

TENTATIVE DETERMINATION DRAFT PERMIT

Last Revised on **September 14, 2021**

STATE DISCHARGE PERMIT NUMBER	04-DP-0024	NPDES PERMIT NUMBER	MD0003247
APPROVAL DATE	Draft <Date on Transmittal Letter>	EFFECTIVE DATE	Draft
EXPIRATION DATE	Draft <Effective Date + 5 Years>	REAPPLICATION DATE	Draft <Enter Date per S.C. I.>
MODIFICATION DATE:	N/A		

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq. and implementing regulations 40 CFR Parts 122, 123, 124, and 125, the Department of the Environment, hereinafter referred to as the "Department," hereby authorizes

Valley Protein, Inc.
5420 Linkwood Road
Linkwood, Maryland 21835

TO DISCHARGE FROM a poultry rendering facility

LOCATED AT 5420 Linkwood Road, Linkwood, Dorchester County, Maryland 21835.

VIA OUTFALL 001 as identified and described herein, and from facility areas identified in the storm water pollution prevention plan associated with the previous permit 99-DP-0024 until the Permittee either signs a Declaration of Intent to Comply with the Terms and Conditions of the General Permit for Stormwater Associated with Industrial Activities and receives approval of its Notice of Intent, or obtains other coverage for its stormwater discharges associated with industrial activity.

TO an unnamed tributary to Higgins Millpond (Use-I), which is protected for water contact recreation, fishing, aquatic life, and wildlife in accordance with the following special and general conditions and map made a part hereof.

I. SPECIAL CONDITIONS

A.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the effective period of this permit, the permittee is authorized to discharge wastewater from scrubbers, condensers, plant wash water, vehicle wash water, and storm water runoff via Outfall 001 (Maryland Coordinates 1616.08 E and 326.09 N). The Outfall 001 is identified as 8” PVC from the chlorine contact tank discharging into an unnamed tributary to the Transquaking River.

As specified below, such discharge shall be limited and monitored by the permittee at the outflow weir of the Chlorine Contact Tank.

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Flow		Report	Report	MGD					Continuous	Measured & Recorded	
Dissolved Oxygen					[5.0]			mg/l	5/Week	Grab	
Fecal coliform						200	Report	MPN /100 ml	3/Week	Grab	(1)
E. coli						126	Report	MPN /100ml	3/Week	Grab	(2)
Total Residual Chlorine						0.011	0.019	mg/l	5/Week	Grab	(3)
pH					6.0		[9.0]		5/Week	Grab	
Biochemical Oxygen Demand (BOD5)					Sampling Required			mg/l	3/Week	24-hr. Comp	
Total Suspended Solids					Sampling Required			mg/l	1/Week	24-hr. Comp	
Oil & Grease					Sampling Required			mg/l	1/Week	Grab	

I. SPECIAL CONDITIONS

A.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES	
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS				
Ammonia (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Nitrogen, organic Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Nitrite + Nitrate (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Kjeldahl Nitrogen, Total	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Nitrogen, Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Phosphorus, Total (as P)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)	
Kjeldahl Nitrogen, Total							[Report] (Annual Average)	mg/l	1/Month	Calculated	(7)	
Kjeldahl Nitrogen, Total		Report	Report	Lbs/Day			Report	Report	mg/l	1/Month	Calculated	(6)
Nitrogen, Total (as N)	[Report] ⁽⁷⁾ (lbs/year)	1,231 ⁽⁷⁾⁽⁸⁾ (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note ⁽⁷⁾			Report	Report	mg/l	1/Month	Calculated	(6) (7) (8)
Phosphorus, Total (as P)	[Report] ⁽⁷⁾ (lbs/year)	123 ⁽⁷⁾⁽⁸⁾ (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note ⁽⁷⁾			Report	Report	mg/l	1/Month	Calculated	(7) (8)

I. SPECIAL CONDITIONS

A.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Between April 1 and November 30											
Ammonia (as N)		Report	Report	Lbs/Day		[4.2]	[23.0]	mg/l	1/Month	Calculated	(6)
Biochemical Oxygen Demand (BOD ₅)		31.0	39.0	Lbs/Day		[Report]	Report	mg/l	1/Month	Calculated	
Oil and Grease		13.0	20.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		39.0	53.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Between December 1 and March 31											
Ammonia (as N)		Report	Report	Lbs/Day		[10.0]	[23.0]	mg/l	1/Month	Calculated	(6)
Biochemical Oxygen Demand (BOD ₅)		90.0	180.0	Lbs/Day		[Report]	Report	mg/l	1/Month	Calculated	
Oil and Grease		50.0	100.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		110.0	220.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	

NOTE: Limits or monitoring requirements in [brackets] denote that these are parameters that will change once the permit transitions to the conditions of section I.A.2. or I.A.3. The number/requirement in the [bracket] is correct for this limit and monitoring set.

