Monitoring and Reporting

26. TOPIC OF MULTIPLE COMMENTS: NEED TO IMPLEMENT MORE RIGOROUS INDEPENDENT THIRD-PARTY MONITORING, DISCONTINUE SELF TESTING

Elizabeth Williams - *This permit should be upgraded to require independent, third-party monitoring of all discharge limits to ensure compliance. Equally important to the health of the local ecosystems upon which our tourism and seafood industries rely. Rather than permitting continued pollution of public resources, Maryland Department of the Environment (MDE or Department) must issue fines and enforce water pollution control laws. It is very concerning that the agency has not taken action against previous violations by Valley Proteins.*

Captain Iris Robertson - *Monitoring of compliance going forward should be done by an independent agency. No more self-reporting. Boarding should be on a daily basis until VP stops polluting.*

Elizabeth Williams - *This permit, which expired in 2006, should be upgraded to require independent, third-party monitoring of all discharge limits to ensure compliance.*

Sharon Smith - *Testing should be conducted weekly by a third party. Testing should occur weekly at various times each week without prior notification to Valley Protein.*

Terence McArdle - *It is beyond understanding is the fact that they are self-testing the water they release into the Transquaking River and then they self-report to the MDE. A question for the MDE that was never asked is whether this type of self-testing and self-reporting is the normal procedure for the permits issued by the MDE. This amounts to an honor-reporting system where thousands, perhaps millions, of dollars are at stake for Valley Proteins. In addition, in the new permit this self-testing, self-reporting would be continued.*

Mark Wilson - *Until best use practices are implemented by VP or any other company that takes their place, MDE has no choice but to rigorously enforce its regulations by holding violators accountable. Proof of compliance should never be left to the regulated party. Proof of compliance must be done by the regulatory agency.*

Charles Denton - *All testing should be performed daily and by and outside independent service with clear instructions to post on a public website.*

Tom Lilly, in-person public hearing 11/16/2021 - *One concerns the sampling, which I understand in the permit can be done in-house by Valley Proteins. You know, I have to question that. And I think that accurate sampling should be done by an EPA certified laboratory. For example, we have one right here, right in Salisbury, Chesapeake Lab, which, for example, samples wastewater discharges from I think 500 wastewater treatment plants. They're highly qualified. And it's important to note that the EPA has a certification, as I mentioned, and they also train technicians and they have to follow Federal guidelines. So testing should be done at least, I'm going to say, weekly, we think. And, as importantly, the sampling should be done by independent people. That's an integral part of the monitoring process.*

Christina Darby, Nanticoke River, in-person public hearing 11/16/2021 - *Regardless of how well and thoroughly the permit rules are written and loophole-free, if there is no continuing oversight, monitoring and evaluation by an independent agency to ensure Valley Proteins' adherence, then it is all for naught and the environment continues to suffer.*

Iris Robertson, in-person public hearing 11/16/2021 - *After listening to everybody's testimony this evening and after hearing all of the specifics to the permit and your request for input from us about how you could potentially make the permit better, I'm hearing that reporting -- independent reporting daily should be absolutely fundamental to a permit. And then enforcement should be fundamental. Those are the two component pieces -- independent reporting and enforcement. I'm going to say it again, independent reporting and enforcement.*

Charles Stegman, Wicomico Environmental Trust, in-person public hearing 11/16/2021 - *We also feel strongly that monitoring testing should be done by the State or by an independent party, instead of relying on reports coming from Valley Proteins.*

Commenter requests that any permit require continuous monitoring of each permitted constituent in its discharge, and prompt reporting of all exceedances. The Draft Permit requires monitoring of only a portion of the periods of discharge. More oversight of this facility is needed, with increased monitoring and reporting requirements. The December 2021 violations, including permittee's apparent failure to self-report, further confirm the need for regular, continuous, and comprehensive monitoring. In addition to enhanced monitoring of the permitted outfall, Commenter requests that any permit require continuous monitoring of locations (such as basins or other waste and wastewater management areas) where pollutants are in a position to overflow or otherwise illegally be discharged. An independent third-party monitor who will inspect the facility and receive all data in real time, cameras that monitor potential sources of pollutants, and alarms designed to provide advance warning before an illegal discharge can occur, along with contingency plans for off-site disposal of wastewater to prevent illegal discharges, are examples of needed improvements to the Draft Permit. Monitoring information should be provided automatically and in real time to MDE or through an independent third-party who will confirm reporting to MDE. These precautions are needed in light of the history of this facility, and the harm it imposes on the impaired ecosystem from continued excess loads of nutrients (and potentially other pollutants).

Dave Arndt - *However, appropriate actions must be taken to ensure there is a commitment from Valley Proteins to comply with new pollution limits that protect water quality. Valley Proteins new wastewater permit must be updated to include strong and enforceable pollution limits. The permit should be based on science that addresses the unique conditions at Higgins Mill Pond, a shallow impoundment just*

downstream of the facility prone to major pollution problems. Pollution limits should be keyed to real-time flow monitoring that guarantees impacts are well-managed during low flow conditions.

RESPONSE

Self-monitoring is prescribed by the Clean Water Act pursuant to regulations at 33 U.S. Code Section 1318 (also COMAR 26.08.04.03A), which may include effluent monitoring conducted by MDE's inspectors. Many analyses cannot be performed away from the Facility without distorting the results. Moreover, much of the sampling is automated (e.g. composite samples collected over a time period). Valley Proteins uses EPA certified laboratories for all of the samples that cannot be analyzed on site. All permittees are required to maintain results of all analyses, including accounts of sample collection, identification of laboratories performing such analyses (and demonstration of applicable certifications), and results for a minimum of three years.

The final determination permit has either increased or maintained the monitoring frequency requirements for all parameters at Outfall 001. The final determination permit (04DP0024) has a robust structure of monitoring and reporting. In the permit there are monitoring requirements for fifteen different parameters. Fifty-three (53) different statistics need to be reported. Reporting on this sampling is required to be compiled and submitted electronically monthly. Additionally, the permit has other reporting requirements in the text special conditions. Twelve (of 22) special conditions have required and/or conditional reporting requirements. Once the compliance schedule is complete, the permittee will also have 28 additional limits to comply with.

As discussed at length in the fact sheet and in responses to other comments in this document, there are a number of new parameters which are monitored and/or limits, including total Kjeldahl nitrogen and temperature (added for the final determination - see also response to Comment #17).

It is, however, important to note that there are a number of non-point source discharges in this watershed, which are contributing significantly to its water quality. See the response comment #49 for more perspective on how Valley Proteins discharge compares to the other nutrient sources in the watershed. The Department has used water quality models (as detailed in the fact sheet and throughout this response document) to derive limitations appropriate to protect the receiving waters. Requiring actual downstream monitoring would not provide any additional information as to the appropriate limits for this facility. Rather, it would only provide information relative to the overall status of the receiving waters, which includes all of the nonpoint sources referenced above. Thus, the Department has determined it is not appropriate to include downstream monitoring as a permit requirement.

CHANGES FOR THE FINAL PERMIT

None.

27. COMMENT: Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III

The Draft Permit requires notices of non-compliance with effluent limitations. Any final permit should also require self-reporting within 24 hours of any noncompliance, alongside other permit reporting requirements. This is necessary to support the enforcement program. In 2016, Randy Denny had to request from the company that it self-report such noncompliance, but Mr. Denny lacked the permit-imposed tools to enforce this request. Emails between R. Denny, MDE, and E. Wroten, Valley

Proteins (Dec. 2016), Exh. 52. Any final permit should require Valley Proteins to perform this self-reporting.

RESPONSE

The provisions of the permit that the comment is referring to are general conditions. These are conditions that are placed in all individual permits. Specifically the comment refers to General Condition B. 2. (NONCOMPLIANCE WITH EFFLUENT LIMITATIONS). The comment is requesting that 24-hours reporting to apply to knowledge of any limit violation and not just to daily maximum or daily minimum effluent limits violations.

The Department agrees and has changed the text of General Condition B. 2. to the text in the changes section below. This text comports with the 24-hour reporting requirement at [40 CFR 122.41\(l\)\(6\)](#).

CHANGES FOR THE FINAL PERMIT

The language of condition II.B.2. has been updated to require 24-hour reporting upon acquiring knowledge of any noncompliance with the permit which may endanger human health or the environment. For convenience, the full text of the condition has been provided below.

NONCOMPLIANCE WITH EFFLUENT LIMITATIONS

The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances by notifying the Inspection and Compliance Program by telephone at (410) 537-3510. Then Within five calendar days, the permittee shall provide the Department with the following information in writing:

- a. a description of the non-complying discharge including its impact upon the receiving waters;*
- b. cause of noncompliance;*
- c. anticipated time the condition of noncompliance is expected to continue or if such condition has been corrected, the duration of the period of noncompliance;*
- d. steps are taken to reduce and eliminate the non-complying discharge;*
- e. steps to be taken to prevent recurrence of the condition of noncompliance; and*
- f. a description of accelerated or additional monitoring conducted to determine the nature and impact of non-compliant discharge.*

For non-compliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of the time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather.

28. COMMENT: Mark Wils, in-person public hearing 11/16/2021

From a layman's point of view, the Department must not only enforce current regulations regarding bacteria, nitrogen, and phosphorus pollutants, it also has to fully analyze discharges for other pollutants such as nitrates, heavy metals, PFAS chemicals, and other known pollutants that are not being tested for now. This would create a baseline for how bad the VP discharges are and help inform how these pollutants can be dealt with.

RESPONSE

The permit requires monitoring for nitrates. Nitrates are a part of total nitrogen (TN) and are controlled by the conditions in the permit that control TN. For nitrates, there are no applicable standards that should be imposed as permit conditions because nitrate is not directly related to surface water quality criteria (other than being part of TN). TN is limited to prevent eutrophication. Total Kjeldahl Nitrogen (TKN) is limited to prevent oxygen depletion. Ammonia is limited to prevent toxicity. Meanwhile, monitoring for nitrates is appropriate to provide accurate TN information (TN = nitrate + nitrite + TKN).

In the permit renewal application, heavy metals were all reported as not being detected. Heavy metals are not typically pollutants of concern from poultry rendering facilities. Since heavy metals are not a pollutant of concern the permit does not need to have related conditions.

The rendering of poultry offal is not a likely source of PFAS. Per the CDC PFAS [factsheet](#)³⁵,
“The per-and polyfluoroalkyl substances (PFAS) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. Fluoropolymer coatings can be in a variety of products. These include clothing, furniture, adhesives, food packaging, heat-resistant non-stick cooking surfaces, and the insulation of electrical wire. Many PFAS, including perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), are a concern because they:

- *do not break down in the environment,*
- *can move through soils and contaminate drinking water sources,*
- *build up (bioaccumulate) in fish and wildlife.”*

Additionally, on December 5, 2022³⁶, EPA issued its most up-to-date guidance for the NPDES Program concerning PFAS. The applicability section of the letter identified nine industry categories³⁷ known or suspected to discharge PFAS. Valley Proteins does not fall into any of the sectors identified. Thus, it would not be appropriate to institute anything additional monitoring requirements or narrative controls with regard to PFAS.

In conclusion, PFAS is not considered a pollutant of concern in the influent to the facility, also Valley Proteins' industry (the Meat and Poultry Products Point Source Category) is not considered a source of PFAS by EPA, and they are not using any PFAS-containing material in their processes there is no basis

³⁵ https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html

³⁶ PFAS Strategic Roadmap (pdf) - https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

³⁷ (A) Organic chemicals, plastics, and synthetic fibers, as identified in part 414 of title 40, Code of Federal Regulations (or successor regulations). (B) Pulp, paper, and paperboard, as identified in part 430 of title 40, Code of Federal Regulations (or successor regulations). (C) Textile mills, as identified in part 410 of title 40, Code of Federal Regulations (or successor regulations). (D) Electroplating, as identified in part 413 of title 40, Code of Federal Regulations (or successor regulations). (E) Metal finishing, as identified in part 433 of title 40, Code of Federal Regulations (or successor regulations). (F) Leather tanning and finishing, as identified in part 425 of title 40, Code of Federal Regulations (or successor regulations). (G) Paint formulating, as identified in part 446 of title 40, Code of Federal Regulations (or successor regulations). (H) Electrical and electronic components, as identified in part 469 of title 40, Code of Federal Regulations (or successor regulations). (I) Plastics molding and forming, as identified in part 463 of title 40, Code of Federal Regulations (or successor regulations).

for any PFAS-related conditions. Additionally, while under study and not relevant to the final determination permit, how to regulate PFAS in wastewater has not been finalized by MDE or by the U.S. EPA.³⁸

CHANGES FOR THE FINAL PERMIT

None.

29. COMMENT: Christina Darby, Nanticoke River, in-person public hearing 11/16/2021

Current reporting requirements have numerous loopholes. Reporting often is on an annual basis. This is not frequent enough. Given the current conditions and Valley Proteins' record of noncompliance, all reporting should be required on at least a monthly basis. Several categories of reporting are required only upon request by the Department. Competing priorities might neglect to affirmatively request such reports.

RESPONSE

Monitoring frequency is determined based on the expected variability in the composition of the stream being sampled. With regards to effluent monitoring at Outfall 001, every parameter is monitored at a minimum frequency of once per week. All of these monitoring results must be summarized on a discharge monitoring report and submitted monthly to the Department via the electronic reporting tool NetDMR.

Groundwater sampling is required once per quarter, a lower frequency because any variance caused by the migration of groundwater will be less frequent - so weekly or monthly monitoring will most often not provide meaningful data. Please note that there is a typo in the third paragraph of Special Condition P.3, which opens by stating "Each calendar year, the permittee shall take and analyze a groundwater sample...". The monitoring table in the same special condition specifies the correct monitoring frequency of once per quarter. The typo will be fixed in the final permit.

The permittee is also required to comply with a special permit condition governing sludge disposal. Sludge is generated at this facility during various stages of the treatment process and the excess sludge is hauled away. Once every 12 months, the permittee shall report to the Department the quantity of sludge expected to be generated for the coming calendar year and how all sludge generated at the facility shall be disposed of. Similarly, the permittee shall manage and report the removal of sludge to offsite locations no later than December 28th of each year. If requested by the Department, the permittee must provide a copy of the most recent reports within 30 days. Otherwise, it is not deemed necessary for the Department to collect sludge disposal information on a more frequent basis.

The Department has re-reviewed the frequencies of monitoring and reporting in the tentative determination permit and found that they are sufficient to monitor the variability of each respective activity.

Also see the response to Comment #65.

³⁸ On June 15, 2022, EPA issued interim drinking water health advisories for PFOA and PFOS (two parameters included in the PFAS chemical group). However, since the Transquaking River does not have a designated use for public water supply, these advisories would not be relevant to the final determination permit reissuance. This information also has no impact on the conclusion that PFAS is not a pollutant of concern, as outlined in the response to Comment #22.

CHANGES FOR THE FINAL PERMIT

The typographical error in the third paragraph of condition I.P.3. has been corrected in the final permit. The paragraph opens by saying, “Each ~~calendar year~~, the permittee shall take and analyze a groundwater sample...”. Instead that passage should say “Each quarter, the permittee shall take and analyze a groundwater sample...”

30. COMMENT (Tom Lilly, in-person public hearing 11/16/2021)

The second suggestion is very careful monitoring of the loads coming out of the plant. We have found in other situations like this, where this is a great opportunity for an illegal operation that's trying to dispose of PCPs (phonetic) for example, from out of State, to stick those in a load of material. And if we don't have very careful monitoring and logging of what goes in and out of the plant, we're going to have a problem. So that needs to be looked at very carefully.

RESPONSE

Please refer to the responses to Comments #26 and #28 for information responsive to this comment.

CHANGES FOR THE FINAL PERMIT

None.

31. COMMENT (Charles Denton, in-person public hearing 11/16/2021)

My name is Charles Denton, spelled D E N T O N. I'm a public stakeholder. I would like to start out by seconding what Tom Lilly said about external EPA testing. That's the only way I believe we can have any credibility from what everyone else is talking about. And I also would like to echo, before I get into my written comments, what Judith said about the solids disposal. It's just a big murky unknown. And as I studied the draft permits, there was nothing really said about it. And I would like to address that briefly in the beginning. It appears to me in looking over the documents that Valley Proteins is planning to increase the facility's raw material processing capacity, in addition to upgrading the wastewater treatment improvement. A lot of this number of 575,000 gallons -- but where -- it must have an associated increased production. And that concerns me because I can't understand why it wouldn't be a major issue. And it concerns me because the permit doesn't talk about what this plant actually processes. But the solids at the end of the process will go up and they could go up fourfold, I think was the number someone mentioned. I don't mean for this comment to be mistaken, but what portion of the million pounds of raw material, or maybe 100 million later, comes from within Maryland? Or comes from without Maryland? Because my suspicion -- this is totally unscientific -- is this facility has the ability potentially to take materials from the Mid-Atlantic of a plant of theirs somewhere else in the valleys of Virginia or somewhere that's aging or crumbling and bring that material here. And then this State and our rivers will suffer the consequences. I'm not opposed to some transportation personally, but there's that potential. And we don't have anything in this permit that addresses that. The removed substances, like I said, are suspect. Also, what is the timeframe for instituting this permit? There's nothing that I saw, unless I missed it, about where we will go the next month, the next six months, the next year. The last thing I would like to mention is how the public knows that effluent limits are achievable and not just aspirational.

RESPONSE

The renewal NPDES permit to Valley Proteins contains fixed limits on what the facility can discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality in the Transquaking River watershed. The Department periodically sends inspectors to determine a facility's compliance with permit conditions and is empowered to take enforcement action against violations and assess monetary penalties. The facility's monitoring reports are public documents, and the general public can review them..

With regards to time frame, the Department is required to respond to every substantive comment received from the public. Once that process is complete, a final determination is published and the new permit will be effective within 45 days of publication of the final determination.

Please refer to responses to Comments #26, #33, and #39 for further details.

CHANGES FOR THE FINAL PERMIT

None.

32. COMMENT (Christina Darby, Nanticoke River, in-person public hearing 11/16/2021)

The current permit requires no reporting whatsoever of total nitrogen discharge from December 1st through March 31st. This is a high-risk area for excessive discharge, and soil amendments may no longer be spread on farmland from mid-December through February. The exception from reporting during these months means that total nitrogen discharges which exceeded the current permitted limit by one-third last year during the months of required monitoring, likely are also being under-reported by more than percent each year.

RESPONSE

The previous permit did only require reporting total nitrogen between April 1 and November 30. The tentative determination corrects this oversight and required monitoring for Total Nitrogen year-round.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Compliance Schedule

33. TOPIC OF MULTIPLE COMMENTS: THE CURRENT FACILITY SHOULD NOT BE ALLOWED TO INCREASE ITS DISCHARGE FLOW

Captain Iris Robertson - Until Valley Proteins can prove that they can meet the specifications of the existing permit there is no reason to think they will meet the specifications for a new permit. Why should they be given four times the opportunity to pollute at four times the level they are already polluting? And how come the MDE doesn't enforce the current permit? Valley Protein has continually violated the terms of their existing permit and has a legally allowed pollutants to be introduced into waters of the state. No

expanded discharge limit should be in a new permit. Valley Proteins track record should not be rewarded with expansion. Start enforcing the current permit with SUBSTANTIAL fines.

Mark Wilson - *First, the option to permit Valley Protein to continue discharging at the current level which is already damaging the environment. The company has been out of compliance for years at that level of discharge and has not faced any real penalty for it. Second, the option to allow VP to almost quadruple the discharge is incomprehensible given the company's poor record of compliance. To adhere to the Department's mission, neither choice is justifiable.*

Charles Stegman, MD - *The handout we received includes 04DP0024 - Draft Permit Summary which states the future flow volume from the Valley Protein facility may be increased from 150,000 gallons per day to a flow rate of up to 575,000 gallons per day upon the discretion of the permittee. New limitations are proposed by the Maryland Department of the Environment based on the probable flow rate increase. My concern is that these new proposed limitations listed in the handout, in the flow rate of ammonia, dissolved oxygen, and biochemical oxygen are not nearly sufficient to avoid a large increase in pollutants being discharged. An increase from 150,000 gallons a day to 575,000 gallons per day represents an increase of 3.83 times the original volume. In order to avoid increasing pollutants discharged, the limitations would have to be decreased by a commensurate value: 3.83 times. The numbers given on the handout are a small fraction of the reductions necessary to avoid additional pollution.*

Elizabeth Williams - *Valley Proteins must come into compliance with their current discharge limits before they are allowed to expand their discharge volume.*

Sharon Smith - *Valley Protein should not be allowed to increase its discharge volume until in full compliance.*

Terence McArdle - *Valley Proteins discharges 150,000 gallons of waste water a day, 365 days a year. The new permit would allow that number to increase 4 fold to around 600,000 gallons. VP has not been able to meet the old 2006 regulations of nutrient pollutants. The question remains if VP cannot return safe water to the river now how will it do so in the future with a 4 fold increase of polluted water? The VP representative at the meeting gave no plan of action for the present pollution problems and no mention of how VP would handle a 4 fold increase of released water into the Transquaking River and beyond into the Chesapeake Bay.*

Brenda McArdle - *Noncompliance with current requirements should eliminate the possibility expansion.*

Diane J. Miller - *VP should not be allowed to increase its discharge volume from 150,000 gallons per day to 575,000 gallons per day, or be permitted to expand its facility until it can demonstrate that it actually is a good neighbors and a good environmental steward by complying with the reporting schedule requirements and meeting pollutant limits for the duration of this permit (which is supposed to be 5 years - not 20).*

Jeff S. Keyes - *I'm writing this letter to you today because I am concerned about the Valley protein proposal for expansion.*

Lexine Lowe, DCPG - *I am bringing this up to show that a state agency like MDE can act in the public interest by deciding against a proposed facility expansion that threatens the environment and quality of life. Namely, that a small watershed can be threatened by unwise growth, and that state agencies*

charged with protecting the environment have an obligation to protect us from, rather than enable, unwise development. We do not dispute that Valley Protein is performing a necessary service for the chicken industry. Unfortunately, it has been performing this service in an irresponsible manner which has greatly increased pollution in the Transquaking river. A rich company like VP is financially able to do things the right way, but if they do not, it is MDE's responsibility to see that they do.

Richard Ball, DCPG - *I understand and believe based on information I have read and my own observation that a significant amount of nitrogen in the Transquaking River come from the Valley Protein facility. The water pollution from the facility has and continue to contribute to the poor health of the watershed and has ruined the recreational quality of the Transquaking River. I understand that with an average daily discharge from Valley Protein is 150,000 GPD. If you consider permitting the facility to 575,000 GPD, I'm very concerned about the change in downstream hydrology. Please delay the plan to increase the discharge flow above 150,000 GPD until we are sure the facility regularly meet all the requirements of the current permit.*

Paul Allen, in-person public hearing 11/16/2021 - *So when I moved here 28 years ago, this place was very pristine. The Transquaking River was sustained only with -- and now I would say the water there is -- could be politely described as a nice shade of yuk. It was a jewel, really. The species of birds was incredible, there were yellow perch there, wonderful large mouth bass, slab crappies, and now, sadly, the only -- mostly the only things that really thrive in there are invasive species. Blue, channel catfish, European carp and snakeheads, those are the only things that are really doing well now. Overall, when the water quality goes down, species diversity goes down. And diversity is the most important part of the ecosystem, it's the part that -- it's the thing that gives us stability. I did a little research about this before I came in and I read the tentative determination fact sheet. And, you know, they're asking for four times the present discharge. And one of the things that I -- that doesn't occur to people is even though the concentrations might be going down, in terms of the regulations. If you increase the volume by four times, it's going to be a lot more stuff in the water. It's going to be at least -- indicator species, you know, things that are very sensitive, are going to go away.*

Lexine Lowe, DCPG, in-person public hearing 11/16/2021 - *State agencies like MDE can act in the public interest by deciding against a proposal that threatens quality of life. Although tonight we are talking about the proposed industrial expansion of an existing facility and not a housing development, there is an important similarity. Namely that a small watershed can be threatened by unwise growth and that State agencies charged with protecting the environment have an obligation to protect us from, rather than enable, unwise development. We do not dispute that Valley Proteins is performing a necessary service for the chicken industry. Unfortunately, it has been performing this service in an irresponsible manner, which has greatly increased pollution in the Transquaking River. A rich company like Valley Proteins is financially able to do things the right way, but they do not. And it is MDE's responsibility to see that they do.*

Matt Pluta, Riverkeepers & ShoreRivers, in-person public hearing 11/16/2021 - *Finally, the permit we're reviewing today offers Valley the option to expand their discharge volume from 150,000 to 575,000 gallons of treated wastewater a day. I ask the Department what has Valley Proteins done in recent history to earn and deserve the right to discharge nearly five times more wastewater than they currently are?*

John Grautt, Wicomico Environmental Trust in-person public hearing 11/16/2021 - *... We're very troubled that a new permit would allow the Linkwood facility to quadruple its wastewater discharge volume, at the request and sole option of Valley Proteins. The Transquaking is a small stream as we've*

been told and shown, a shallow pond at the end, it's so small that it doesn't even have a USGS flow station. Permitting an increase four times the discharge at this volume would be irresponsible.

John Grautt, Wicomico Environmental Trust in-person public hearing 11/16/2021 - ...MDE, we suggest, would not consider any requests for an increase in discharge volume from the Linkwood facility unless and until, one, the Transquaking River watershed is no longer impaired and, two, Valley Proteins has established a consistent compliance record. Then let's consider their request for an increase.

Debby Hill, in-person public hearing 11/16/2021 - ...I think Valley Proteins needs to prove that it can clean up its act before the Maryland Department of the Environment gives them the permit to increase in size. I mean, they haven't handled what they've got now to where we're satisfied with it. So I think the Maryland Department of the Environment needs to keep track of them for next year. If they clean up what they've got, maybe we'd be willing to look at a permit increasing their size. But I can't see you approving of it at this point, I really can't, when they've got such a bad track record.

William Wrightson, in-person public hearing 11/16/2021 - And arguably the most important aspect of the permit revision is the metric by which the effluent is measured and some other folks mentioned this. MDE is using a percentage -- you'll see some of those categories are milligrams per liter -- ammonia, chlorine and fecal coliform are all listed that way. We feel strongly -- at least for the pond, which is a pretty unique biome -- that the permit needs to focus on imposing a much more rigorous limits on the total load in pounds or tons of various pollutants, not the percentages. I think we all understand if you take a two percent solution and you dilute it to one percent, then you multiply by four, you have more stuff coming into your waterway. And in the case of ammonia, if you look at the slide, they actually don't change the concentration between 150 and the 575, so basically approving a four times plus increase of ammonia coming into the pond. And in the most recent iteration of the permit, MDE would allow the plant to add much more water to the outflow, but it does not actually reduce the absolute amount of waste that is going into the waterway and the pond. And this is just math, mathematical trickery.

The Increase in Flow Permitted Under the Draft Permit is Unreasonable (Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III) - Valley Proteins has operated in a manner that has been harmful to Higgins Millpond over the last thirty years. Instead of addressing this harm, the Draft Permit inexplicably not only allows Valley Proteins to continue to discharge pollutants at loads that will harm water quality, but also to nearly quadruple the entire flow of wastewater discharged from the facility. There is no basis for permitting any increase in wastewater flows for at least three key reasons.

- *First, the increased flow would cancel out any potential benefit from a significant wastewater treatment upgrade (with the overall load remaining unchanged as described above).*
- *Second, Valley Proteins' history of violations illustrate that the current flow is, if anything, too high. Valley Proteins cannot seem to comply with its permit under the current operational volumes. The history of upsets and malfunctions, along with the unreported illegal discharges in December 2021, underscore this point.*
- *Third, the permit record does not reflect consideration of a range of additional potential problems due to increased production and increased wastewater flow, such as more raw materials (offal) in contact with stormwater that bypasses treatment, potential*

increased odor and other nuisance attributes of the facility, added propensity for upsets, potential temperature impacts, and other issues. Some of these issues are discussed further below.

This plant has failed to operate without harming the environment at its current operational volumes. Any expanded flow and accompanying expanded operations would further damage the pond's ecosystem that already receives the brunt of this facility's failures. For any renewal permit, MDE should impose a maximum flow of 150,000 gallons per day as an enforceable limit, rather than a "monitoring only" condition, and also should require that the pollutant loads be reduced as discussed above.

Susan Sturgis - The permit is for significant expansions in the Linkwood facility's capacity. Yet the public for years has been reporting egregious violations, some of which MDE staff acknowledged knowing about. At the 11/16 hearing, multiple attendees enumerated smells so bad they could not engage in outdoor activities. Another speaker shared photos from that day and the previous of sludge spread in an environmentally disastrous manner. Dead dogs, odd tasting tap water, fish kills, once plentiful species gone, etc, etc. Then, within a few weeks of the hearing, a MDE inspection led to a suspension of activity at the Linkwood facility, precipitated by overt, "in your face" violations.

RESPONSE

Several commenters stated that the facility should not be allowed to increase its volume of discharge since it has difficulty meeting the current discharge limits. COMAR 26.08.04.02 provides the requirements for when the Department shall reissue a discharge permit. The final determination permit is in compliance with 26.08.04.02 at either flow regime (0.150 MGD or greater than 0.150 up to 0.575 MGD) and thus as the regulation a permit is being reissued.

The final determination permit is an industrial surface water individual discharge permit. For the convenience of discussion that section of COMAR is re-printed below. The parts of that section that are not relevant to this type of discharge permit have been struck out. As explained in the fact sheet and in this response document the reissued permit is in compliance with COMAR 26.08.04.02 A.(1). A.(2) does not apply to the final determination permit because the discharge is not from a publicly owned treatment works. For A.(3) as of issuance the complying with any administrative orders. For more information the reader should review the COMMENT GROUP - Compliance/Enforcement section of this document. For A.(4) the industrial treatment works at the facility are operated and maintained by a certified operator. For A.(5) "the requirements of Regulations .01, .01-1, and .01-2 of this chapter" refer to the application process and the public participation steps associated with it being completed. As demonstrated by the record of the issuance of the final determination permit, all of those requirements have been satisfied. For COMAR 26.08.04.02B., federal effluent standards and limitations do apply to this type of facility. However, none of them have been applied because they have been superseded by more restrictive water quality based limits of the same parameters. For COMAR 26.08.04.02C., a compliance schedule that meets the terms of this regulation has been implemented in the permit.

COMAR 26.08.04.02 - Requirements for the Issuance and Reissuance of Discharge Permits

A. General. The Department shall issue or reissue a discharge permit upon a determination that:

(1) The discharge or proposed discharge specified in the application is or will be in compliance with all applicable requirements of:

COMAR 26.08.04.02 - Requirements for the Issuance and Reissuance of Discharge Permits

- (a) Effluent limitations,
- (b) Surface and ground water quality standards,
- (c) The Federal Act,
- (d) State law or regulation,
- (e) Best available technology, and
- (f) Federal effluent guidelines;

~~(2) The discharge or proposed discharge from publicly owned treatment works (POTW) or other sewage treatment works, and the sewerage systems, including the pumping stations, which serve the POTW or other treatment works, are in compliance with:~~

- ~~(a) The continuing planning process required under §303(e) of the Federal Act; and~~
- ~~(b) The approved county water and sewerage plan adopted under Environment Article, Title 9, Subtitle 5, Annotated Code of Maryland;~~

(3) The provisions of existing discharge permits, as issued, and any outstanding administrative orders affecting the applicant or his affiliate have been or are being complied with by the applicant and his affiliate;

(4) Industrial waste treatment works, ~~publicly owned treatment works, or other sewage treatment works~~ are operated and maintained by a certified operator under the provisions of Environment Article, Title 12, Annotated Code of Maryland, and applicable regulations; and

(5) The requirements of Regulations .01, .01-1, and .01-2 of this chapter have been met.

B. Conformance with Federal Act. In the absence of formally promulgated effluent standards and limitations under the Federal Act, the Department shall apply, in the terms and conditions of issued discharge permits, effluent limitations to achieve the purpose of the Federal Act.

C. Compliance Schedule.

(1) The Department may impose a compliance schedule as a condition of a permit for existing discharges which do not comply with permit conditions, effluent limits, or water quality standards.

(2) When a compliance schedule is imposed, the Department shall:

(a) Require the permittee to achieve compliance within:

- (i) Applicable periods established in effluent limitations or water quality standards, or

COMAR 26.08.04.02 - Requirements for the Issuance and Reissuance of Discharge Permits

- (ii) In the absence of any legally applicable schedule of compliance, the shortest reasonable time consistent with the requirements of the Federal Act and State law or regulation;
 - (b) Set for each compliance schedule that is longer than 9 months, interim dates of 9 months or less for:
 - (i) Compliance with interim requirements, or
 - (ii) Submission of reports of progress toward completion of the interim requirements;
 - (c) Require the permittee to provide written notice of the permittee's compliance or noncompliance with the interim or final requirements within 14 days following each interim or final compliance date;
 - (d) Prepare and report to the EPA on the last day of February, May, August, and November, a list of all instances occurring in the quarter before the report where the permittee failed to:
 - (i) Comply with an interim or final requirement, or
 - (ii) Notify the Department of compliance or noncompliance with each interim or final requirement; and
 - (e) Make available to the public for inspection and copying, the quarterly lists reporting failure to comply with compliance schedules.
- (3) The compliance schedule may be modified according to Regulation .10D of this chapter.

In addition to satisfying the COMAR requirements to reissue the permit the permit was issued because it is more protective of the Transquaking River and Chesapeake Bay than continuing to allow administrative extension under the previous permit (99DP0024). 99DP0024 did not have any flow limits, so the renewal permit conditions restricting flow are more stringent. In addition the concentration limits for BOD, dissolved oxygen, TKN, ammonia and the pH limits range were determined based on applicable water quality standards. The Department determined the appropriate limits protective of water quality using flows of 0.150 and 0.575 MGD. The Department's modeling to determine these limits has been explained in response to other comments.

Finally, the new annual loading limits on nitrogen and phosphorus do not change with the flow. They are much lower than the limits in the previous permit. The annual nitrogen loading limit drops by 44% and the annual phosphorus loading limit drops by 79%. The identified impairment of the Transquaking River watershed is linked to nutrient loading (i.e. discharges of nitrogen and phosphorus). Should any future water quality analysis indicate that further loading reductions from the VP facility are necessary to restore stream health, the Department shall implement those via future permit actions.

See also the response to Comment #26 with regards to self-monitoring.

CHANGES FOR THE FINAL PERMIT

None.

34. COMMENT: Richard Bearman, in-person public hearing 11/16/2021

The question is why is MDE prepared to give Valley Proteins a new permit and three years to come into compliance? Which is to say three years of continuing discharge violations.

RESPONSE

Valley Proteins is not being given 3 years to come into compliance. VP must be in compliance with the terms of the renewal permit immediately upon its effective date. However, as discussed in greater detail in previous responses above, the Department has determined that substantially stricter limits are appropriate, which will require upgrades to the existing wastewater treatment works. The renewal permit allows Valley Proteins up to 3 years to complete such upgrades.

A term of 3-years was given based on best professional judgement. Three-years was determined to be appropriate for numerous reasons. The upgrade needed at this facility is “roughly” similar to a municipal wastewater treatment plant. Municipal WWTPs treat effluent that comes primarily from residences. For a typical municipal upgrade the length of the ENR upgrade is dependent on the “starting point” of the participating facility. I.e. it can be shorter if a facility is already performing at BNR or a pseudo-ENR level then the actual upgrade time required (barring finance or supply chain delay) will take less than 2 years. If a facility is barely meeting secondary level effluent criteria, then the upgrade will take 2-3 years.

Valley Proteins’ upgrade is likely to be complicated. It will self-finance the upgrade in a economic environment with rising interest rates. Additionally, the global supply chain has not returned to normal following the COVID-19 pandemic. Also, adequate treatment for VP’s raw effluent will require sophisticated engineering and specialized design. The levels of nitrogen, phosphorus are much higher than in typical municipal raw effluent. The engineering and design work cannot be finalized until the final permit is issued. That work is dependent on the terms of the final permit. The cost of the upgrade, and the financing, is also dependent on final engineering and design plans. Thus we determined, based on best professional judgment, that 3-years is an appropriate timeframe to engineer, design, bid, finance, construct, pilot, and implement the required upgrades to the WWTP. Following this 3-year schedule, the more restrictive limitations will become effective.

CHANGES FOR THE FINAL PERMIT

None.