There shall be 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 point of discharge.

The effluent limitations and monitoring requirements are based on an annual average flow of 150,000 gallons per day (gpd). In accordance with General Condition B.1, the Department must be notified at least 180 days before the annual average flow is expected to exceed this level. This requirement is not a flow limit.

(1) Monthly geometric mean.

I. SPECIAL CONDITIONS

A.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

- (2) The fecal coliform limit shall be in effect until the E. coli limit becomes effective. The E. coli limit shall take effect one year after the issuance date of the permit. The permittee, however, may request that the switch from fecal coliform to E. coli limitation take place more quickly.
- (3) The minimum level for reporting purposes is 0.10 mg/l. All results below this minimum level shall be reported as <0.10 mg/l.
- (4) [Reserved]
- (5) [Reserved]
- (6) Testing for all forms of nitrogen must be performed on the same sample. The phosphorus sample should be taken at the same time as the nitrogen samples.
- (7) The Monthly Loading Rate (**MLR**) is a calculated parameter, in units of lbs/month. The MLR should be reported in the space for the Quantity of Loading, Monthly Average. The MLR is calculated as the sum of each week's flow (in millions of gallons per day) times the average concentration (in mg/l) measured each week, times 8.34.

$$MLR = \sum_{\text{Month}} (\text{Flow}_{\text{Weekly Sum}} \times \text{Concentration}_{\text{Weekly Average}} \times 8.34)$$

The Monthly Average Loading Rate (**MALR**) has units of lbs/day. The MALR should be reported in the space for the Quantity of Loading, Daily Maximum. It is calculated by dividing the MLR by the number of days in the month.

$$MALR = MLR / \# \text{ Days in the Month}$$

The Annual Maximum Loading limit (**AML**) is a calculated parameter, in units of pounds per year. The AML is calculated by summing the MLRs from January 1st through December 31st of the current calendar year. I.e. the MLR will equal the AML for January (or for the first month the both numbers are reported).

$$AML = \sum_{\text{Calendar Year}} MLR$$

The details and results of the required annual calculations shall be submitted to the Department's Water and Science Administration, Compliance Program with the Discharge Monitoring Report for December. The resulting number shall be reported in the space for the Quantity of Loading, Annual Maximum.

- (8) This is a monthly maximum limit. The limits are in conformance with *the Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester, Maryland Total Maximum Daily Load (TMDL)* approved on March 9, 2000 by the United States Environmental Protection Agency.

I. SPECIAL CONDITIONS

A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This section, or section I.A.3., becomes effective no later than 3 years after the effective date of the permit. If an election decision is not received from the permittee section I.A.2. will become active. Section I.A.2 or I.A.3. may be activated early, upon request from the permittee. Once either section is activated the other section may no longer be invoked, except via a major modification process. Upon receipt of an early activation request the applicable section will become active the first of the month after receipt of the request. (See Special Condition T for the compliance schedule associated with this section.) Once in effect this section will completely supersede section I.A.1.

During the effective period of this section, the permittee is authorized to discharge wastewater from scrubbers, condensers, plant wash water, vehicle wash water, and storm water runoff via Outfall 001 (Maryland Coordinates 1616.08 E and 326.09 N). The Outfall 001 is identified as 8” PVC from the chlorine contact tank discharging into an unnamed tributary to the Transquaking River.

As specified below, such discharge shall be limited and monitored by the permittee at the outflow weir of the Chlorine Contact Tank.