35. COMMENT (Charles Denton)

You state in the Tentative Determination Fact Sheet that the facility renders approximately 20 million pounds of raw material a week. At this level of production is it correct that an average 150,000 gallons of treated wastewater is discharged currently when 20 million pounds are processed? Then, if the flow is allowed to increase to 575,000 gallons/day the facility will be allowed to increase the amount of

material processed in equal proportion? You are not clear about this processing increase and the four-fold increase in pollution discharge.

What portion of the 20 million pounds of raw material processed comes from outside Maryland and from what states? There should not be an increase in total material processed.

Is Valley Protein increasing the facility's raw material processing capacity in addition to upgrading the wastewater treatment improvement?

RESPONSE

Currently, a maximum of 4.0 million pounds of raw material and an average of 3.63 million pounds of raw material are processed each full day of operation. A potential increase in raw material production may result in the average daily wastewater flow increasing from 150,000 gallons per day to 575,000 gallons per day. Valley Proteins proposes to upgrade the existing wastewater treatment plant to increase its efficiency and to maintain compliance with any revised discharge limits established in the renewed permit. The future WWTP design will be finalized based on the limits in the final renewal permit. The Department has evaluated the potential for multiple discharge scenarios in developing its limitations for the tentative determination permit. Where the raw material comes from is not a factor in the permitting decision-making process.

CHANGES FOR THE FINAL PERMIT

None.

36. COMMENT (Drew Koslow)

Increasing discharge volumes will make existing impairments to The Transquaking River and Higgins Mill Pond worse. A discharge of 575,000 gpd of industrial wastewater would convert the Transquaking River from an important recreational fishery for Snakehead and Largemouth Bass into a conduit for pollution down to Fishing Bay. This is an unacceptable theft of waters of the state for a private discharge. It is particularly disturbing that the state is proposing to enable the continued degradation of state waters to prop up the antiquated infrastructure of this plant, in direct contradiction to Maryland Water Quality Standards.

RESPONSE

See the response to Comment #33 regarding expansion. Also see the responses in the COMMENT GROUP - Effluent Limits (responses to Comments #s 1 - 19).

CHANGES FOR THE FINAL PERMIT

None.

37. TOPIC OF MULTIPLE COMMENTS: LENGTH OF COMPLIANCE SCHEDULE

Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - The Phased-in Compliance Schedule is Not "the shortest reasonable time" as Required by COMAR

26.08.04.02.C(2)(ii) - The need for a phased-in compliance schedule to meet permit levels that largely reflect current discharges is unjustified. Any renewal permit should impose more stringent terms and conditions right away. MDE may impose compliance schedules where discharges do not comply with water quality standards, but MDE must require permittee to achieve the standards within “the shortest reasonable time.” COMAR 26.08.04.02.C(2)(ii). The proposed three-year schedule fails to satisfy the requirement of COMAR 26.08.04.02.C(2)(ii) by providing unreasonably excessive time, and also (as discussed above) by not requiring achievement of water quality standards. The record shows that Valley Proteins can reasonably accomplish needed work and reduce pollution relatively promptly. For example, full design of “interim” or “Phase I” upgrades was submitted to MDE in 2020.19 As the record reflects the necessity of this interim work to support compliance (though it will not itself decrease nutrients), under any reasonableness standard it should already be underway. For the further treatment (referred to as “Phase II” upgrades) that are necessary to reduce pollutant loadings, Valley Proteins’ representatives have described to MDE an anticipated construction period of 18 months to achieve 0.5 mg/L organic nitrogen. At the very least, it would be reasonable to expect Valley Proteins to perform the design and other pre-construction work now, in advance of any permit renewal’s effective date, to minimize further delay. MDE has already allowed Valley Proteins sufficient time to study the Phase I and Phase II solutions and verify that they are effective. Further delay is unwarranted. MDE may reasonably deny the permit and not allow any compliance schedule. However, if MDE does renew the permit with a compliance schedule, then upon the effective date the interim limits should be at least as stringent as those set forth in Draft Permit Section I.A.2 (and with consideration of the additional comments herein regarding improved terms and conditions). Further, it would be unreasonable to allow Valley Proteins more than 12 to 18 months to complete the necessary upgrades (Phase II). Such a compliance schedule should be contingent upon Valley Proteins actually and significantly reducing pollutant loads under a maximum flow of 150,000 gallons per day.

John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.) - ...new permit is necessary to enable improvements to the facility to attain higher water quality. A three year phase-in of the more stringent limits is necessary and appropriate in order to allow construction of the upgrade to the wastewater treatment plant

RESPONSE

The compliance schedule in the permit is Special Condition T. It is a detailed list of milestones that need to be accomplished. We find it is reasonable to expect that a permittee could/would only initiate capital investment, engineering and design of upgrades once the goal of the design is confirmed, via the issuance of a final permit. We did, however, re-review the timing of each milestone in the compliance schedule. We continue to find the schedule proposed in the tentative permit to be appropriate.

See the response to Comment #34 for additional discussion regarding the rationale for the compliance schedule.

CHANGES FOR THE FINAL PERMIT

None.

38. COMMENT (Terence McArdle)

Not mentioned at the meeting was the fact that in March of 2021 the MDE was going to give a grant to Valley Proteins to clean up nutrient pollution from Valley Proteins itself. Remember, Valley Proteins is a

private, for profit company. VP is headquartered in Virginia. It is a Virginia company with plants in 8 states with annual sales of half a billion dollars. The grant to VP was \$13 million to help pay for improvements that would cost more than \$15 million dollars. The improvements would supposedly greatly improve, perhaps eliminate the nutrient pollution that VP produces. The MD State Government in September of 2021 withdrew the grant. According to the Baltimore Sun. "As a result, Valley Proteins no longer plans to install enhanced nutrient reduction technology at the plant — a project with a \$15 million price tag, said Michael Smith, vice chair and co owner of the company. Company officials will, however, fund other, smaller improvements in an effort to meet the state's new requirements once they're finalized." This clearly means that Valley Proteins knows how to eliminate their pollution problems today. They must know the methodology as they have given the methodology a budget. Valley Proteins has budgeted the cost of operating "cleanly" at \$15 million. There is no ethical reason for Valley Proteins to delay this cleanup. But they now await the requirements for the MDE before doing anything except "small improvements".

Notwithstanding the claim of providing "Good Jobs", after all who claims to be providing "Bad Jobs", unrepentant companies who pollute our environment cannot be allowed to continue to operate as usual.

RESPONSE

The final determination permit contains limitations which will require the permittee to install and implement advanced biological nutrient treatment at the facility. Cost of treatment is not an acceptable reason for failure to meet final permit limitations. A majority of the most restrictive limits proposed are water quality-based, meaning consideration of the technologies to be chosen and cost of those technologies is largely irrelevant in establishing the limitations. See the response to Comment #65 regarding additional information about compliance and enforcement.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Sludge and Removed Substances

39. TOPIC OF MULTIPLE COMMENTS: LAND APPLICATION OF SLUDGE SHOULD BE BANNED

Libby Handley Nagel - *You may also want to read about the deer being killed and consumed off of property that has had liquid sludge repeated applied year after year that it is deemed not healthy in the State of Maine.*

Terence McArdle - *It was made perfectly clear that the Valley Proteins rendering plant has an adverse effect on the local environment, adversely effecting water quality, land quality and air quality. They are without any doubt the main cause of water pollution in the Transquaking River, the Higgins Millpond, and hence on to the Chesapeake Bay. Valley Proteins was shown to be dumping sludge illegally around nearby fields in direct contradiction of the permit of 2006. This spread of sludge surely has a negative effect on the surrounding land.*

John Grautt, Wicomico Environmental Trust in-person public hearing 11/16/2021 - *A fourfold increase would raise another serious question. If the Linkwood facility quadruples its wastewater discharge and then it actually complies with the proposed reduction in total nutrients, waste, load, et cetera, where will the waste go? The law requires that Valley Proteins and its subcontractors and contractors ensure that any substances removed from the Linkwood facility are dispensed in a manner that, quote, prevent any removed substances or run-off from such substances from entering or being placed in a location where they may enter the waters of the State. You can't just shift it from one pile to another As others have shown, Valley Proteins has, with limited exceptions, failed to report or confirm that this requirement has been satisfied even under the lower discharge volume and the higher effluent limitations of the current permit. It would be simply naive to assume that if the discharge volume were quadrupled Valley Proteins would comply with reduced limitations without violating the prohibition against polluting other Maryland waters.*

Sludge Placement Where it May Cause Flows to Higgins Millpond Should Be Prohibited (Comment Letter from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III) - *Commenter requests that removed substances be prohibited from being placed on the land within the Higgins Millpond watershed. The impacts of the operation already are concentrated in the pond, though the offal is generated from a geographically broader area. This comment is not addressing in general the use of sludge or infringing on other regulatory regimes, but instead serves the goal of protecting Higgins Millpond by ensuring that permittee does not concentrate any potentially excessive placement of its sludge in the same watershed, consistent with the prohibition of land application on Valley Proteins' own property. See Draft Permit at 18.*

RESPONSE

The commenters concerned about the land application of sludge from this facility offsite. The purview of this NPDES permit is to regulate direct discharges from the site into surface waters of the State. In order to ensure sludge pollutants do not enter surface waters directly from the site, the permit prohibits all on-site sludge disposal. While the permit does contain requirements for tracking of removed substances, the purpose of this within the construct of an NPDES permit is to ensure all sludges are accounted for so that the Department can enforce the prohibition on direct discharge. Further controls regarding off-site handling and disposal of removed substances fall outside the scope of an NPDES permit.

CHANGES FOR THE FINAL PERMIT

None.

40. COMMENT (Allen Girard, Chesapeake Bay Foundation., in-person public hearing 11/16/2021)

Finally, number three, the permit should better account for removed substances. The nutrient plan required for farms that receive sludge should be made accessible to the public, since they are reference documents in the permit. Public access to the plans is necessary to evaluate whether the State's obligation to control pollution for removal of substances is being met. Given the chronic monitoring reporting violations in the current permit, removed substances and other monitoring reports should be required to be submitted monthly, rather than annually.

RESPONSE

The purview of this NPDES permit is to regulate direct discharges from the site into surface waters of the State. The permit does not control removed substances (including sludge) once they leave the site. Land application of the sludge as a soil amendment is regulated by the Maryland Department of Agriculture (not MDE). The only reason the permit requires accounting for removed substances is to make sure they are not making their way into the direct discharge. Therefore, it is not necessary for sludge disposal information to be reviewed or collected frequently. If a problem is found, however, the Department has the authority, via the permit, to compel the permittee to provide a copy of the most recent reports within 30 days.

Please refer to response to Comment #39 for further information.

CHANGES FOR THE FINAL PERMIT

None.

41. COMMENT (Charles Denton)

Concerning 'Removed Substances'. How much waste solids are generated from the water treatment system? Will this quantity increase if treatment flow increases to 575,000 gallons per day? What is the chemical analysis of the 'solids waste' material? Total pollution increase to the local water is not clearly defined.

RESPONSE

While the final determination permit contains references to other requirements regarding removed substances and their disposal, NPDES permits primarily express limitations and requirements with regards to wastewater. We performed a full reasonable potential analysis on the wastewater discharges from the facility. Chemical analysis of the solids is not relevant to the final determination permit.

CHANGES FOR THE FINAL PERMIT

None.

42. COMMENT (Fred Pomeroy, DCPG, in-person public hearing 11/16/2021)

They say a picture is worth a thousand words. And I'm going to hold those up and read the captions. One of the captions is of this photo I took just this morning of sludge on top of the ground within ten feet of a ditch leading into the upper Transquaking tributary. My caption says close-up of semi-solid sludge on top of ground within ten feet of a ditch draining into Transquaking. Sludge applied to this field. I was up there yesterday evening, too. Sludge had been applied to this field two days in a row. I witnessed it. Field less than a mile from Valley Proteins plant. And I'm going to quote what Mr. Stegman quoted from the language of the current, outdated, permit. It states that sludge must be disposed of in such a way as to, quote, prevent any removed substances from entering or from being placed in a location where they may enter the waters of the State. This applies to both VP and its contractors and its subcontractors. We've been saying for a long time that the Transquaking watershed is under a double indemnity. Wastewater coming down containing these pollutants, and sludge being applied within the watershed

means a double indemnity. They're hit with -- this watershed is hit and the Nanticoke watershed also, with two forms of pollution. Very quickly, there's another photo that shows the tracks of the applicator within, I'd say, two feet, of the ditch. It says, Taken looking east from Red Hill Road -- this is 6:30 this morning -- toward Linkwood Road. Tracks from sludge applicator two to three feet from ditch leading to upper tributary of Transquaking. This field is less than one mile from Valley Proteins. I have two more very quickly. The sludge applicator -- when I was pulling behind them in my pick up, pulled its pipes up and there was emitted a vast cloud of a miasma into the air. Needless to say, it smelled horrible. It says, Photo showing sludge applicator and trailing airborne mist rising into the air during application. And guess what, this field has received sludge two days in a row. It got it -- I was up there yesterday evening at about 4:30 and I saw where the tracks of the applicator -- it had just happened, because there was liquid sludge right beside the ditch. When I went up there this morning, the same field was being reapplied. And this shows if you -- I'm going to pass these around. 7 I'll just pass them around, you've got them.

RESPONSE

While this NPDES permit contains references to requirements for management of removed substances, it cannot regulate the land application of Valley Proteins sludge as a soil amendment.

See also the response to Comment #39.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Odors

43. TOPIC OF MULTIPLE COMMENTS: BAD ODOR COMING FROM THE FACILITY

Rick and Kim Hall - I live approximately 2 miles from the Valley Protein facility on Linkwood Road. In the last twelve months the stench being produced by Valley Protein far exceeds anything we have ever smelled before! In previous years, we have always only smelled the rendering plant at the most 4 to 5 times a year. At present, a day does not go by that we don't smell it and the odor has changed. I can hear the operation from my home, ramp up at night and it seems far- far busier, than during the daytime hours.

Libby Handley Nagel - Last night the odor could be smelled in Salem at 7:30 at night

Bruce Robson - Years of reporting smell so bad one couldn't be outside, river water issues, drinking water issues, sludge in fields, dead dogs, farmers reporting drastically reduced care in sludge spread; significant changes in fish species, and on and on.

Margaret Anzalone - Along the way, I met lots of people who complained about the bad odors including a woman who took perfume to her job at the Post Office in order to get through some days; yet, I met no one who was aware of the telephone number to call to report air emissions bad smells. During the hearing last month at the Linkwood Firehall, there was testimony from a nearby resident that the telephone number doesn't work and that his calls seem to be flagged for non-answer.

Sharon Smith - *Valley Protein should be required to ameliorate the stench created by its operation. Thank you for the opportunity to comment on this important matter.*

Terence McArdle - *This spread of sludge surely has a negative effect on the surrounding land. The smell that emanates from Valley Proteins was mentioned numerous times and we ourselves can vouch for the truth in the described odor. Basic science tells us that odors are made up of molecules and chemical compounds. But chemical compounds of what exactly from Valley Proteins? No one at the MDE, no one from the local area gave any indication that there could be another culprit. The lone representative from Valley Proteins, an assistant manager, did not deny any accusation that Valley Proteins was the source of the pollution.*

Brenda McArdle - *If MDE is incapable of enforcing the requirement with which they are responsible for oversight, the agency should no longer be paid with taxpayer funds.*

Franco Primavesi, virtual public hearing 10/20/2021 - *On some nights, it's impossible to get out of my house to go for a walk, to walk my dog because of the odor, so I'm interested to see how you're going to enforce and make Valley Proteins account for those odors.*

Suzanne Sullivan, in-person public hearing 11/16/2021 - *I recognize that this is a wastewater treatment permit, but I wanted to say thank you for sharing the phone number and emphasizing it for odor. That's something that I experience, especially during the summer. And I've actually found that it dictates how I choose to spend my time on my own property. If the stench is so bad, I don't go canoeing, I don't go fishing. If the stench is so bad, I don't mow the lawn -- I don't do that anyways. But you get the point. It actually dictates what I do with my time. And I don't think that a permit for some business should dictate that on my own property.*

Doug Stephens, in-person public hearing 11/16/2021 - *I distinctly remember the water being crystal clear when we were little and it's nowhere near that now. And I think about how this company is allowed to -- we've heard it several times -- exceed their limits over and over again and we're just moving the ball forward and just ignoring it. What I see is them impeding on my rights to clean water and clean air. So I think it's time for the public and us people here tonight to have more rights and to be able to breathe clean air and not smell it and not have to have fish that are contaminated. And that you should hold the company accountable.*

Gordon Hill, in-person public hearing 11/16/2021 - *I live about a little over two and-a-half miles from the rendering company. And I know that that's a pretty good distance for me being able to smell the terrible smell that I hear comes from the rendering company. This summer it's really been bad. And I know the smell because I worked at the rendering company a few times and know how bad it can be. And I thought it was awful bad in my house. You know, I have -- I had work done and put a deck, a large deck on the back of my house, you know, to enjoy, put a barbecue grill and umbrellas, to be able to sit back and enjoy my property and the area and the trees, you know, because I live in a wooded area. But I'm unable to do this because of the rendering company. I have to -- you know, when I sit outside and all of a sudden the smell comes across, then I have to get up and go inside the house, close all the windows and turn the air conditioner on, you know, on a nice spring day. So I think something -- I don't know what causes this smell, whether it's from water or whether it's their materials that they stockpile up at the rendering company that causes it. But certainly this is another big problem I think they have with the rendering company. And I talked to some of my neighbors thinking, you know, am I the only one that has this problem. But I talked to neighbors and they -- one of them that's right beside me said that it has woken her up in the night at times. She has smelled it and been woken up and it causes problems with*

her sleep, you know, when it does happen. And then I talked to another neighbor and they have dogs and a lot of people walk their dogs out on the road. And he says when that smell hits down on the neighbor's that the dogs won't even go outside. Yeah. And my other neighbor who I talked to said she has problems with her smelling, it's something, you know, medical and I said you're really lucky not to be able to smell this. She says but I have to hear the complaints from my husband.

Charles Bradford, in-person public hearing 11/16/2021 - *I understand Valley Proteins, JCR, the rendering plant, whatever it was called back when it was there -- the stench, the smell was nowhere near what it is today. I live within a half a mile, by air, of Valley Proteins. I have multiple fields around me that are being delivered the sludge from Valley Proteins. The problem is, the smell from around the surrounding area is putrid. Two years ago they shut down the high school and the middle school due to it, because they thought they had a sewage leak. So school was dismissed for the day. All I can say is, something needs to be done. I drove down the road, off their cooling tower I had debris fly into my windshield. The smell when you go by it, is really sickening. Other than that, I really don't know what to say. It just needs to be taken care of.*

Libby Nagel, in-person public hearing 11/16/2021 - *I'm a farmer and landowner in Dorchester County. I used the old sludge probably 10 or 15 years ago, which was granular. What I do want to say is there were set-backs, you had to be set back so far from the ditches, and when that was dumped on the land it had to be worked into the ground within that day, before they -- I mean, at night-time, it had to be worked in. The government would come along and pull samples of it. If it was not right, they shut those people down that day. This new stuff they're putting -- and you couldn't come back and put it in the same field, you had to wait years before you could come back and reuse it in the same field. This stuff that they're using, there's a farm on Aries Road that I can guarantee you for the past three years the fields have had it put into it every day. The vehicles are tracking this stuff up and down the road. You can literally smell it on the wheels. I live four miles down in Salem, and I can smell it at my house down there. There are people who are living in Linkwood that say the smell is permeating into their house, they're talking about selling their homes. They'll never get the money back for what they've invested because of this odor. So MDE needs to step up to the plate and they need to do the job that they're supposed to do.*

Tracy Whitby-Fairall in-person public hearing 11/16/2021 - *As many have testified this evening, the odor over the past months has been horrific. I echo Suzanne, you can pick and choose what you do depending on how it smells outside over the summer. I'm a 35 year member of this fire department. If I'm not on that end of Linkwood Road, I'm typically on this end of Linkwood Road. If it's not smelling there, it's smelling here. We've all been hit with it. I know we're talking about water quality and everything tonight. But as an impacted neighbor of the rendering plant, we have all noticed a significant increase in odor, obviously water issues, and Transquaking. So I wanted to share my experience in that regard as a citizen in the neighborhood. I live two miles -- I checked it on the Google map, I'm two miles north on the other end of Linkwood Road and it has been impactful to our lives over the past 12 months.*

William Wrightson, in-person public hearing 11/16/2021 - *I agree that the sludge is an issue and odor problems associated with the plant are also serious matters that negatively affect the entire population around the plant, which MDE needs to consider in its permitting process. We understand there are plants that do not discharge wastewater, for example. Have we studied these, MDE? USDA has tested and recommended a number of processes to eliminate odors -- which has been one of the biggest topics tonight -- and to process sludge -- another big topic tonight -- for rendering plants as well.*

Justin Koshar, in-person public hearing 11/16/2021 - *I've been a lifelong resident of Dorchester County. Pro agriculture, pro poultry industry, we cannot afford to lose the poultry industry in the State of Maryland. I don't know how many of you all realize that, but it's the damn truth. What I'm getting ready to say here is not that hard. The State of Maryland and Valley Proteins need to uphold their standards to control this odor. We cannot -- I have an obligation to keep my property straight and it's not that hard to control the odor. I know there are exceptions to the rules, things happen. But the State of Maryland and Valley Proteins need to, you know, look into this and control this odor somewhat. It's embarrassing at times. I understand it. It happens. But Lord have mercy, control it. It's not that hard, folks.*

RESPONSE

Odors emanating from the facility are generally beyond the scope of the final determination permit; instead they are regulated and permitted by MDE's Air and Radiation Management Administration (ARA). Odor complaints can be reported to their main complaint line at 410-537-3215, to the Salisbury field office at 410-713-3680, or by email at mde.webmaster@maryland.gov. Complaints are referred to inspectors who will then conduct an investigation.

However, the final determination permit can and does address odors related to wastewater discharge. Special Condition O. has requirements for odor control related to the anaerobic lagoons. The condition also requires the minimization of odors arising from the storage, treatment, or disposal of wastewater. The permittee is also required to address odors when considering housekeeping measures or any future plans for facility improvement.

Many at the hearing were also concerned about odors emanating from the land application of sludge that may have come from the facility. Such odors are beyond the scope and authority of the final determination permit. The Maryland Department of Agriculture ("MDA") administers programs concerning the registration, labeling and application of commercial fertilizers, organic nutrients, organic wastes, soil conditioners and soil amendments³⁹. Compliance with Maryland's nutrient management regulations regarding use of soil conditioners or amendments is ultimately the responsibility of the farmer or operator. For more information or to report a possible violation of these regulations contact:

Maryland Department of Agriculture
Nutrient Management Program
50 Harry S Truman Pkwy Room 207
Annapolis, MD 21401
Phone 410-841-5959
Fax 410-841-5950; or

State Chemist Section
50 Harry S Truman Pkwy Room 511
Annapolis, MD 21401
Phone 410-841-2721
Fax 410-841-2740

³⁹ The content on MDA comes from the Guidelines for Application of Soil Conditioners, Soil Amendments, Waste Materials or Effluent on Agricultural Land - https://mda.maryland.gov/resource_conservation/Documents/nm_manual/III-F-1-III-F-3.pdf

Finally, in response to comments received, Valley Proteins has published the phone number of the General Manager of the Facility (540-931-7792). Odor concerns may be called in directly to the facility at the time they are identified. Also, the public is encouraged to call VP Care, a 24-hour customer service team, at 800-871-3406.

CHANGES FOR THE FINAL PERMIT

None.

44. COMMENT: Franco Primavesi, virtual public hearing 10/20/2021

I live 2.5 miles from the plant, and my concern is regarding alerts. I see that in the permit there is mention of alerts, but there's no mention of how those -- how we're going to enforce Valley Proteins on the alerts. I have been complaining for over two years to MDE about alerts, and I see you have no resolution or valid feedback from MDE on this.

RESPONSE

The new permit will require the plant to continue its odor management practice for the treatment plant. This includes maintenance of an odor-minimizing "scum layer" on certain ponds and routine and periodic reporting to MDE. It is often difficult to determine the source and causes of odors. That is particularly true in agricultural areas, since Valley Proteins is not the only contributor of solids that are land-applied as fertilizers.

Please refer to the response to Comment #43 for other information concerning odors.

CHANGES FOR THE FINAL PERMIT

None.

45. COMMENT (Betsy LeCompte-Anderson, in-person public hearing 11/16/2021)

I live in the immediate area and I've listened to everything this evening. But my main concern or question -- and maybe some of you can answer or enlighten me on this. But I have recently noticed not just the odor, but an odor in my water coming into my home that I'm drinking. And it's very, very intense. Now, my concern is what's going into my body. And is this coming in through my well? Because we're on a well system. So I'm not a scientist, environmental debater, you know, or any of that. But if someone knows if this is going on or is experiencing the same thing, I would like you to please share this. Because it's a major concern at this point. I have asked four other neighbors directly in my vicinity and they are experiencing this same thing.

RESPONSE

See the responses to Comments #56 and #57 regarding groundwater requirements in the final determination permit. For concerns regarding the water quality of your drinking water from a well system, you should contact the local health department.

CHANGES FOR THE FINAL PERMIT

None.

46. COMMENT (Bruce Robson, in-person public hearing 11/16/2021)

Just a couple observations. At the beginning you acknowledged how many complaints you've had over the years about the smell, you referenced that. And from what I heard tonight, I'm like, are you kidding? And then the gentleman from -- the gentleman from Valley Proteins, what would you think our reaction would be to you, what you just said, had the nerve to get up there and say? And I say the nerve. I'll be the first to say I am not fully informed, but after hearing this tonight, I say what nerve for you to say to these people who live with this every day. In the last 18 months it's gotten worse and you're telling us, oh, it's gotten better. I'm sorry, it's an emotional thing. These are these people's homes.

RESPONSE

See the response to Comment #43 regarding odor.

CHANGES FOR THE FINAL PERMIT

None.

47. COMMENT (Eric Windsor, in-person public hearing 11/16/2021)

I just see this being tied up in paperwork at this point. You are giving these guys three years to figure out a permit. If you don't issue the permit, they're going to continue to operate on the permit until they figure out a different permit situation. So we're just tied up in bureaucracy right now. I just keep seeing this kind of stuff, and that's exactly what's going on with this. How long is this going to continue? They don't care, as long as they can keep functioning and that's all that really matters for them is their business. That's what they want, they want function. So until something more pressing that actually decreases production that's actually going to help the river -- that's the only thing that's actually going to change anything on our end. And they're allowed to get away with it because they're just going to do what they're going to do. Business wants to produce, and as long as they can produce more, they will. The only people that are allowed to stop that is the MDE and obviously they're not doing it, because they haven't done it for the last 20 years. I don't know. My brother lives, what, a quarter mile away. He can't open his windows, his water stinks like someone else was talking about. I live not too far away from it. I see algal blooms on ponds. I don't even know how this is allowed. It's absurd.

RESPONSE

See the response to Comment #65 regarding compliance and enforcement. See also the response to Comment #37 regarding the length of the compliance schedule.

CHANGES FOR THE FINAL PERMIT

None.

48. COMMENT (Franco Primavesi, in-person public hearing 11/16/2021)

I live two and-a-half miles northwest from the plant. And as you were saying, Valley Proteins -- at least two times a week in the summer, if I can sleep with the windows open at night, if my kids can play outside -- so Valley Protein is ruling us. It is telling us what we can do outside and when we can actually do it. My biggest concern here -- there are a lot of numbers here, and thank you for putting on this, but it's a lot of numbers and I don't see the numbers of what they find or what's going to happen with Valley Proteins when they don't meet these numbers. And the fact that they have -- it's like Valley Proteins is noncompliant with the permit to operate right now. I think MDE should -- I've been complaining to MDE for close to three years now two or three times a week to the phone number that MDE has. And I have the instinct they recognize my number and they hang up on me. In some cases during the weekends, that phone number goes unanswered. So my main concern is what is your capability, ability and willingness to enforce the permit. Because from my perspective, Valley Proteins should be shut down right now. For three years I've been complaining that Valley Proteins is not in compliance, they ought to close if they have no permit to operate. They should not go beyond the property line and it's going at least two and-a-half miles. So, please, have something here that says how it is going to be enforced and do something about it. Because during the summer days, it will be the same.

RESPONSE

See the response to Comment #43 for information about odor control and contact numbers for reporting.

See the response to Comment #65 for information regarding compliance and enforcement.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Transquaking River TMDL

49. TOPIC OF MULTIPLE COMMENTS: NEED TO REVISE THE CURRENT TRANSQUAKING RIVER NUTRIENT TMDLS

Patricia A. Comella, Esq. (Ret.) - *I am recommending that MDE replace the TMDL currently in use. I believe that the present TMDL is obsolete and that it should be replaced with a TMDL that not only covers water quality, but takes into account that the pollutants in the soil can migrate into the water and affect water quality. In other words, determination of water quality is more complex than realized when the TMDLs were first developed.*

Margaret Anzalone - *TMDL- It's old and the limits are outdated. The Transquaking Watershed deserves better.*

Diane J. Miler - *The TMDL for the Transquaking watershed is more than 20 years old. Changes in land use within the watershed since the writing of the TMDL make it critical to limit and even reduce discharges of point source pollution while helping to implement better BMPs on the land if we can ever hope to restore the ecology of the river. Like the TMDL, the current NPDES Permit for the Valley Proteins Linkwood facility is also 20 years old. Through administrative continuance by MDE, this 5-year permit has been extended well past what is reasonable. The science around water quality and*

how it impacts ecosystem health as well as technology for pollutant removal and treatment has advanced significantly. Changes in technology should be reflected in more stringent controls and processes to remove pollution and manage effluent.

Doug Stephens, in-person public hearing 11/16/2021 - *I distinctly remember the water being crystal clear when we were little and it's nowhere near that now. And I think about how this company is allowed to -- we've heard it several times -- exceed their limits over and over again and we're just moving the ball forward and just ignoring it. What I see is them impeding on my rights to clean water and clean air. So I think it's time for the public and us people here tonight to have more rights and to be able to breathe clean air and not smell it and not have to have fish that are contaminated. And that you should hold the company accountable.*

Richard Ball, public in-person public hearing 11/16/2021 - *I moved to the Eastern Shore in 1973. And I began to see the river, the upper Transquaking River, slowly die. The dark green toxic algal blooms started to appear in the late '90s and early 2000's. I became a volunteer creek watcher in 2006. My station on the Transquaking is Hicksburg Road and Route 50. And I've been doing that site there every two weeks, 12 months out of the year, since 2006. We have an extensive database. Roman Jessien will tell you about some of the data. It's full of nitrogen, it's full of bacteria and full of phosphorus. I'm not going to say I know that this -- that these contaminants are coming from Valley Proteins plant, but they are in the river.*

Roman Jessien, in-person public hearing 11/16/2021 - *I've been involved in water chemistry, sampling streams and so forth for almost 40 years. MDE has to do a much better job than what they've been doing. I do want to espouse the comments that other folks from Dorchester Citizens for Planned Growth have documented or have responded with. But what I want to say is all the streams that we sample in Dorchester County and also the Nanticoke Watershed Alliance, Transquaking is consistently, consistently highest in nitrogen and it has some very, very high values on a per sample basis. So we've seen this for the last -- since we started in '06 -- consistently the highest. The watershed is degraded. I can't say that, you know, it's all totally due to Valley Proteins, but it's a big player and it needs to be monitored and managed a little better. Come on, you guys got to do a better job.*

William Wrightson, in-person public hearing 11/16/2021 - *And you saw in the presentation that one of their goals is to protect the water quality at Higgins Millpond. And the degradation over time of the pond very closely corresponds to Valley Proteins plant discharges. At this time, the pond experiences extensive algae growth, toxic algal blooms and is oxygen depleted. We've had multiple fish kills and, as you heard, two dogs died of total organ failure in hours from microcystin poisoning, because they drank some pond water. Clearly the water quality of this pond is not being protected. I want to talk about the TMDL. The TMDL is a model that you guys use to try to predict whether a water body can handle waste that is years old. It's actually based on a river. We think MDE would be making a mistake to rely on a river model that assumes a moving flow of water, to represent Higgins Millpond. It does not flow like a river. Especially during the hotter summer months, the water level is often below the top of the dam and will lose an inch a day to evaporation alone. Water coming into the Millpond often sits for long periods and allows accumulation of nutrients of a volume which is a food bank for the algae. So we want to see more rigorous standards that are actually based on the health of Higgins Millpond that will protect its water quality. More rigorous protection year-round, not just in the summer months.*

Barbara Hale - *The Transquaking River is polluted and may be dangerous for aquatic life, and does not serve its recreational purpose. You have received extensive testimony and scientific data about why this permit should not be issued. MDE mission is to protect the waters of the State - please protect the Transquaking Watershed.*

Fred Pomeroy, DCPG, comment letter dated January 12, 2022 - The TMDL document for the Transquaking river, issued back in 2000 before inadequate. The TMDL has failed utterly to protect the Transquaking. It must be revisited and established as a valid guidance document which can bring about a restoration of water quality. The egregious examples of algal blooms, fish kills, oil slicks, and pet deaths as a result of contact with the waters of Higgins Mill Pond have continued unabated for years. Our request to revisit the Transquaking TMDL was first formalized during a 2014 public informational meeting hosted by MDE to outline for the public VP's request for the expanded discharge addressed above. This request was renewed at the 2019 working meeting in Cambridge mentioned above. Under the outdated Transquaking TMDL, water quality has continued to deteriorate. The deterioration has accelerated exponentially since VP expanded its industrial operation. The continued deterioration is graphically documented in a series of 18 photographs resulting from an MDE inspection of the facility on Dec. 15, 2021. The creation of a new TMDL must precede any expansion of the wastewater discharge permit being sought by Valley Proteins. It is time that MDE grants this request.

RESPONSE

The permit considers the Transquaking River TMDL effective at this time. The comments in this section are all asking essentially that the Transquaking River Nutrient TMDL be revisited. The breadth of the reasons given are as follows:

- The TMDL needs to be changed to account for storm water runoff and/or groundwater discharges (making their way to surface waters) from the site.
- The TMDL modeling needs to be redone because it is old (i.e. was done in 2000 with older modeling technology and data) and now improved modeling tools have become available and the land use in the basin has changed?
- The TMDL needs to account for increased flow from Valley Proteins?
- The TMDL needs to be redone because it has not worked?

The Transquaking River TMDL represents the allowable loads of nitrogen and phosphorus for the Transquaking River. The Department is assessing water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals. The current Transquaking River TMDL accounts for all permitted and non-permitted sources within the watershed, including Valley Proteins, agricultural sources, and natural background sources, accounting for surface runoff and groundwater contributions.

TMDLs can always be updated to include the most accurate technology, techniques, and data. However, processing TMDLs (including updating them) is a very time and labor intensive process. To develop the Transquaking River Nutrient TMDL originally the following major tasks had to be completed - setting characterization, source assessment, assessing the current water quality, assessing the source of the water quality impairment, targeting a water quality goal, calculating the total maximum daily load and then dividing the loads amongst wasteload allocations (point sources), load allocations (non-point sources), margin of safety. Once the TMDL was determined then an assurance of implementation plan needed to be developed. Finally the whole endeavor had to go through a public participation process and EPA review before it could be finalized.

The TMDL studies performed by MDE and approved by EPA show that the great majority of nutrient loading to the Transquaking River is not from Valley Proteins (the only point source). For reference,

tables 2A and 2B from the Transquaking River Nutrient TMDL's Technical Memorandum⁴⁰ are also provided below. These tables give the average annual nonpoint source loads attributed to significant land uses for nitrogen and phosphorus, respectively.

Table 2A
Nonpoint Source Nitrogen Loads
Attributed to Significant Land Uses for Average Annual TMDLs

Land Use Category	Percent of Nonpoint Source Load	Nonpoint Source Load (lb/yr)
Mixed Agricultural	50.3%	206426
Forest and Other Herbaceous	43.7%	179356
Urban	1.8%	7466
Atmospheric Deposition ²	4.3%	17481
Total	100	410,729

Table 2B
Nonpoint Source Phosphorus Loads
Attributed to Significant Land Uses for Average Annual TMDLs

Land Use Category	Percent of Nonpoint Source Load	Nonpoint Source Load (lb/yr)
Mixed Agricultural	73.2%	21445
Forest and Other Herbaceous	22.1%	6487
Urban	1.2%	341
Atmospheric Deposition ²	3.5%	1025
Total	100	29,298

Originally Valley Proteins was only allocated 3.41% and 4.71 % of the TMDL loads. See *Table 1, Summary of Phosphorus and Nitrogen TMDLs* below.