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Flow		Report	Report	MGD					Continuous	Measured & Recorded	
Dissolved Oxygen					6.0 [5.0]			mg/l	5/Week	Grab	(9)
E. coli						126	Report	MPN /100ml	3/Week	Grab	(2)
Total Residual Chlorine						0.011	0.019	mg/l	5/Week	Grab	(3)
pH					6.0		7.8 [9.0] ⁽⁹⁾		5/Week	Grab	(9)
Biochemical Oxygen Demand (BOD5)	Sampling Required							mg/l	3/Week	24-hr. Comp	
Total Suspended Solids	Sampling Required							mg/l	1/Week	24-hr. Comp	

I. SPECIAL CONDITIONS

A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Oil & Grease	Sampling Required							mg/l	1/Week	24-hr. Comp	
Ammonia (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrogen, organic Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrite + Nitrate (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Kjeldahl Nitrogen, Total	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrogen, Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Phosphorus, Total (as P)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Kjeldahl Nitrogen, Total							2.8 [Report] (Annual Average)	mg/l	1/Month	Calculated	(7) (9)
Kjeldahl Nitrogen, Total		Report	Report	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	(6)
Nitrogen, Total (as N)	8,477 ^{(7) (9)} [Report] (lbs/year)	1,231 ^{(7) (8)} (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note (7)		Report	Report	mg/l	1/Month	Calculated	(6) (7) (8) (9)

I. SPECIAL CONDITIONS

 A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Phosphorus, Total (as P)	315 ^{(7) (9)} [Report] (lbs/year)	123 ^{(7) (8)} (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note (7)		Report	Report	mg/l	1/Month	Calculated	(7) (8) (9)
Between April 1 and November 30											
Ammonia (as N)		Report	Report	Lbs/Day		1.5 [4.2]	12.2 [23.0]	mg/l	1/Month	Calculated	(6) (9)
Biochemical Oxygen Demand (BOD ₅)		31.0	39.0	Lbs/Day		6.0 [Report]	Report	mg/l	1/Month	Calculated	(9)
Oil and Grease		13.0	20.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		39.0	53.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Between December 1 and March 31											
Ammonia (as N)		Report	Report	Lbs/Day		3.3 [10.0]	12.5 [23.0]	mg/l	1/Month	Calculated	(6) (9)
Biochemical Oxygen Demand (BOD ₅)		90.0	180.0	Lbs/Day		12 [Report]	Report	mg/l	1/Month	Calculated	(9)
Oil and Grease		50.0	100.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		110.0	220.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	

NOTE: Limits or monitoring requirements in **BOLD** denote the new parameters that will need to be complied with once the permit transitions from the conditions of I.A.1. to the conditions of this section. The [bracketed] ~~strikeout~~ conditions are those that will no longer be effective.

The effluent limitations and monitoring requirements are based on an annual average flow of 150,000 gallons per day (gpd). In accordance with General Condition B.1, the Department must be notified at least 180 days before the annual average flow is expected to exceed this level. This requirement is not a flow limit.

I. SPECIAL CONDITIONS

A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

There shall be 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 point of discharge.

(1) [Reserved]

(2) [Reserved]

(3) The minimum level for reporting purposes is 0.10 mg/l. All results below this minimum level shall be reported as “<0.10 mg/l” or “NODI B” in NetDMR.

(4) [Reserved]

(5) [Reserved]

(6) Testing for all forms of nitrogen must be performed on the same sample. The phosphorus sample should be taken at the same time as the nitrogen samples.

(7) The Monthly Loading Rate (**MLR**) is a calculated parameter, in units of lbs/month. The MLR should be reported in the space for the Quantity of Loading, Monthly Average. The MLR is calculated as the sum of each week’s flow (in millions of gallons per day) times the average concentration (in mg/l) measured each week, times 8.34.

$$MLR = \sum_{\text{Month}} (\text{Flow Weekly Sum} \times \text{Concentration Weekly Average} \times 8.34)$$

The Monthly Average Loading Rate (**MALR**) has units of lbs/day. The MALR should be reported in the space for the Quantity of Loading, Daily Maximum. It is calculated by dividing the MLR by the number of days in the month.

$$MALR = MLR / \# \text{ Days in the Month}$$

The Annual Maximum Loading limit (**AML**) is a calculated parameter, in units of pounds per year. The AML is calculated by summing the MLRs from January 1st through December 31st of the current calendar year. I.e. the MLR will equal the AML for January (or for the first month the both numbers are reported).

$$AML = \sum_{\text{Calendar Year}} MLR$$

The details and results of the required annual calculations shall be submitted to the Department’s Water and Science Administration, Compliance Program with the Discharge Monitoring Report for December. The resulting number shall be reported in the space for the Quantity of Loading, Annual Maximum.

a) The TN AMLR Limit is **8,477 Lbs/year**. To meet the AMLR limit, at an annual average flow of 150,000 gpd the permittee will need an annual average TN concentration of less than 18.6 mg/l.