⁴⁰Transquaking River Nutrient TMDL Technical Memorandum, Significant Nutrient Point Sources and Nonpoint Sources in the Transquaking River Watershed located [here](https://mde.maryland.gov/programs/water/TMDL/DocLib_Transquaking_02130308/transquaking_techmemo.PDF) - https://mde.maryland.gov/programs/water/TMDL/DocLib_Transquaking_02130308/transquaking_techmemo.PDF

**from the Transquaking River Nutrient TMDL
Table 1, Summary of Phosphorus and Nitrogen TMDLs⁴¹**

Parameter	Flow Regime (Period)	TMDL (Total)	WLA *	LA	MOS (Margin of Safety)
Nitrogen (lbs/month)	Low-Flow (May 1 - Oct. 31)	11,046	1,231	9,263	552
		100.00%	11.14%	83.86%	5.00%
Phosphorus (lbs/month)	(May 1 - Oct. 31)	1,686	123	1,479	84
		100.00%	7.30%	87.72%	4.98%
Nitrogen (lbs/year)	Average-Flow (Nov. 1 - April 30)	438,853	14,954	410,729	13,170
		100.00%	3.41%	93.59%	3.00%
Phosphorus (lbs/year)	(Nov. 1 - April 30)	31,746	1,496	29,298	952
		100.00%	4.71%	92.29%	3.00%

* Valley Proteins is the only point source

More importantly, once the renewal permit is issued, and the new TN and TP limits derived from the Bay TMDL are effective, VP’s discharge will be of much higher quality. The nutrients in the improved discharge will be capped at significantly lower levels. Specifically for total nitrogen and phosphorus in Valley Proteins discharge loads will only be allocated at 1.93% and less than 1%, respectively, of the Transquaking TMDL. See *Update of Table 1 - Incorporating TD Valley Proteins Limits as Changes to the WLA* below. Continuing to administratively extend the previous permit (99DP0024) would have allowed Valley Proteins to continue to be able to discharge up to the much higher loads that when under this final determination.

The table below is an update of Table 1 above. The “Update of Table 1” table simply adds the total nitrogen and phosphorus limits in the permit as effective WLAs. The table shows the WLA not used by Valley Proteins as a separate reserved WLA. Please note that the Department has focused on reducing loads on an annual basis. The monthly loading limits have been maintained as they were previously to prevent backsliding (hence the 0 reserved load in the WLA (Reserved) column for monthly). However, it would be impossible for Valley Proteins to discharge at the monthly loading limit for every month and still discharge below their annual loading limits. In this way the annual loading limits further restrict the discharge of nutrients.

⁴¹ This table is an update from Table 1 that appears in the EPA Decision Letter on the Transquaking River. The update is mainly that percentages were added to the table. The letter is located [here](https://mde.maryland.gov/programs/water/TMDL/DocLib_Transquaking_02130308/TransquakingRiver_N_DR.pdf) - https://mde.maryland.gov/programs/water/TMDL/DocLib_Transquaking_02130308/TransquakingRiver_N_DR.pdf

UNOFFICIAL

Update of Table 1 - Incorporating Valley Proteins Limits as Changes to the WLA⁴²

Parameter	Flow Regime (Period)	TMDL (Total)	WLA *	WLA ** (Reserved)	LA	MOS (Margin of Safety)
Nitrogen (lbs/month)	Low-Flow (May 1 - Oct. 31)	11,046	1,231	0 ***	9,263	552
		100.00%	11.14%	0.00% ***	83.86%	5.00%
Phosphorus (lbs/month)		1,686	123	0 ***	1,479	84
		100.00%	7.30%	0.00% ***	87.72%	4.98%
Nitrogen (lbs/year)	Average-Flow (Nov. 1 - April 30)	438,853	8,477	6,477	410,729	13,170
		100.00%	1.93%	1.48%	93.59%	3.00%
Phosphorus (lbs/year)		31,746	315	1,181	29,298	952
		100.00%	0.99%	3.72%	92.29%	3.00%

* Valley Proteins

** Load that is still assigned to the WLA, but no longer available to Valley Proteins

*** Valley Proteins still has monthly TN and TP limits in the permit. It was necessary to maintain these to stay in compliance with the WLA in the Transquaking River TMDL. As such 0 lbs/month are available to go to [Reserved]. However there are now also annual load limits in the permit which are much less than the TMDL. Thus [Reserve] load is not created on a monthly basis, but is created on an annual basis. Due to this technicality no WLA could be assigned to another point source unless Valley Proteins' monthly loading allocation was also reduced.

The new nitrogen and phosphorus limits derived from the Bay TMDI will significantly improve the quality of discharge from Valley Proteins while the Department assesses water quality monitoring data on Higgins Millpond and some of its contributing tributaries so as to determine if it is impaired by excess nutrients and, if so, to what degree. The assessment is to evaluate the need for additional water quality protections or modification of existing water quality standards. Should the assessment results conclude additional controls are warranted, this will be addressed in future permit renewals.

See also the response to Comment #65 for more information on compliance/enforcement activities at the site.

CHANGES FOR THE FINAL PERMIT

None.

⁴² This table is an update of Table 1 above. This table simply adds the total nitrogen and phosphorus limits in the permit as effective WLAs. The table shows the WLA not used by Valley Proteins as a separate reserved WLA. Please note that the Department has focused on reducing loads on an annual basis. The monthly loading limits have been maintained as they were previously to prevent backsliding (hence the 0 reserved load in the WLA (Reserved) column for monthly). However, note that it is not anticipated for it to be possible for Valley Proteins to discharge near the monthly loading limit for any month and still be able to meet their annual loading limits.

50. COMMENT (Margaret Anzalone, in-person public hearing 11/16/2021)

I've been a member of Dorchester Citizens Group for over years. I'm opposed to the granting of the permit to Valley Proteins because the special permit doesn't have three things.

One, it doesn't have a clear process to monitor compliance. Self-reporting is not acceptable to me in this case.

And number two, we need an assurance that MDE will find and use resources to actively involve the Transquaking community in monitoring compliance and giving them information not online, but in person, on how to report suspicious activity. Everybody should have that telephone number in their cell phone.

And number three, the permit doesn't have anything in the plan for establishing an updated -- what's called a TMDL, a total maximum daily load for the Transquaking River. In case I run out of time, I want to thank you for the opportunity for comments. And say that along the way I have had the opportunity to interact with staff at the Cambridge office and they have always been pleasant and responsive. And particularly Randy Denny, who I understand is still with you, even though I thought he had retired, I'm very happy to hear that. Seventeen years ago in the Cambridge library, I attended the informational meeting, which wasn't on the chart, on this same permit. I used to have gray hair, I have solid white hair now, that's how long ago it was. I recall at that meeting a flow chart was displayed on the screen. The print was so small no one could read it. That bothered me. Since araairthen a lot about Valley Proteins has bothered me.

The sludge and how it's kept secret as to where it goes exactly; how Valley Proteins got its air permit renewed, when so many people constantly complained about the noxious odors; how the National Discharge Elimination System permittee can continue to operate despite long-term status on the EPA's ECHO website as being in violation. We need a process to monitor compliance stated in the permit. Both the current limit of discharge and Valley Proteins' requested increased discharge had been given three years to come into compliance again by MDE. After three years of continued violations the facility can continue to operate for three more years while it supposedly corrects itself. The mechanism for monitoring the self-correction is not stated in the draft permit. Self-reporting, for me, by Valley Proteins is not enough.

RESPONSE

Please refer to the response to Comment #26 regarding self-monitoring.

Please refer to the response to Comment #49 regarding the TMDL.

Please refer to the responses to Comments #5 and #39 regarding the land application of sludges in the watershed.

With regards to community involvement, the Department identifies phone numbers which can be used for notification on its website - <https://mde.maryland.gov/programs/water/Compliance/Pages/index.aspx>. Specifically, to reach the Eastern Division, the public should call 410-901-4020.

See also the response to Comment #43 for means to contact Valley Proteins directly with concerns.

CHANGES FOR THE FINAL PERMIT

None.

51. COMMENT (Mr. Zijp, in-person public hearing 11/16/2021)

Now, knowing what I know about the Transquaking, I'm sort of quaking in my shoes because how are we going to clean up the rivers while pollution is ongoing and pollution might be ongoing without us actually knowing. Because as some of the speakers have said before, we seem to be cleaning up -- mopping the floor, with the tap running. There is so much pollution coming down that -- without MDE apparently capable of monitoring that clearly. Therefore, I want to first thank the team around here that organized this evening and secondly the people that are helping to monitor the water quality, thank you very much. Because it has been one of the basic pieces of fact that I use to base my opinion on. And thank you very much for doing that. The proposal, as proposed tonight, fails on a number of important points. First of all, it does not recognize that serious mistakes have been made in the past, like Suzanne already said. It was in 2001 and never really anything happened. But much more important is the enforcement of the rules. It's nice to have limits and it's almost to the point of boring to go through the details of that. That's rearranging the deck chairs on the Titanic. The Transquaking is actually dying. And whether or not we know whether it's and-a-half gallons per liter or is 6 beside the point. The point is do we know, do we have reliable data to understand is the Transquaking getting better or not. And, therefore, my question to you, the MDE, do you think in light of the new money coming available from the big infrastructure bill and the concerns of this team that business as usual is a real option for the MDE? I suggest it is not. But I would like to hear your reaction to that.

RESPONSE

Please see the response to Comment #49 regarding TMDL status of the Transquaking. With regards to the reference to the infrastructure bill, that is beyond the scope of this NPDES permit.

CHANGES FOR THE FINAL PERMIT

None.

52. COMMENT (Diane Miller, DCPG, in-person public hearing 11/16/2021)

In my professional life I'm an ecologist and professional wetlands scientist. And with DCPG I've been following this permit for many years. I'm interested in seeing this fragile river system return to health through better management of industrial, commercial, residential and agricultural pollution. I'm concerned about the possibility that this permit will be approved as routine, when it is not routine. The TMDL for the Transquaking is more than 11 years old. Changes in land use within the watershed since the writing of the TMDL make it critical to limit and even reduce discharges of point source pollution, while helping to implement better BMPs on the land, if we can ever hope to restore the ecology of the river. Like the TMDL, the current NPDES permit for Valley Proteins is also 20 years old. The existing permit should only have been in effect for five years, but it has been administratively continued to this day. Twenty years is a long time. The science around water quality and how it impacts the ecosystem health, as well as technology for pollutant removal and treatment has changed significantly. Changes in technology should be reflected in more stringent controls and processes to remove pollution and manage effluent. The proposed permit allows Valley Proteins to continue business as usual, which is not good

enough. Valley Proteins has responsibilities and has not met them historically. We need guarantees that it will fulfill its responsibilities now. For a company with a track record of violations and nonreporting over these many years, the compliance history of Valley Proteins is of greatest importance when developing the permit. Valley Proteins has not acted as a good citizen and or environmental steward and does not deserve to be treated as such. The term “greenwashing” is used to describe a practice of companies that purposely mislead consumers by claiming to be environmentally friendly or sustainable. Valley Proteins, on their website, claims that they’re making a sustainable difference for a healthier environment. On their website they say they continually adhere to environmental practices that meet and surpass government requirements. And that the production facilities are equipped with the latest technologies for maintaining clean air and water. The Transquaking River knows this is a lie. Also, looking at the EPA ECHO database, which stands for enforcement and compliance history, Valley Proteins has more than 60 facilities nationwide in 12 different states. I didn’t realize that they were that big. Nationally, in the past five years -- oh, time is up.

RESPONSE

For individual NPDES permits, the Department evaluates applicable technology standards and water quality standards, including those specific to the site of the facility, in determining the appropriate limitations. There really is no such thing as a “routine” individual NPDES permit because each of them are tailor-made for the facility, discharges and receiving stream in question.

Please see the response to Comment #49 regarding the TMDL status in the Transquaking.

Please see the responses to Comments #26 and #65 regarding compliance history and monitoring.

Please see the response to Comment #25 the annual phosphorus limit.

With regards to the remaining comments regarding Valley Proteins website and claims, that go beyond the scope of this NPDES permit. While the Department has no comment on any such matters, it is important to note that the final determination permit regulates discharges from the facility based on the submitted application and factual information we have collected (including information collected under the terms of the current permit, 99DP0024) - not claims or advertisements promoted by the permittee.

CHANGES FOR THE FINAL PERMIT

None.

53. COMMENT (Matt Pluta, Riverkeepers & ShoreRivers, letter dated January 14, 2022)

The Transquaking River TMDL affects the load allocations which are provided in the Valley Proteins discharge permit. MDE must begin the process to revise the Transquaking River TMDL using more modern modeling tools and information which has become available since this TMDL was originally finalized over two decades ago. Specifically, the TMDL should account for the compliance history of Valley Proteins, amongst other factors in that revisions.

RESPONSE

Please see the response to Comment #49.

CHANGES FOR THE FINAL PERMIT

None.

54. COMMENT (Richard Bearman, in-person public hearing 11/16/2021)

It did not, it seems to me, however, answer one question. Why are there signs warning about swimming and consuming fish from the Transquaking if MDE's mission is to keep water quality, quote from their own work, suitable for fish, aquatic life, human contact, wildlife contact and other special uses. The reason is because MDE is not doing its duty. I'm extremely disappointed and confused at the manner in which MDE has protected our environment and the health and safety of Maryland citizens with regard to the Valley Proteins plant.

RESPONSE

See the responses to comment #49. Also, as stated in numerous other responses, the proposed tentative determination permit contains significantly more stringent limits than prior permits, which were derived, in part, using site-specific water quality modeling in an effort to ensure that the discharges from this facility are not the cause of continued stream impairments.

CHANGES FOR THE FINAL PERMIT

None.

55. COMMENT (Barbara Hale, in-person public hearing 11/16/2021)

It is my concern that the poisonous condition of Transquaking's waters are mixed with the Chicamacomico and carried up river toward my home. My family and I enjoy boating on these rivers, fishing and crabbing and watching the eagles, water fowl, ospreys, otters and muskrats, blue herons, turtles and the river's new winter inhabitants, white pelicans. The joy these sites give are mitigated by the knowledge that the waters are polluted and may be dangerous for all life, both animal and human. Your mission is to protect the waters of the State of Maryland. Please protect the Transquaking watershed.

RESPONSE

See the response to comment #49 for discussion of watershed protection.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Groundwater

56. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - Groundwater Loads Should Be Assessed and Mitigated

As noted above, MDE is aware of groundwater contamination going back to at least 2005 (sixteen years) and possibly earlier. Exh. 24 at 4. MDE has required monitoring, but has failed to require analysis of the loadings and impacts from the groundwater or to require mitigation. Any renewal permit should fill that gap in two ways: 1) require more rigorous assessment of the groundwater and mitigation as appropriate; and 2) when examining the impact from the facility recognize that Valley Proteins loadings to Higgins Millpond includes, in addition to the point source discharges, other loads via groundwater. As noted below, there also may be unaccounted for stormwater loads not contained or treated. These extra nutrient sources should be accounted for in determining how to protect Higgins Millpond. MDE notes at least two wells that evidence an ongoing groundwater issue, and the other wells should additionally be considered in evaluating the loads reaching Higgins Millpond. See Exh. 24 at 14-16 (implying some levels as acceptable without demonstrating any evaluation of loads reaching Higgins Millpond). Any renewal permit should require Valley Proteins to rigorously assess the groundwater conditions: to fully characterize the vertical and horizontal extent of contamination, the contribution of contaminants via groundwater discharge to Higgins Millpond, and the loads. The analysis should be accompanied by assessment of mitigation options if groundwater is adding to the pollution loading to Higgins Millpond. Past groundwater monitoring reports to MDE provide data but require no analysis of trends, loads, or implications of the data.

RESPONSE

The final determination permit does not authorize or regulate discharges to groundwater. Part I.P. of the tentative determination permit contains updated groundwater monitoring, including installation of additional monitoring wells, to track existing contamination and address public concerns about the leaking infrastructure on the site. Additionally, the final determination permit also adds requirements to install background monitoring wells to track the movement of the contaminated groundwater, as the source of the contaminated groundwater being on or off site is currently unknown. Also, the recent Consent Decree issued prior to the final determination permit's issuance requires Valley Proteins to conduct a groundwater study to determine if the facility's above ground portions of its secondary wastewater treatment system, the wastewater treatment lagoons, and septic system are discharging to groundwater.

Once the updated monitoring structure is in place, the data will inform any determination by the Department if mitigation measures are appropriate and, if so, what those measures should include.

CHANGES FOR THE FINAL PERMIT

None.

57. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III - MDE Should Require Confirmation that All Lagoons are Adequately Lined and Protect the Groundwater

MDE recognizes groundwater contamination from lagoons at this facility, and that at least certain “leaking lagoons ... are now lined.” Exh. 24 at 4, Section IV (Results of File Review). **However, the record calls into question whether “all” lagoons are lined, including the following representations by Valley Proteins engineers:** · “Lining of lagoon was dropped in favor of above ground tankage.” MDE, Teleconference Minutes re Valley Proteins ENR Project (Jan. 7, 2020), Exh. 53.

- “VP will not be moving forward with the concrete liner portion of the project given the high cost of the concrete liner.” Email from W. Tanner, Reid Engineering to Stephen Liu, MDE (Dec. 13, 2019), Exh. 54.
- “This portion of the project is to install the concrete liner in the footprint of the existing lagoon.” Emails between MDE and Valley Proteins (Dec. 2019), Exh. 55.
- “Concrete lining for the lagoon is likely to be re-bid...” MDE, Meeting Minutes re Valley Proteins ENR Project (Jan. 29, 2017), Exh. 23.

The record does not support any assumption that all lagoons are lined. The renewal permit should clarify this issue, and for any unlined current or former lagoons MDE should assess necessary action to protect and remediate the groundwater.

RESPONSE

Special Condition P of the permit requires continued monitoring of the presence of contaminants in the groundwater and the effectiveness of the previous compliance plan. The Department will review the results of the sampling and determine what, if any, further corrective measures will be necessary to address the excessive levels in groundwater. These monitoring requirements are updated from the requirements in the previous permit. In particular the renewal permit requires installation and re-siting of some monitoring wells. It also requires monitoring for an expanded suite of parameters which include Total Kjeldahl Nitrogen, Ammonia, Nitrate, Total Dissolved Solids, and Fecal Coliform.