I. SPECIAL CONDITIONS

A.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

- b) The TP AMLR Limit is **315 Lbs/year**. To meet the AMLR limit, at an annual average flow of 150,000 gpd the permittee will need an annual average TP concentration of less than 0.69 mg/l.
- (8) This is a monthly maximum limit. The limits are in conformance with *the Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester, Maryland Total Maximum Daily Load (TMDL)* approved on March 9, 2000 by the United States Environmental Protection Agency.
- (9) This limit becomes effective 3 years after the effective date of the permit unless the limits in section I.A.3. are requested in advance of the deadline. Also see Special Condition T.

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I. SPECIAL CONDITIONS

A.3 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This section becomes effective no later than 3 years after the effective date of the permit. This section will only be activated instead of section I.A.2. if requested by the permittee before section I.A.2. automatically goes into effect. Section I.A.2 or I.A.3. may be activated early upon request from the permittee. Once either section is activated the other section may no longer be invoked, except via a major modification process. Upon receipt of an early activation request the applicable section will become active the first of the month after receipt of the request. (See Special Condition T for the compliance schedule associated with this section.) Once in effect this section will completely supersede section I.A.1.

During the effective period of this section, the permittee is authorized to discharge wastewater from scrubbers, condensers, plant wash water, vehicle wash water, and storm water runoff via Outfall 001 (Maryland Coordinates 1616.08 E and 326.09 N). The Outfall 001 is identified as 8” PVC from the chlorine contact tank discharging into an unnamed tributary to the Transquaking River.

As specified below, such discharge shall be limited and monitored by the permittee at the outflow weir of the Chlorine Contact Tank.

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Flow		Report	Report	MGD					Continuous	Measured & Recorded	
E. coli						126	Report	MPN /100ml	3/Week	Grab	(2)
Total Residual Chlorine						0.011	0.019	mg/l	5/Week	Grab	(3)
pH					6.0		7.8 [9.0] ⁽⁹⁾		5/Week	Grab	(9)
Biochemical Oxygen Demand (BOD5)	Sampling Required							mg/l	3/Week	24-hr. Comp	
Total Suspended Solids	Sampling Required							mg/l	1/Week	24-hr. Comp	
Oil & Grease	Sampling Required							mg/l	1/Week	24-hr. Comp	

I. SPECIAL CONDITIONS

A.3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Ammonia (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrogen, organic Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrite + Nitrate (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Kjeldahl Nitrogen, Total	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Nitrogen, Total (as N)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Phosphorus, Total (as P)	Sampling Required							mg/l	3/Week	24-hr. Comp	(6)
Kjeldahl Nitrogen, Total							2.8 [Report] (Annual Average)	mg/l	1/Month	Calculated	(7) (9)
Kjeldahl Nitrogen, Total		Report	Report	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	(6)
Nitrogen, Total (as N)	8,477 ^{(7) (9)} [Report] (lbs/year)	1,231 ^{(7) (8)} (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note (7)		Report	Report	mg/l	1/Month	Calculated	(6) (7) (8) (9)