Additionally, as an enforceable condition in the Consent Decree to resolve previous violations of the permit, the Department is requiring Valley Proteins further investigate the lagoons to determine if any are leaking and causing ongoing groundwater contamination. If the lagoons are determined to be leaking, the Consent Decree also requires Valley Proteins to implement measures to correct the leakage.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Stormwater

58. COMMENTS from Pamela D. Marks, Beveridge & Diamond, representing William L. Wrightson III -Stormwater Controls Should be Site Specific and Rigorous

Any final permit should enhance stormwater controls. The Valley Proteins facility has significant sources of stormwater pollution. It already receives some 9 million pounds of poultry offal per week and hopes

to expand to some 20 million pounds, yet there is no indication that the truckload after truckload of dead carcasses and animal wastes are properly managed to avoid stormwater contact. Instead, it seems that there is contact, and the fouled stormwater flows to containment areas that may overflow in storm conditions or when there are other failures. Further, MDE's fact sheet concedes that under Valley Proteins' Stormwater Pollution Prevention Plan ("SWPPP"), a portion of the stormwater from the rendering plant and adjacent parking areas is not treated, even though "most" may be collected and treated. Exh. 24 at 4. Yet MDE has not identified the volume and content of the stormwater that is not collected and treated, and whether this untreated water that flows directly to Higgins Millpond might even be the most pollutant-impacted "first flush" of stormwater, or might be from an area of particular concern from a pollutant standpoint. The facility should be required to account more rigorously for its stormwater, ensuring that all is collected and treated, in a more rigorous site-specific plan. MDE should require Valley Proteins to update its SWPPP and the plant's management of stormwater to prevent stormwater pollution that bypasses the wastewater treatment system and evades accountability. In addition, given the risks at this site in connection with stormwater overflow: 1) MDE should assess whether the volume of stormwater capacity is sufficient in light of storm frequency (considering data of the frequency of storm events); 2) MDE should assess how much freeboard is required in all collection basins (stormwater and process water) to prevent potential overflow in event of storm (and other) events; and 3) MDE should require active monitoring of collection basins, to confirm effective operation and the needed pollution prevention, and to provide for immediate reporting to MDE of risk of a release and action to contain and prevent the release. Collection basins and other stormwater controls should be monitored at all times with alarms and by cameras (and other monitoring technology as appropriate) to detect potential for an overflow before an unlawful discharge may occur. Moreover, the December 2021 violations, including failures to report, further confirm the need for alarms and cameras that provide continuous monitoring of the multiple sources of contaminated stormwater. This information should be provided automatically to MDE or, at minimum, to an independent third-party monitor who will reliably report when a situation is evolving that has the potential to cause overflow. Further, regulation of stormwater for this permittee should not be shifted to the general permit. Maryland's general permit is not intended for plants that are violating water quality standards. Valley Proteins is not meeting applicable water quality standards, and thus is ineligible for the general permit.

RESPONSE

The industrial stormwater conditions in the permit requires the permittee to keep up-to-date their stormwater pollution prevention plan. Then within 30-days of issuance they will be required to obtain industrial stormwater coverage under the current general industrial stormwater permit (currently the 12-SW-A, but soon to be replaced by the 20-SW). The current industrial stormwater general permit requires registrants under it to keep their stormwater controls site-specific and current. This general permit contains the most up to date controls for industrial stormwater. Additionally, the Consent Decree entered into by the Department and the permittee requires corrective actions to address potential stormwater impacts, including the installation of a concrete barrier to contain stormwater runoff and the imposition of benchmark monitoring until the permittee obtains industrial stormwater coverage under the 20-SW.

Common requirements for coverage under the general permit include development of a written stormwater pollution prevention plan (SWPPP), implementation of control measures, corrective actions, and inspections. The SWPPP is a site-specific written assessment of potential sources of pollutants in stormwater runoff. Control measures will be implemented at the facility to minimize the discharge of these pollutants in runoff from the site. These control measures include site-specific best management practices (BMPs), maintenance plans, inspections, employee training, and reporting. The procedures detailed in the SWPPP must be implemented by the facility and updated as necessary, with a copy of the

SWPPP kept on-site and made available for Department review upon request. The current SWPPP at the time of application must also be submitted along with the NOI. The industrial stormwater permit also requires collection of analytical, and/or compliance monitoring data to determine the effectiveness of implemented BMPs. Specifically, Sector U of the general permit requires benchmark monitoring for biochemical oxygen demand, chemical oxygen demand, nitrate-nitrite, and total suspended solids to ensure adequate controls are in place for management of stormwater. If benchmark monitoring indicates continued inability by the facility to provide acceptable stormwater controls, the general permit specifies that the Department may require an individual permit.

The [General Permit For Discharges from Stormwater Associated with Industrial Activities](#), Maryland General Permit No. 20-SW, does not automatically prohibit registration by facilities whose industrial stormwater may cause violations of a water quality standard. Part I.G.1. of the permit says a potential registrant is, "... ineligible for coverage under this permit if the Department determines prior to your authorization to discharge that your discharges will not meet an applicable water quality standard." The Department has not made any such determination.

Furthermore, Part III.B. of the 20-SW has water quality-based effluent limitations that require registrants to control their discharges as necessary to meet applicable water quality standards. If the Valley Proteins facility was causing violations of applicable water quality standards due to their stormwater discharge(s) then coverage under the general permit can handle such an eventuality. Part III.B.2.a of the 20-SW says the following:

"Water Quality Standards Your discharge must be controlled as necessary to meet applicable water quality standards. The Department expects that compliance with the other conditions in this permit will control discharges as necessary to meet applicable water quality standards. There shall be no discharge that causes visible oil sheen, and no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour of the point of discharge. If at any time you become aware, or the Department determines, that your discharge causes or contributes to an exceedance of applicable water quality standards, then you must (1) take corrective action, (2) document the corrective actions, and (3) report the corrective actions to the Department's Water and Science Administration Compliance Program as required by Part IV. Additionally, if information in your NOI or required reports or if information from other sources indicates that your discharge is not controlled as necessary to meet applicable water quality standards, the Department may impose additional control measures (to meet narrative water quality based effluent limit above in Part III.B) on a site-specific basis or require you to obtain coverage under an individual permit. You must implement all measures necessary to be consistent with an available wasteload allocation in an EPA established or approved TMDL, including the restoration requirements (Part III.A)."

CHANGES FOR THE FINAL PERMIT

None.

59. COMMENT (Libby Nagel, in-person public hearing 11/16/2021)

And I don't know who to give it to, because I'm not smart enough to get it out of my phone, but I've got dead -- pictures of them laying up there on the property, chickens. So I think you need to be aware of that, there's stacks of them, and I'm not really sure that that's legal.

RESPONSE

The final determination permit regulates wastewater discharges from the property. The allegation in the comment would be evaluated in accordance with the industrial stormwater conditions in the permit.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Permitting Process

60. TOPIC OF MULTIPLE COMMENTS: LENGTH OF TIME PERMIT WAS EXPIRED WAS TOO LONG

Suzanne Sullivan, in-person public hearing, 11/16/2021 - But I was finding distrust that MDE can let an expired permit go for years without renewal. How am I supposed to trust that these new limits are going to be monitored or --.

RESPONSE

The Department acknowledges the significant delays in reissuing the final determination permit. The Department will learn from this experience in an effort to avoid similar delays in issuing future permits. Significant efforts are underway across all divisions issuing NPDES permits at MDE in order to reissue administratively extended permits as quickly as possible and prevent lengthy administrative extensions moving forward.

CHANGES FOR THE FINAL PERMIT

None.

61. COMMENT (Fred Pomeroy, DCPG, in-person public hearing 11/16/2021)

Since all our test sites were revealing significant pollution, it was apparent that as a small and member financed organization, we would not be able to pursue remedies for every site. I suggested to the water monitors that we needed to focus on the site where the pollution numbers were the most egregious. This led us directly to the sampling site on Route 50 in Linkwood, just downstream of the Valley Proteins rendering plant. In 2014 we learned Valley Proteins was applying to MDE to super-size its wastewater discharge for dumping into the upper tributary of the Transquaking. To us, this requested increase was staggering. We knew the pollution numbers we were recording for this site were already extremely high, way above what was considered a decent baseline for nitrogen phosphorus. The fecal coliform sampling was dangerously high and often there was virtually no dissolved oxygen present in the water. These

numbers were undoubtedly contributing to the problems of toxic algal blooms, dead pet dogs, and fish kills we were hearing about anecdotally from residents of the watershed. A river that was already on the verge of dying would, if the point of source discharge flow from Valley Proteins was quadrupled as requested. This river would be completely overwhelmed. Since 2014 MDE's record of regulation at Linkwood has been governed by a vague process called Administrative Continuance. Administrative Continuance has allowed VP to continue to pollute the Transquaking, while their industrial operation has expanded. Administrative Continuance has relied on self reporting by VP, which too often has meant non-reporting. Administrative Continuance is the equivalent of allowing the fox to guard the henhouse, or in this case the oval (phonetic) for many hen houses. DCPG calls on MDE to stop this travesty. A good first step would be to drop the higher discharge level as an option in the new permit, at least until VP maintains a clean track record of compliance. Next, as DCPG has been saying for years, the updated watershed study, called a TMDL, which was written in 2000, must be redone in a comprehensive fashion which actually helps to save and protect the river. MDE would like to silo this procedure, focusing on wastewater discharge only. Actually VP's contribution to declining environmental health in this watershed is at least fourfold. It includes air pollution, evidenced by noxious odors emanating from the plant. Significant draw-down of public groundwater aquifers, as the industry requires additional freshwater, and further contamination of air, surface water and groundwater in the whole Nanticoke watershed through the -- I'm going to finish this sentence -- through the use of largely unregulated industrial sludge created by the plant and distributed misleadingly as farm fertilizer. At present we are a very long way from saving the Transquaking.

RESPONSE

As stated in prior responses, the Department has considered site-specific water quality criteria as part of its development of limitations and other requirements in the tentative determination. Further information about the TMDL status of the Transquaking River watershed is outlined in the response to Comment #49.

Please see the response to Comment #26 regarding self monitoring.

CHANGES FOR THE FINAL PERMIT

None.

62. COMMENT (Patricia Comella, DCPG, in-person public hearing 11/16/2021)

My comment today is about the tentative determination protocol. To me, it expresses, it implies, an expectation that the permit under consideration will be issued. This, I believe, puts pressure on the regulatory agency to make sure the permit is issued. Further, the tentative determination allows expansion of the facility before the permit is issued, so that it happens that the facility is functioning before the permit is actually granted. And what we have seen in Valley Proteins is their expansion over a very extensive period of time in what they -- in their product. And what this does is it leads to increasing in the work that -- in what is being released of pollutants. And this, I believe, can be proved problematic. So what this says, basically, also is that the regulatory agency is participating in the -- in the -- my handwriting is awful -- in the pollution of the environment, which is contrary to its mission of protecting the waters.

RESPONSE

The Department's public participation provides opportunities to the public to participate at each significant phase of the permitting process, from initial receipt of an application until the Department makes a final decision on the issuance of the permit. The Department's procedures to elicit public participation include publishing public notices in newspapers to provide information regarding the permit and to outline procedures for submitting public comments and requests for meetings, and holding public meetings and administrative hearings. Public notices also indicate where and when information such as draft permits, application, and supporting information are available for public review, as well as how to obtain a copy of the information. MDE maintains a website that offers public information.

Publishing a tentative determination is one of the steps in the public participation process, when the Department decides to issue or deny issuance of a permit. A notice of the tentative determination is placed in newspapers local to the facility requesting the permit and is provided to all persons on the interested parties list. A public hearing is the primary forum for obtaining comments on a tentative determination from the public. At the meeting, the comments are recorded and a written transcript is prepared. Per Department's policy, a written response document is prepared that addresses all significant comments that were made at the hearing or received in writing. The response document is distributed to people on the interested parties list when a final determination is made. A final determination is made after considering all the testimony and comments. At that point, a notice stating the final decision and providing an explanation of the decision, including any significant changes that were made to the permit as a result of comments, is published in local newspapers and distributed to the interested parties list.

COMAR 26.08.04.02.A. requires that the Department reissue a discharge permit upon a determination that the discharge will be in compliance with all applicable requirements of: (a) Effluent limitations, (b) Surface and ground water quality standards, (c) The Federal Act, (d) State law or regulation, (e) Best available technology, and (f) Federal effluent guidelines. When the Department drafts a tentative determination, it is usually a proposed permit, but denial can also be proposed. There is no assumption by the Department - and there should be no assumption by the permittee or any interested third party - that all of the terms found in the tentative determination will remain unchanged for a final determination. Any permit condition may be subject to public comments. All comments submitted are considered in development of the final permit language.

Please refer to the response to Comment #28 for additional response on the topic of the facility's request for an increase in flow. We'll also note that Valley Proteins is not authorized to expand the operations at its Linkwood facility until the above process is concluded and a new permit is issued.

CHANGES FOR THE FINAL PERMIT

None.

63. COMMENT (Margaret Anzalone)

I am sure that the good people at MDE can do better and come up with some way to involve this community. For example, use at least the Dorchester newspaper consistently (not only the Easton based Star Democrat) and the Linkwood Firehall to post hearing notices for each of the three permits. The water drawdown permit notice was mailed by ground mail only, I recall, to certain identified nearby property owners, and I doubt that any of them actually received the notice or were aware of a hearing. One addressee, I recall, had been dead for several years and the property had been in Probate for that long. MDE should send such important notices that might affect possible loss of drinking water via

certified mail, and follow up with the local postmaster about actual receipt of ground mail as, in at least one case, the recipient hadn't checked his PO Box for several months.

RESPONSE

The Department followed and exceeded all public participation requirements required by regulations. The public participation regulations are found at [COMAR 26.08.04.01-2](#).

During each public participation event MDE added any individuals who gave complete and legible address information as an interested party. Notice for public participation milestones were sent via U.S. mail to interested parties.

An informational meeting was requested and was held from 6:00 to 7:30 PM, Tuesday, September 23, 2014 at the Central Branch Library, 303 Gay Street, Cambridge, MD 21613. Once a draft permit was ready for the public the Notice of Tentative Determination and Virtual Public Hearing was published September 15 and 22, 2021 in the Daily Banner. The public also requested that an in-person public hearing be held. The Notice of In-Person Public Hearing was published October 13 and 20, 2021 in the Daily Banner. The in-person public hearing was held at 6:00 PM, Tuesday, November 16, 2021 at the Linkwood-Salem Volunteer Fire Department Meeting Hall, 3905 Ocean Gateway, Linkwood, MD 21835. The original comment period lasted until 5 PM on Wednesday, December 15, 2021. This comment period incorporated the additional 60-day period provided in §1-606(d)(1)(ii) of the Environment Article. On December 13, 2021, a request was received to extend the comment period. On December 16th, the Department chose to grant the request. The comment period was then extended for another 30-days. The comment period ended at the close of business, 5:00 PM, on Friday, January 14, 2022.

The draft permit was available for review in the offices of the Water and Science Administration since the initial date of public notice. A copy of the application, draft permit, fact sheet, and other relevant documents were made available for downloading from the Department's website at - <https://mdewwp.page.link/WWPPortal>.

There was also a webpage dedicated to this permit renewal located at - <https://mdewwp.page.link/permitsofinterest>. These links were also in the handouts that were made available for download via the "Go-To-Webinar" application used to hold the above-mentioned public hearings.

CHANGES FOR THE FINAL PERMIT

None.

64. COMMENT (Charles Denton)

Has Valley Protein reviewed or provided feedback to MDE on the Draft Permit and the new discharge limitations? When and how will MDE know if VP agrees to the Permit requirements?

RESPONSE

Valley Proteins is provided an opportunity to view and comment on the draft permit. Their concurrence or agreement is not part of the process. The Department is solely responsible for determining the

appropriate permit terms. The permit is a legal document and once it is issued, Valley Proteins must abide by the terms and conditions of the permit. Without a permit, the Valley Proteins cannot discharge any process water into the waters of the State.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Compliance/Enforcement

65. TOPIC OF MULTIPLE COMMENTS: COMPLIANCE/ENFORCEMENT

Diane J. Miler - *The proposed permit does not do enough to ensure that water quality will be protected and restored. Instead, the proposed permit allows Valley Proteins to continue business as usual, while the environment continues to suffer. We need this new permit to ensure that the VP will fulfill their responsibilities and be held accountable for their actions. The company is continuously dealing with environmental issues with wastewater discharges, odor and air pollution violations, Pollution of land and shallow groundwater, and the degradation of local water quality and ecosystem health. This permit should not be approved as we don't know the history of non-compliance, complaints from local residents, environmental degradation of Higgins Mill Pond and the Transquaking River, and blatant mismanagement and disregard for environmental regulations and limits set forth in their permit.*

Margaret Anzalone - *I am opposed to the granting of the permit to Valley Proteins without a process to monitor compliance, and without assurance that the MDE will find and use resources to actively involve the TQW community in monitoring compliance and give them information (not online but in person) on how to report suspicious activity.*

A process to monitor compliance needs to be stated in the permit. Both the current limit of discharge and VP's requested increased discharge have been given 3 years to come into compliance by MDE. After years of continued violations, the facility can continue to operate for 3 more years while it supposedly corrects itself. The mechanism for monitoring this self-correction is not stated in the draft permit. Self-reporting by VP is not enough.

Diane J. Miler - *At the Linkwood facility in the past 5 years there have been 13 inspections and 12 quarters with non-compliance, but only one formal enforcement action for violations to the Clean Water Act with a \$5,000 penalty assessed by the state "to resolve alleged violations...from August 2019 through September 2018." With their record of exceeding effluent limits and failure to report, we need assurances that they will adhere to the limits and requirements set forth in this new permit. There needs to be a better method for ensuring that testing and reporting are being completed accurately and on time by setting penalties or fines for every incidence followed by a facility inspection.*

Lexine Lowe, DCPG - *The MDE's past and recent record of oversight at the VP plant has not been nearly strong enough. This is actually an understatement which is proven by the following summary of issues :*

- There are repeated violations of effluent limitations since at least 2018, including recurring nitrogen violations.*
- *There is repeated failure to submit complete monitoring well data.*
- There is failure to submit information regarding sludge management to ensure that . sludge is not impacting ground or surface waters.*

-There is failure to address and remediate the persistent high nitrate levels in surrounding groundwater and prevent migration of nitrates from waste lagoons.