I. SPECIAL CONDITIONS

 A.3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

PARAMETER	QUANTITY OR LOADING				QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE	NOTES
	ANNUAL MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS	MINIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	UNITS			
Phosphorus, Total (as P)	315 ^{(7) (9)} Report (lbs/year)	123 ^{(7) (8)} (lbs/month)	Report ⁽⁷⁾ (lbs/day)	See Note (7)		Report	Report	mg/l	1/Month	Calculated	(7) (8) (9)
Between April 1 and November 30											
Ammonia (as N)		Report	Report	Lbs/Day		1.4 [4.2]	12.2 [23.0]	mg/l	1/Month	Calculated	(6) (9)
Biochemical Oxygen Demand (BOD ₅)		31.0	39.0	Lbs/Day		6.0 [31.0]	Report	mg/l	1/Month	Calculated	(9)
Oil and Grease		13.0	20.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		39.0	53.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Dissolved Oxygen					6.5 [5.0]			mg/l	5/Week	Grab	(9)
Between December 1 and March 31											
Ammonia (as N)		Report	Report	Lbs/Day		3.2 [10.0]	12.2 [23.0]	mg/l	1/Month	Calculated	(6) (9)
Biochemical Oxygen Demand (BOD ₅)		90.0	180.0	Lbs/Day		8.0 [Report]	Report	mg/l	1/Month	Calculated	(9)
Oil and Grease		50.0	100.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Total Suspended Solids		110.0	220.0	Lbs/Day		Report	Report	mg/l	1/Month	Calculated	
Dissolved Oxygen					6.0 [5.0]			mg/l	5/Week	Grab	(9)

NOTE: Limits or monitoring requirements in **BOLD** denote the new parameters that will need to be complied with once the permit transitions from the conditions of I.A.1. to the conditions of this section. The [bracketed] ~~strikeout~~ conditions are those that will no longer be effective.

I. SPECIAL CONDITIONSA.3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

The effluent limitations and monitoring requirements are based on an annual average flow of 575,000 gallons per day (gpd). In accordance with General Condition B.1, the Department must be notified at least 180 days before the annual average flow is expected to exceed this level. This requirement is not a flow limit.

There shall be 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 point of discharge.

(1) [Reserved]

(2) [Reserved]

(3) The minimum level for reporting purposes is 0.10 mg/l. All results below this minimum level shall be reported as <0.10 mg/l.

(4) [Reserved]

(5) [Reserved]

(6) Testing for all forms of nitrogen must be performed on the same sample. The phosphorus sample should be taken at the same time as the nitrogen samples.

(7) The Monthly Loading Rate (**MLR**) is a calculated parameter, in units of lbs/month. The MLR should be reported in the space for the Quantity of Loading, Monthly Average. The MLR is calculated as the sum of each week's flow (in millions of gallons per day) times the average concentration (in mg/l) measured each week, times 8.34.

$$\text{MLR} = \sum_{\text{Month}} (\text{Flow}_{\text{Weekly Sum}} \times \text{Concentration}_{\text{Weekly Average}} \times 8.34)$$

The Monthly Average Loading Rate (**MALR**) has units of lbs/day. The MALR should be reported in the space for the Quantity of Loading, Daily Maximum. It is calculated by dividing the MLR by the number of days in the month.

$$\text{MALR} = \text{MLR} / \# \text{ Days in the Month}$$

The Annual Maximum Loading limit (**AML**) is a calculated parameter, in units of pounds per year. The AML is calculated by summing the MLRs from January 1st through December 31st of the current calendar year. I.e. the MLR will equal the AML for January (or for the first month the both numbers are reported).

$$\text{AML} = \sum_{\text{Calendar Year}} \text{MLR}$$

The details and results of the required annual calculations shall be submitted to the Department's Water and Science Administration, Compliance Program with the Discharge Monitoring Report for December. The resulting number shall be reported in the space for the Quantity of Loading, Annual Maximum.

I. SPECIAL CONDITIONS

A.3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Continued from the previous page

- a) The TN AMLR Limit is **8,477 Lbs/year**. To meet the AMLR limit, at an annual average flow of 575,000 gpd the permittee will need an annual average TN concentration of less than 4.8 mg/l.
 - b) The TP AMLR Limit is **315 Lbs/year**. To meet the AMLR limit, at an annual average flow of 575,000 gpd the permittee will need an annual average TP concentration of less than 0.18 mg/l.
- (8) This is a monthly maximum limit. The limits are in conformance with *the Total Maximum Daily Loads of Nitrogen and Phosphorus for the Transquaking River, Dorchester, Maryland Total Maximum Daily Load (TMDL)* approved on March 9, 2000 by the United States Environmental Protection Agency.
- (9) This effluent limitations and monitoring requirements section must be requested by the permittee before section I.A.2. automatically becomes active. Also see Special Condition T.

I. SPECIAL CONDITIONS

B. DEFINITIONS

1. “Annual Maximum Loading Rate (in pounds/year)” means the highest allowable total load of a parameter calculated for a calendar year. It is calculated as the sum of the individual Total Monthly Loading Rates from January through December of the current calendar year.
2. “Biochemical Oxygen Demand (BOD₅)” means the amount of dissolved oxygen required to biologically break down organic material and oxidize inorganic material in an unfiltered environmental sample during a standard BOD₅ test without the use of a nitrification inhibitor.
3. “Bypass” means the intentional diversion of wastes from any portion of a treatment facility.
4. “Clean Water Act” means the “Federal Water Pollution Control Act Amendments of 1972,” 33 U.S.C. 1251, 86 Stat. 866, as amended by the “Clean Water Act of 1977,” 91 Stat. 1566, and all other amendments to that act.
5. “CFR” means the Code of Federal Regulations.
6. “COMAR” means the Code of Maryland Regulations.
7. “Composite sample” means a combination of individual samples obtained at a minimum of hourly intervals over a specified time period, where the volume of each individual sample (or the sampling interval when using constant volume samples) is proportional to discharge flow rates recorded during the sampling period.
8. “Daily determination of concentration” means an analysis performed on a wastewater sample representative of flow for that calendar day, with concentration expressed in mg/l or other appropriate unit of measurement.
9. “Daily determination of discharge of constituents by mass loading” means a value calculated by multiplying the daily determination of concentration times flow in millions of gallons per day (MGD), times 8.34. The product is mass loading expressed in pounds/day.
10. “Daily maximum effluent concentration” means the highest reading of any daily determination of concentration.
11. “Daily maximum effluent limitation by mass loading” means the highest allowable daily determination of discharge of a constituent by mass loading during a 24-hour period.
12. “Department” means the Maryland Department of the Environment (MDE).
13. “Estimated flow” means a calculated volume or discharge rate based on a technical evaluation of sources contributing to the discharge, including but not limited to pump capabilities, water meters, and batch discharge volumes.
14. “Grab sample” means an individual sample collected over a period of time not exceeding 15 minutes. Grab samples collected for pH and total residual chlorine must be analyzed within 15 minutes from the time of collection.

15. “Geometric Mean (G.M.) concentration” is the concentration of a parameter calculated as:

$$\text{G.M.} = [(X_1)(X_2)(X_3) \dots (X_n)]^{1/n}$$
 raised to the power of $(1/n)$, where “X” is the concentration of the parameter measured in each sample, and n is the number of samples taken each month.
16. “Kjeldahl Nitrogen, Total” (TKN) means the sum of organic nitrogen and ammonia nitrogen where all values are reported as nitrogen (N).
17. “Measured flow” means any method of liquid volume measurement for which accuracy has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.
18. “Minimum value” means the lowest value measured during a 24-hour period.
19. “Monthly, quarterly, semi-annual, or annual average effluent concentration” means the value calculated by computing the arithmetic mean of all daily determinations of concentration made during any respective calendar-month, 3-month, 6-month, or 12-month period.
20. “Monthly, quarterly, semi-annual, or annual average effluent limitation by mass loading” means the highest allowable value calculated by computing the arithmetic mean of all daily determinations of discharge of a constituent by mass loading made during any respective calendar month, 3-month, 6-month, or 12-month period.
21. “Monthly log mean (monthly geometric mean) limit” is the highest allowable value calculated as the logarithmic or geometric mean of all samples taken in a calendar month. The geometric mean is the antilogarithm of the mean of the logarithms.
22. “National Pollutant Discharge Elimination System (NPDES)” means the national system for issuing permits established under §402 of the Clean Water Act (1972).
23. “NetDMR” means a nationally-available electronic reporting tool, initially designed by states and later adapted for national use by EPA, which can be used by NPDES-regulated facilities to submit discharge monitoring reports (DMRs) electronically to EPA through a secure Internet application over the National Environmental Information Exchange Network (NEIEN). EPA can then share this information with authorized states, tribes, and territories.
24. “Nitrogen, Total” means the sum of organic nitrogen, ammonia nitrogen, nitrate, and nitrite, where all values are reported as nitrogen (as N).
25. “Oil and Grease” refers to test results obtained by using EPA Method 1664 (or any EPA approved revisions to this method) for Clean Water Act monitoring programs.
26. “Outfall” means the location where effluent is discharged into receiving waters.
27. “Permittee” means an individual or organization holding a discharge permit issued by the Department.
28. “Recorded” (i.e. recorded flow, pH, or temperature, etc.), means a method of providing a permanent, continuous record, including but not limited to circular and strip charts.
29. “Sampling Point” means the effluent sampling location in the outfall line(s) downstream from the last addition point, or as otherwise specified.