Ron Rothman - *So that citizens can monitor MDE I propose that:*

- 1. A specific monitoring and testing schedule be included in the permit*
- 2. This schedule be published on MDE's website*
- 3. The results of the monitoring and testing be posted within a time period proposed by MD*

Elizabeth Williams - *Rather than permitting continued pollution of public resources, MDE must issue fines and enforce water pollution control laws. It is very concerning that the agency has not taken action against previous violations by Valley Proteins.*

Sharon Smith - *Valley Protein should be fined to the maximum extent allowed by law on an ongoing basis (monthly) until it is compliant with the current discharge permit.*

Fred Pomeroy, virtual public hearing 10/20/2021 and Letter dated 01/12/2022

I noticed that your presentation tonight had no mention of how these new standards will be enforced. And, of course, as Alan has just said, enforcement is critical, otherwise, we may have --we haven't had enforcement of the requirement to have a permit for, like, years or at least 9 years from 2006, and if we don't have a rigid standard of enforcement, these updated limits may be just a hollow -- a hollow set of numbers. This history of non compliance must be dealt with before any expansion of the facility's permit is granted.

John Groutt, virtual public hearing 10/20/2021 - *What will be the penalties or the way to reinforce, because the -- if there are violations...many times, there seem to be no penalties. It just is a slap on the wrist or even -- not even that, and evidently Valley Protein has been doing a lot of things without much of even a slap on the wrist.*

Matt Pluta, Riverkeepers & ShoreRivers, in-person public hearing 11/16/2021 - *Worse yet, according to the State records, Valley Proteins had repeatedly been in significant violation of those outdated limits. That means they've exceeded pollution limits for things like fecal coliform, nitrogen, phosphorus, solids, organic matter -- many times in excess of over 100 percent of their permit limits. I guarantee you if this permit is issued, Valley Proteins will violate their permit within the first quarter of that issuance. And what, if anything, has the State done about this? Records show that Valley Proteins has been issued one measly \$5,000 fine in the past five years for significant violations. This all comes during the same time that our communities, the people here tonight and our towns and counties, are investing millions of dollars in efforts to reduce pollution going into our waterways. Meanwhile, Valley Proteins has made millions of dollars in the process of violating their permit and degrading our waterways. We are at the 11th hour of the largest clean-up of a single water body this country has ever seen. We are doing everything we can as a community to clean up pollution from urban areas, from farms and from wastewater. Yet the State has failed in holding corporate polluters like Valley Proteins accountable for their pollution.*

Matt Pluta, Riverkeepers & ShoreRivers, in-person public hearing 11/16/2021 - *Now, speaking specifically about the permit in front of us today. The permit we're reviewing fails to have meaningful reporting requirements. Considering the egregious violator that Valley Proteins has been, the State should be monitoring their discharge every single day that they are in operation. Right now, this draft permit only requires Valley Proteins to take samples of their discharge three or four times a week when, in fact, they are discharging six and-a-half days a week out of the entire year. Six and-a-half days every week for the entire year. They should be required to sample every single day they are in operation.*

Suzy Staehlin, in-person public hearing 11/16/2021 - *When I heard there was a hearing and I started to learn about what it was about, I was like, why are we having a hearing, they don't need a permit, they keep discharging and so why are we even having a hearing? I don't even know -- 150,000 gallons a day? Anyway, I was wracking my brain on what I could say to change behavior and change the outcome of what I see happening. And I came up and I thought, well, what is it that I would do? How would I not -- I'm sorry, I have to go back. How can you possibly not see that the pollution is unacceptable? So I thought why is this happening? Would I be too lazy to say anything? Would I be incompetent to not realize it? Would I be too corrupt? Who is getting money to turn their head and not see what is happening already. I can't even talk about the permit, let's talk about the reality right now. And I thought, well, maybe there's a fourth answer. Is it possible that the culture is so pervasive as to turn a blind eye to the existing pollution that's going on in the State of Maryland? Is there no one with the moral backbone to stand up and say this is not right. They should be on probation. If I was in charge -- and I'm not -- but I would have effective immediately, you are fined some substantial fine every day. And if there is no action taken to reduce the pollution in 30 days, you are shut down. And they cannot come up with an excuse. So my question for MDE is what is the reason that you would even consider a permit for more pollution when you can't control the existing pollution.*

Robert Sellers - *It was difficult having to sit there and hear how my neighbors are held hostage and their health directly threatened by irresponsible behavior. Behavior perpetrated on them by an outfit that has someone get up and address the group with the admonishment that this outfit provides \$11 million in local payroll- "good jobs for this area" I try to do my part for my community and the environment to the best of my ability and resources. I rely on the government and the rule of law to protect my interests beyond my abilities to safeguard the environment and our health. I read where Valley Proteins and other recyclers of waste cooking oil are losing a lot of money through the loss of this waste oil by opportunistic thievery. Rogue truckers are pumping oil from Valley Proteins customers' collection tanks. Valley Proteins and the other processors have mounted a significant effort to encourage the apprehension of these thieves and enforce laws to reduce the incentive to steal their resources. A lukewarm effort on their part to discourage theft of their resources would be ineffective. Likewise, a lukewarm(or lesser) effort on the part of government regulatory agencies charged with protecting our environment will be equally ineffective in bringing about improvement and a change in attitude on the part of polluters. Therefore, I cannot support continuing to kick the can down the road as far as the proposed action plan of the MDE as presented. Valley Proteins doesn't expect posting signs on their oil collection tanks saying: "unh-unh don't you take our oil "will be effective. Likewise, what is being proposed by MDE will not be any more effective in protecting the health and safety of my neighbors.*

Brenda McArdle - *MDE should reassess responsibilities and do their job of protecting the waterways and environment - not a private individual owned enterprise who does not respect the rights of citizens around their facilities State of Maryland Mail.*

Jan Boettgar, DCPG - *It seems that a big business-like Valley Protein is often given a pass when they ignore deadlines for reporting and violate water quality standards. I feel strongly that industrial operations, because of their size and potential to harm the environment, should be subjected to more scrutiny, not less. MDE's mission statement says its purpose is to "protect and restore the environment for the health of all Marylanders ". They have certainly not fulfilled this mission when it comes to this industrial operation in Linkwood. That is why DCPG joined with Shore Rivers, The Chesapeake Bay Foundation, and the Chesapeake Legal Alliance in filing a Notice of Intent to sue Valley Protein over their continued violations of the clean water standards. It is a real shame that ordinary citizens like us have to threaten a lawsuit in order to get the attention of MDE. I urge MDE to do the right thing and*

force Valley Protein to conduct its operations in a way that will quickly and positively bring a halt to the harm they are doing to the natural resources and the people of Dorchester.

Buck Walter - *Please make sure that corrective actions are taken by Valley Protein before any new discharge permits are issued and that they are held liable for all environmental damage caused to the Transquaking and other local waterways.*

RESPONSE

The Department became aware that the facility was having serious and recurring compliance issues in 2021. The following is a brief summary of compliance activities at Valley Proteins beginning in July 2021 through mid-August 2022:

1. July 2021 - Routine inspection by MDE WSA-Inspector (Randy Denny) found non-compliance issues.
2. September - October 2021 - Mr. Denny continued with monthly follow up inspections in September and October. These inspections continued to document non-compliances.
3. Mid Dec 2021 - Inspection after receiving a complaint found non-compliances on site.
4. December 2021 - Inspections increased to multiple times a week throughout December. The inspections documented non-compliances and MDE's WSA-Compliance worked with Valley Proteins to come back into compliance and clean-up pollution issues. MDE also entered into an interim consent order that established additional operational limits until the plant could consistently meet the permit limits.
5. January 2022 - As clean-up efforts improved and we verified that VP was not discharging outside the terms of the consent order and permit limits, inspections went to weekly.
6. January - March 2022 - Inspections continued (for the most part) weekly through March 2022.
7. March 2022 - Inspections started to become bi-weekly as Valley Proteins kept working and began to better come into compliance.
8. June - August 2022 (present) - Inspections moved to monthly as the facility was remaining in compliance.

A review of discharge monitoring reports (DMRs) from the facility indicated that there have been both numerical exceedances and late reporting violations during the previous permit term. Specifically, the Department noted exceedances for BOD, ammonia, fecal coliform, and chlorine. All of the prior incidents of non-compliance were considered in evaluating the appropriate permit limitations, reporting, and monitoring frequencies for this renewal.

To resolve these violations, the Department filed suit in the Circuit Court for Dorchester County on February 2, 2022. Consequently, the Department, along with intervening citizen groups and Valley Proteins entered into a Consent Decree. In addition to paying a civil penalty of \$540,000, the Consent Decree requires Valley Proteins to undertake several corrective actions, including engineering and compliance plans regarding previous plant performance and violations.

Due to the increased complexity of complying with this new permit, as compared to the previous permit, we have concluded that it is appropriate to add conditions to ensure that the wastewater treatment operations are adequately staffed. Consequently we will add two conditions to the compliance schedule condition in the final permit: (1) Valley Proteins must assess the number and type of personnel necessary to operate the new plant (Needs Assessment); and (2) Valley Proteins must report on the

number and type of certified wastewater operators that are to be hired, trained, and actively working in the WWTP by the time the upgraded facility is scheduled to go into operation. If the number and type of certified wastewater operators are different from the Needs Assessment, Valley Proteins must include in its reports the reasons why the numbers differ and an explanation for why the updated plans are sufficient.

The monitoring and reporting requirements in the final determination permit equal or exceed those of the previous permit. For a comparison between the two see the table below. Several comments generally suggested that the monitoring regime should be changed or improved. Frequency of Analysis for each parameter is set on a case-by-case basis. The United States Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) Permit Writers' Manual (2010), section 8.1.3 says the following concerning setting monitoring frequencies:

“The permit writer should establish monitoring frequencies sufficient to characterize the effluent quality and to detect events of noncompliance, considering the need for data and, as appropriate, the potential cost to the permittee. Monitoring frequency should be determined on a case-by-case basis, and decisions for setting monitoring frequency should be described in the fact sheet.”

A number of commenters expressed that they thought increased monitoring was needed. However, none gave rationale for how the monitoring framework should be altered. Per the guidance from the Permit Writer's Manual, monitoring frequencies should be described and set in a balanced way. The monitoring frequencies in the final permit built on the monitoring in the previous permit. Historically, the effluent from the facility has not been highly variable thus in general we did not conclude that overall monitoring frequencies needed to be increased. Per the application, the facility operates for 5.5 days per week. Thus monitoring 5 times per week was considered a maximum frequency.

The monitoring frequency for dissolved oxygen, chlorine and pH were set to 5 times per week because these are easy parameters to measure in real time and are key to determining that the treatment is working properly. More specifically, oxygen and chlorine, that are within permit limits, are indicative that overall the treatment is working. pH must be controlled to allow the TKN limits to be maintained.

Fecal coliform/E. coli, biochemical oxygen demand, all the forms of nitrogen, and phosphorus were increased from 1/week, in the previous permit, to 3/week. All of these parameters, except for fecal coliform/E. coli, are associated with new more restrictive water quality based limits in the final permit. The fecal coliform/E. coli monitoring frequency was increased because of compliance problems (pre-2021) the facility had in this area. We concluded that additional monitoring requirements are unnecessary.

Summary of the Monitoring Requirements in the Permit

Parameter	Frequency of Analysis	Sampling Statistics Reported	Notes	Comparison with the Previous Permit (99DP0024)
Flow	Continuous	2 - monthly average, daily maximum	reported in millions of gallons per day	Same
Dissolved Oxygen	5/Week	1 - minimum	reported in milligrams per liter (mg/L)	Same

Parameter	Frequency of Analysis	Sampling Statistics Reported	Notes	Comparison with the Previous Permit (99DP0024)
Fecal coliform	3/Week	2 - monthly average, daily maximum		Monitoring has been increased 3 fold. Previously measured 1/Week
E. coli	3/Week	2 - monthly average, daily maximum		Not measured
Total Residual Chlorine	5/Week	2 - monthly average, daily maximum	reported in mg/L	Same
pH	5/Week	2 - minimum, daily maximum		Same
Biochemical Oxygen Demand (BOD5)	3/Week	4 - monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Monitoring has been increased 3 fold. Previously measured 1/Week
Total Suspended Solids	1/Week	4 - monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Same
Oil & Grease	1/Week	4 - monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Same
Ammonia	3/Week	4 - monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Monitoring has been increased 3 fold. Previously measured 1/Week
Nitrogen, organic Total (as N)	3/Week	5 - annual average (lbs/year), monthly average and daily maximum	Sampled to be able to report TKN thus the statistics that need to be reported are the same.	Not measured independently, but would have been measured to be able to report total nitrogen
Nitrite + Nitrate (as N)	3/Week	6 - annual average (lbs/year), annual maximum (lbs/year), monthly average and daily maximum	Sampled to be able to report TKN and Total Nitrogen thus the statistics that need to be reported are the same.	Not measured independently, but would have been measured to be able to report total nitrogen
Kjeldahl	3/Week	5 - annual average	reporting monthly	Not measured

Parameter	Frequency of Analysis	Sampling Statistics Reported	Notes	Comparison with the Previous Permit (99DP0024)
Nitrogen, Total (TKN)		(lbs/year), monthly average and daily maximum	average and daily maximum in both lbs/day and mg/L	
Nitrogen, Total (as N)	3/Week	5 - annual maximum (lbs/year), monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Monitoring has been increased 3 fold and increased to be year round. Previously measured 1/Week and only from April 1 - November 30
Phosphorus, Total (as P)	3/Week	5 - annual maximum (lbs/year), monthly average and daily maximum	reporting monthly average and daily maximum in both lbs/day and mg/L	Monitoring has been increased 3 fold. Previously measured 1/Week

CHANGES FOR THE FINAL PERMIT

Condition I.T. in the final permit was updated to add two conditions to help ensure that the upgraded wastewater treatment works are adequately staffed. For convenience, the whole condition is reprinted below. The new language is underlined.

T. COMPLIANCE SCHEDULE FOR WWTP UPGRADES

1. The permittee shall achieve compliance with section I.A.2. or I.A.3. Note (9) by no later than 36-month after the effective date of this permit. Compliance with the final limits shall be met by achieving the following interim requirements according to the schedule specified below.

Item No.	Duration	Due Date (from effective date of permit)	Action Required
1	2 months	2 months	<p>Review the WWTP Expansion and/or Upgrade design and identify any changes that will be made to the design to comply with the limits of section I.A.2. or I.A.3. Note (9). Then submit a summary letter of the proposed WWTP Expansion and/or Upgrade to the Department at the address below. The letter shall detail any new unit process or major modifications to the existing WWTP necessary to comply with the limits.</p> <p>Submit all documents required by this section to: WSA-Wastewater Permits Program Industrial and General Permits Division Maryland Department of the Environment</p>

Item No.	Duration	Due Date (from effective date of permit)	Action Required
			<p>1800 Washington Boulevard, STE-455 Baltimore, MD 21230-1708</p> <p>AND TO</p> <p>WSA- Compliance Program Maryland Department of the Environment 1800 Washington Boulevard, STE-420 Baltimore, MD 21230-1708</p>
2	6 months	8 months	<p>Prepare and submit to the Department a 90% Design Document of the proposed WWTP Expansion and/or Upgrade incorporating the design modification identified in Item No. 1.</p> <p><u>Preliminary Staffing Needs Assessment - Assess and report the expected number and type of personnel necessary to operate the upgraded wastewater treatment plant. The report must include the number and type of certified wastewater operators that are to be hired, trained, and actively working in the WWTP by the time the upgraded facility is scheduled to go into operation.</u></p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>
3	1 month	9 months	<p>Prepare Final Bid Documents and issue Bid Documents to Contractors for bidding.</p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>
4	2 months	11 months	Bid Duration.
5	1 month	12 months	<p>Evaluate received bids and issue notice of award to a selected contractor.</p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>
6	20 months	32 months	<p>Substantially complete construction of the WWTP Expansion and Upgrade unit process or modifications necessary for compliance with new limits.</p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>

Item No.	Duration	Due Date (from effective date of permit)	Action Required
7	2 months	34 months	<p>Final Completion of WWTP Expansion and Upgrade.</p> <p><u>Final Staffing Needs Assessment - Assess and report the final number and type of staff necessary to operate the upgraded wastewater treatment plant. The report must include the number and type of certified wastewater operators that are to be hired, trained, and actively working in the WWTP by the time the upgraded facility is scheduled to go into operation. If the number and type of certified wastewater operators are different from the Preliminary Staffing Needs Assessment (see Item #2 in this table) the report will need to include rationale for why the final numbers are different and a rationale for why the updated plan still provides for adequate plant staffing.</u></p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>
8	2 months	36 months	<p>Final Completion of WWTP Expansion and Upgrade.</p> <p>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>

- 2 Reports of non-compliance with any of the above milestones shall be submitted within 30 days after missing the date. Such reports shall be submitted to the following:

WSA- Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE-420
Baltimore, MD 21230-1708

66. COMMENT (Susan Olson, DCPG, in-person public hearing 11/16/2021)

I'm testifying to voice my concern over the details outlined in MDE's tentative determination to issue Valley Proteins a new wastewater discharge permit. It seems to me that the concept of fairness is being omitted in the MDE proposal to allow Valley Proteins the option to expand their wastewater discharge by nearly fourfold, up to 575,000 gallons a day, from the present level of 150,000 gallons a day. What is the rationale for letting them expand, when their history of operations includes multiple exceedances of nitrogen, phosphorus, fecal coliform, ammonia and chlorine. Why should a regulatory government body like MDE allow a fourfold expansion to an industry that has undoubtedly contributed to great harm in this watershed. Specifically, Valley Proteins' effluent into the upper body of the Transquaking has contributed to the further degradation of a river where over-eutrophication and anoxia conditions have led to fish kills, deadly algal blooms, the death of two much loved dogs, and warning against public

bathing. Is it fair to reward them for this history by giving them the option to expand their discharge? The issue of fairness extends beyond MDE's proposal to allow Valley Proteins to carry out a massive up-sizing of their wastewater discharge. In fact, it extends to the whole notion of locating a heavy industry that creates tons of industrial waste at the headwaters of a tiny and fragile watershed. I think it is safe to say that if there had not already been a small scale rendering plant at this location for many years, the current facility, which bears little resemblance to its predecessor, could never have been sited on the Transquaking. And in conclusion, MDE, rather than insisting on state of the art upgrades like enhanced nitrogen removal to cleanse Valley Proteins' discharge into the Transquaking, is allowing for the option of a fourfold increase in discharge. By not holding this company accountable for its past violations, MDE is rewarding them for behavior that has contributed to the death of the river. I urge MDE to act for the public good and not as an enabler to an industry that has put profit motive over cleaner water and public health. It is only fair that you do so and it is your job.