30. “Total Maximum Daily Load (TMDL)” means the maximum amount of a pollutant a waterbody can receive and still meet water quality standards, calculated using the formula $(TMDL = \Sigma WLA + \Sigma LA + MOS)$ where WLA is the sum of wasteload allocations (point sources), LA is the sum of load allocations (nonpoint sources and background), and MOS is the margin of safety.
31. “Total monthly loading rate (in pounds/month)” means the total load of a parameter calculated for each calendar month using the formula (monthly average concentration in mg/l x (total monthly flow in millions of gallons) x 8.34).
32. “Total Residual Chlorine (TRC)” means the total amount of chlorine present in a sample. This is the sum of the free chlorine residual and the combined available chlorine residual.
33. “Total Suspended Solids (TSS)” means the residue from an effluent sample retained on a filter measured in accordance with [ASTM D5907-09](#), Standard Test Methods for Filterable and Nonfilterable Matter in Water (2009), or other approved methods.
34. “Upset” means an exceptional incident where unintentional and temporary noncompliance with technology-based effluent limitations occurs due to factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent it is caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
35. “Year-to-Date Cumulative Load (in pounds)” means the sum of individual total monthly loads for a parameter calculated from January through the current reporting month in a calendar year.

C. TOXIC POLLUTANT REPORTING

The permittee shall notify the Department as soon as it is known or suspected that any toxic pollutants which are not specifically limited by this permit have been discharged at levels specified in 40 CFR Part 122.42(a).

D. REMOVED SUBSTANCES

1. The permittee shall compile and submit information from the previous calendar year on the disposal of any removed substances, as defined by General Condition B.7. A separate report is due for each different type of removed substance. This report shall be submitted electronically using NetDMR in accordance with General Condition II.A.2. Results shall be submitted to the Department via NetDMR no later than March 28th of each year. The most recent report may also be required to be submitted within 30 days after a request for it by the Department. (See Special Condition Q. for more specific requirements for the reporting of removed sludge.) The report shall include the following information:
 - a. A suitable map showing all areas used for disposal of removed substances.
 - b. The physical, chemical, and biological characteristics, as appropriate; quantities of any removed substances; and the method of disposal.
 - c. If the disposal is handled by persons other than the permittee, identification of the contractor or subcontractor, their mailing address, and the information specified in b above.
 - d. Reporting of removed substances is required to be on and in accordance with the Department’s Removed Substances form (MDE/WMA/PER.068). The form can be

found here: <https://mdewwp.page.link/RemovedSub>. Submitting by and in accordance with the latest form will satisfy conditions a. through c. above. If disposal is handled by another party the items on the form associated with a. above should be marked as not applicable (N/A).

2. The Department's request for the report may also require the permittee to provide the above information prior to the use of new or additional disposal areas, contractors, or subcontractors.

E. ANALYTICAL LABORATORY

Within 30 days after the effective date of this permit, the permittee shall submit to the Department the name and address of the analytical laboratory (including the permittee's own laboratory) which is used to perform the monitoring required by this permit.

If the laboratory changes during the effective period of this permit, the permittee shall notify the Department of the new laboratory within 30 days after the change.

F. WASTEWATER OPERATOR CERTIFICATION

As of the effective date of this permit, the permittee's facility shall be operated by an industrial wastewater operator duly certified by the Maryland Board of Waterworks and Waste Systems Operators. The certification shall be for the operation of a Class 5 industrial wastewater works.

G. FLOW MONITORING

In lieu of providing measured flow at Outfall 001, (defined in Special Condition B), the permittee may estimate flows and submit the following information at the time of submission of the initial discharge monitoring report and/or upon any change in the methodology:

1. description of the methodology used to estimate flow at each outfall where flow measurement equipment is not present;
2. documentation appropriate to the methodology utilized which provides information necessary to support the validity of the reported flow estimate. If actual measurements or observations are made, a description of typical sampling times, locations, and persons performing the measurements/observations should also be provided.
3. description of the factors (e.g., batch discharges, intermittent operation, etc.) which cause flow at the outfall to fluctuate significantly from the estimate provided.