RESPONSE

Please refer to the response to Comment #28.

With respect to “*holding this company accountable for its past violations*”, the permit is not the vehicle for enforcement actions. Violation of the final determination permit could form the basis for enforcement action. Any enforcement action has its own separate process. See also the response to Comment #65 for more information on compliance/enforcement activities at the site.

CHANGES FOR THE FINAL PERMIT

None.

67. COMMENT (Charles Stegman, Wicomico Environmental Trust, in-person public hearing 11/16/2021)

I would like to especially address the compliance issues. Given the long record of noncompliance by Valley, we feel that MDE needs to strengthen the compliance requirements of the new permit. Unfortunately, the new permit proposes to decrease the frequency of reporting, instead of increasing the frequency in certain areas.

RESPONSE

There are no instances of less frequent reporting proposed in the tentative determination versus the existing permit. The frequency of completing discharge monitoring reports is actually more rigorous versus the previous permit because of more frequent monitoring and the introduction of electronic reporting via NetDMR. Formerly, the permittee would summarize monitoring on a single form for each month, but would only mail in those reports once per quarter. Now reports will be due by the 28th day of the following month, rather than just once per quarter. Finally, the minimum frequency of monitoring parameters at the outfall has either remained the same or increased for every parameter.

Also see the response to Comment #65 for a comparison of the reporting in the current permit (99DP0024) versus the tentative determination permit.

CHANGES FOR THE FINAL PERMIT

None.

68. COMMENT (Melody Knox - email on 11/17/2021)

I attended a meeting last night in Linkwood Md in regards to Valley Protein polluting our area with permission to do so because no one seems to be holding them accountable. It makes no sense to me that they have been allowed to do this with nobody doing anything about it let alone granting permits to let them expand their pollution process. Valley Protein needs to be held accountable as does anyone who is allowing this to happen. Shame on you all!!

RESPONSE

See the response to Comment #65 concerning compliance.

See the response to Comment #33 concerning the requested increase in flow.

CHANGES FOR THE FINAL PERMIT

None.

COMMENT GROUP - Comments from the Applicant

69. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

The existing permit imposes no volume limits on the facility's discharge and the increase in discharge flow volume does not allow an increase in nutrient loading

RESPONSE

This comment does not object to any term of the tentative determination and therefore does not require a response.

CHANGES FOR THE FINAL PERMIT

None.

70. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Nutrient loadings from the facility to the Transquaking River will decline

RESPONSE

This comment does not object to any term of the tentative determination and therefore does not require a response.

CHANGES FOR THE FINAL PERMIT

None.

71. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

The facility is positioning itself to actively reduce the amount of residual nutrients to be land-applied

RESPONSE

This comment does not object to any term of the tentative determination and therefore does not require a response.

CHANGES FOR THE FINAL PERMIT

None.

72. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Sampling and laboratory analyses are appropriately regulated and performed

RESPONSE

This comment does not object to any term of the tentative determination and therefore does not require a response.

CHANGES FOR THE FINAL PERMIT

None.

73. (72)47) COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Some commenters claim that odors from the facility interfere with the use of their property. Valley Proteins takes odor concerns seriously and seeks to be responsive to them. Prior to recent months, Valley Proteins has received very few complaints about odors. Indeed, aside from the hearings, Valley Proteins received fewer than ten complaints in the last year. Responding to odor complaints requires real time information so that the Facility can investigate while the odors are occurring.

The new permit will require the plant to continue its odor management practices for the WWTP and should be approved. Permit, Part I. 0. This includes maintenance of an odor minimizing "scum layer" on certain ponds and routine and periodic reporting to MDE.

It is often difficult to determine the sources and causes of odors. That is particularly true in agricultural areas. As noted above, Valley Proteins is not a major contributor of solids that are land-applied as fertilizer, and it is possible that commenters are mistaking the source.

In response to comments, Valley Proteins has published the phone number of the General Manager of the Facility (540-931-7792), so that odor concerns may be called in directly to the facility at the time they are identified. Also, the public is encouraged to call VP Care, our 24-hour customer service team, at 800-871-3406.

RESPONSE

Please see responses to Comments #53 and #69.

CHANGES FOR THE FINAL PERMIT

None.

74. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Over the last three years there have been approximately five incidents per year at the Facility that caused excursions from limits on one or more parameters in its Permit. Valley Proteins strives to have no violations and has taken steps to prevent the recurrence by determining and addressing root causes of these events. The root causes vary from incident to incident and in large part due to various mechanical malfunctions and operational issues that are not recurring in nature. All of these incidents have been documented at length with MDE and it is requested that those documents and explanations be included in the administrative record for this comment period.

MDE and Valley Proteins have been in continuous dialog and negotiations concerning the wastewater system and improvements in water quality, which both parties support. As outlined above, Valley Proteins has spent millions of dollars on improvements to the system and will do even more in connection with a renewed permit. While regrettable, it is not surprising that there have been violations of limits given the age of the WWTP. Technology has improved over time and the investments that will be enabled by a renewed permit should improve compliance, even though the limits will be far more stringent.

RESPONSE

This comment does not object to any term of the tentative determination. See the response to Comment #65 regarding recent compliance actions at the facility.

CHANGES FOR THE FINAL PERMIT

None.

75. COMMENTS (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Cover Page. The outfall description on the cover page states the facility discharges "To an unnamed tributary to Higgins Mill Pond". For internal consistency with Permit, Part I.A.1, the provision should state the facility discharges to "an unnamed tributary of Transquaking River."

RESPONSE

The Department agrees that there is inconsistency and that the receiving stream is a tributary of the Transquaking River.

CHANGES FOR THE FINAL PERMIT

The permit language on the cover page was changed to read "an unnamed tributary of the Transquaking River."

76. COMMENTS (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.A.2 and Part I.A.3. The minimum level for reporting TRC of 0.10 mg/Lin footnote (3) is higher than the proposed monthly average permit limit of 0.011 mg/L. The minimum level for reporting should be reduced to 0.001 mg/L or the lowest detectable concentration of the testing method for residual chlorine. Additionally, Valley Proteins suggests that an alternative higher maximum TRC limit would be appropriate in the event Valley Proteins needs to utilize breakpoint chlorination for ammonia removal. Breakpoint chlorination would be utilized in an emergency on a temporary basis in the event biological nitrification has been impaired which has resulted in a reduction in ammonia removal efficiency. Although this would cause an immediate increase, it would not be likely to materially affect monthly average TRC concentrations.

RESPONSE

The specified nondetectable level for total residual chlorine (TRC) at COMAR 26.08.03.06 is not a water quality criterion, but rather a statement of testing capabilities. The permit requires the use of approved test methods per 40 CFR 136.3. Essentially, COMAR 26.08.03.06 specifies that no approved test method for TRC can reliably detect a concentration beneath 0.1 mg/L. While the Department must apply the water quality criteria as the most stringent applicable limitation, it is not technically feasible for the approved lab methods to measure to that level. As a result, the Department includes the referenced footnote in all applicable NPDES permits.

CHANGES FOR THE FINAL PERMIT

None.

77. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.A.3, p. 11 of 39, 2nd Par. Sections should "become active the first day of the month after receipt of the request" for clarity.

RESPONSE

The intent of the final determination permit language is to implement the limits and monitoring beginning the first day of the month following receipt of the request. The Department, therefore, agrees that the proposed language is more clear.

CHANGES FOR THE FINAL PERMIT

The fifth sentence of the first paragraph under condition I.A.3 was amended from "...will become active the first of the month..." to "...will become active the first day of the month..."

78. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.B.36 and D.1, p.18 of 39. A definition for "Removed Substances" was not included despite requirements applicable to those substances. Valley Proteins recommends the definition in its existing permit be added to the permit as follows: "Removed Substances' are any and all wastewater treatment solids removed from the facility for disposal offsite."

RESPONSE

"Removed substances" is defined in General Condition B.7.

CHANGES FOR THE FINAL PERMIT

None.

79. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.F, p. 19 of 36. Wastewater operator requirements should only apply for the Class of wastewater works required by the Maryland Board of Waterworks and Waste Systems, so the last sentence of this provision should be revised as follows: " ... Class 5 industrial wastewater works, unless the Board determines a different classification is appropriate."

RESPONSE

The Department has determined that the appropriate classification is Industrial Class 5. The Board's function is to advise on classification training level, but not to determine the Class which is applicable to a given system.

CHANGES FOR THE FINAL PERMIT

None.

80. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part. J, 3rd Par., p. 20 of 39. Because the TMDL of interest is for the receiving stream and the term "major modification" is a defined term, this sentence should clarify the reopener provision for TMDLs may be the result of a major modification to the facility: " ... this permit may be reopened for a major modification to implement any applicable requirements associated with the Transquaking River TMDL."

RESPONSE

The meaning of the permit language in Part J. is that "if the Chesapeake Bay TMDL is updated (changed), then the permit may be reopened by the Department as a major modification to the permit (not to the facility)".

CHANGES FOR THE FINAL PERMIT

None.

81. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.L.4, Last Sentence. The schedule for implementation of a TRE should be "in accordance with a schedule submitted with this plan" as opposed to "immediately upon submission of the plan" since the terms "immediately" and "submission" are not clarified. For example, under certain EPA programs the submission of a notification is deemed "immediate" if it is filed within 15 minutes of knowledge, and this confusion may be resolved with a well-defined schedule submitted by the permittee.

RESPONSE

The language in Part L.4. is a part of the standard definition under Toxicity Reduction Evaluation. The language does not preclude the defining of a schedule as part of the measures, with the implementation of that schedule being equivalent to implementation of the measures. There is no need to alter the permit language.

CHANGES FOR THE FINAL PERMIT

None.

82. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I. P.1, p. 23 of 36. Valley Proteins requests two months instead of just one month from the effective date of the permit to file its "groundwater monitoring well location plan."

RESPONSE

The tentative determination draft permit, Special Condition P.1. said the following:

“New/Re-Sited Monitoring Wells - The permittee shall re-site monitoring well (MW) 7 (as necessary) and install two (2) new background monitoring wells (BMW). MW-7 should be re-sited so that it will continue to monitor the groundwater in the area adjacent to the now-removed treatment pond. One BMW should be sited southeast of MW-6, as close to the property line as possible. The other BMW should be sited to the north of MW-5, again as close to the property line as possible.

Within one month from the effective date of this permit, the permittee shall submit to the Department the groundwater monitoring well location plan. The monitoring wells shall be installed no later than three months after approval for the site locations is given. Submit all documents required by this section to...”

After reconsideration of these permit terms and the numerous action items required, the Department thinks it is reasonable that more than one month may be required to complete them. Therefore, the Department agreed to allow two months.

CHANGES FOR THE FINAL PERMIT

The language of condition I.P.1., second paragraph, the 1st sentence, has been changed from “Within ~~one~~ month from the effective date of the permit...” to “Within two months from the effective date of the permit...”.

83. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I. P. 3, p. 24 of 36. The permittee believes it will not be beneficial to objectives of the groundwater program to sample for fecal coliform and requests this parameter be deleted from the parameter list.

RESPONSE

The Department protects groundwater to the level of drinking water standards, so it is appropriate to include monitoring for fecal coliform. See the fact sheet rationale for Special Condition P. for the reasons why fecal coliform groundwater monitoring is being continued.

CHANGES FOR THE FINAL PERMIT

None.

84. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I. Q.4. This provision appears to require internal sampling of wastewater sludges even where the solids are not removed from the system for disposal and duplicates reporting under Part I. D.1 and Part I.Q.3. Accordingly, Valley Proteins requests this part be (1) deleted in its entirety or the first Sentence be revised to state "Unless otherwise reported, the permittee shall... " and the 3rd Sentence be clarified to

require a form be submitted for "each type of removed solids sent for disposal from each different step in the treatment process."

RESPONSE

This condition just clarifies the expectations from Part I.D of the permit with respect to sludge. Part I.D. is the language for removed substances. The goal of the sludge management conditions in the permit is for all of the sludge that leaves the site to be able to be tracked. In short, the Department needs to know where the sludge went to be able to ensure that it did not go into surface waters. Nothing in Special Condition I.Q.4 expands on the types of removed substances that the permittee was already expected to track. It only clarifies the requirements for tracking them.

CHANGES FOR THE FINAL PERMIT

None.

85. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part I.V.1.b. Updating the facility SWP3 cannot be completed outside of the terms in the General Permit for Discharges from Storm Water Associated with Industrial Activities in effect on the Effective Date of this NPDES permit. Since State Permit No. 12-SW NPDES Permit No. MDR0000 by law is no longer in effect or applicable to the facility, this provision should reference the General Permit for Discharges from Storm Water Associated with Industrial Activities in effect at the time the NPDES industrial discharge permit is issued.

RESPONSE

The current *General Permit for Discharges from Stormwater Associated with Industrial Activities* is Maryland State Permit Number 12-SW-A and NPDES Permit Number MDR0000. The Department has also published a tentative determination to renew the general permit, which will be recognized as State Number 20-SW. Special Condition V is updated for the final determination to reflect that the requirement is to apply for the 12-SW-A or its successor and complete a SWPPP (or SWP3, as referenced in the comment) in accordance with that permit.

CHANGES FOR THE FINAL PERMIT

Condition I.W.1. in the final reads:

No later than 30 days after the permit's effective date the permittee must submit a Declaration of Intent to Comply with the Terms and Conditions of the *General Permit for Discharges from Stormwater Associated with Industrial Activities* 12 SW-A ("Declaration of Intent"), register under a successor general permit using the appropriate documentation associated with that permit, or submit an application for other coverage for its stormwater discharges associated with industrial activity. All documents associated with the general permit for industrial stormwater may be found at "<https://mdewwp.page.link/isw>". The application submitted should, minimally, address the following:

86. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part II. A.6. To be consistent with the permit, additional monitoring should only have to be reported where sampling is performed in accordance with the test methods and procedures in the permit and applicable regulations. It is recommended the first sentence of this section be revised to state: "... more frequently than required by this permit using the test methods and sampling procedures required by the permit, the results..."

RESPONSE

The condition already says "If the permittee monitors any pollutant, *using approved analytical methods as specified above*, at the locations designated herein..." (italics added for emphasis). The reference to "approved analytical methods as specified above" refers back to prior permit conditions which specify the parameters to be monitored and the need for methods to comply with regulatory requirements. Thus, the proposed edit to this condition would be redundant.

CHANGES FOR THE FINAL PERMIT

None.

87. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part II. A.7. Because the State of Maryland limits liability for noncompliance to 3 years, this provision should replace 5 years with 3 years.

RESPONSE

While the statute of limitations for civil actions in the State is three years, the statute of limitations for administrative actions in the State is five years. Therefore, the Department has determined that requiring the facility to maintain records for five years is reasonable and appropriate.

CHANGES FOR THE FINAL PERMIT

None.

88. COMMENT (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

Part II. B.7. This provision is not applicable to Removed Substances at the facility, since no Removed Substances may be land applied onsite. Accordingly, this provision must be deleted.

RESPONSE

This general condition of the permit says, "Wastes such as solids, sludges, or other pollutants removed from or resulting from treatment or control of wastewaters, or facility operations, shall be disposed of in

a manner to prevent any removed substances or runoff from such substances from entering or from being placed in a location where they may enter the waters of the State.” This condition is not intended to apply only to disposal on the permitted site. The condition may also apply to onsite storage of the substances to be removed.

CHANGES FOR THE FINAL PERMIT

None.

89. COMMENTS (John E. Griffith Jr, Senior Counsel, DLA Piper, on behalf of Valley Protein, Inc.)

xiv.) Part II.C.2. Transfer of ownership may not be unilaterally modified by the permit. Accordingly, the first sentence of this section should include the following edit: " ... the permit may be transferred in accordance with applicable regulations to another person." The remainder of the section should be removed.

RESPONSE

General Condition II.C.2 does not state that the permit may modify the transfer of ownership. On the contrary it specifies the condition under which the new owner can apply to transfer the permit in the event that a change of ownership or facility control has taken place. This is clearly stated in the first line of the condition. Further, the language utilized in Part II.C.2.b (part b of the referenced condition), which stipulates the required written agreement to be submitted to request permit modification, is nearly identical to the language at 40 CFR 122.63(d) which facilitates the transfer of ownership as a minor modification. No changes to this condition are warranted.

CHANGES FOR THE FINAL PERMIT

None.

90. COMMENT (Robert Vogler, in-person public hearing 11/16/2021)

I'm Robert Vogler from Valley Proteins, Director of Regulatory Affairs. It's been a long night; I'll be very brief. Just a few things, a few highlights. Valley Proteins purchased the Linkwood facility in 2013. It was originally built in 1957. There are 150 employees and an annual payroll expense of over \$11 million. And these are good jobs. The hourly pay is jobs in the range of \$45,000 to \$70,000 a year. So these are good jobs for the community. Since we purchased the facility, we have been undergoing upgrades and refurbishments, including spending \$7 million on wastewater improvements to date. These are voluntary improvements that we've made, pending the issuance of the new permit. I just want to point out that there is a timeline on the poster board there, I'm sorry it's small, and I'm not going to go through it here tonight. But it has been a process. It has been a long process that we've been involved in since we purchased the plant, and particularly since 2014. So we're very happy to be where we are tonight, because we see this as the end of a long process that will lead to a permit with strict water quality standards for protection of the Bay and give us the established standards that we can then go ahead and design and build an upgrade, a permanent upgrade, to the wastewater plant and move on with a state-of-the-art better facility that will be protective of the Bay and the community. So we're

looking forward to that day. We've been waiting for a long time to get to the point where we can start this upgrade.

RESPONSE

The comment does not concern, much less object to, any terms proposed in the tentative determination draft permit.

CHANGES FOR THE FINAL PERMIT

None.