H. FLOW BASIS FOR ANNUAL DISCHARGE PERMIT FEE

The Department will calculate permit fees annually and invoice the permittee based on annual average discharge flow. Permit fees are payable to the Department in advance by July 1 of each fiscal year (July 1 through June 30).

The permittee shall provide notification of any flow revision to the Department's Industrial and General Permits Division by May 1 of each year to update the annual average discharge flow value used for the next billing period, if the flow volume used to calculate the permit fee (or application fee if the permit was renewed within the past year) differs significantly from either of the following flow determinations:

1. Average flow data reported on the permittee's discharge monitoring reports for the current fiscal year, or
2. Estimated flow volume for the next billing period based on recent changes at the facility.

The flow revision notification shall include a summary of flow data reported on DMRs for the previous year and any other supporting documentation to be used as the basis for the flow determination.

I. REAPPLICATION FOR A PERMIT

The Department is implementing a schedule for issuance of discharge permits grouped by geographical areas (watersheds). To implement the watershed-based schedule, the Department may revoke and reissue this permit concurrently with other permits in the watershed. Unless the Department grants permission for a later date, the permittee shall submit a renewal application by no later than 12 months prior to the expiration date on the first page of this permit, or notify the Department of the intent to cease discharging by the expiration date. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

J. PERMIT REOPENER FOR TOTAL MAXIMUM DAILY LOAD (TMDL)

This permit may be reopened as a major modification to implement any applicable requirements associated with a Total Maximum Daily Load (TMDL) issued or approved for this watershed (Transquaking River 02.13.03.08), including but not limited to: biological impairments.

This permit is consistent with the terms and conditions of the Chesapeake Bay Total Maximum Daily Load (TMDL) for Sediments, Nitrogen and Phosphorus, approved December 29, 2010. At this time, the permit limits nitrogen, phosphorus and suspended solids. Such limitations are to prevent water quality degradation of the receiving waters and ultimately the Chesapeake Bay. This determination has been based on facility operations and/or discharge characteristics.

To ensure the Chesapeake Bay and its tributaries are protected from discharges of sediments, nitrogen and phosphorus, this permit may be reopened as a major modification to implement any applicable requirements associated with the Chesapeake Bay TMDL. The permittee may become subject to a Department-issued General Permit regarding the discharge of such pollutants.

K. BIOMONITORING PROGRAM

1. Biomonitoring will be required after an appropriate startup and shake down of the new wastewater treatment plant/system. The permittee must notify the Department once the plant is fully operational. Within three months after this notification, the permittee shall submit to the Department for approval a study plan to evaluate wastewater toxicity at Outfall 001 by using biomonitoring. The study plan should include a discussion of:
 - a. wastewater and production variability
 - b. sampling & sample handling
 - c. source & age of test organisms
 - d. source of dilution water
 - e. testing procedures/experimental design
 - f. data analysis

- g. quality assurance/quality control
 - h. report preparation
 - i. testing schedule
2. The testing program shall consist of definitive quarterly chronic testing for one year. This testing shall be initiated no later than three months following the Department's acceptance of the study plan. Testing event shall include the Ceriodaphnia survival and reproduction test and the fathead minnow larval survival and growth test.
3. The samples used for biomonitoring shall be collected at the same time and location as the samples analyzed for the effluent limitations and monitoring requirements for this outfall. For chlorinated effluents, samples shall be collected after dechlorination. The permittee shall collect 24-hour flow-proportioned composite samples unless the Department has given prior approval of an alternative sampling type.
4. The following EPA document discusses the appropriate methods:

Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms Fourth Edition, EPA-821-R-02-013, October, 2002
5. Test results shall be submitted to the Department within one month of completion of each set of tests.
6. Test results shall be reported in accordance with MDE/WMA "Reporting Requirements for Effluent Biomonitoring Data," 3/21/03.
7. As a minimum, the reported chronic results shall be expressed as NOEC, LOEC, ChV, and IC₂₅.
8. If a 50% mortality or greater occurs in one or more effluent concentrations during the first 48 hours of the chronic tests, 48-hour LC_{50s} shall be calculated and reported along with the chronic results
9. If testing is not performed in accordance with MDE-approved study plan, additional testing may be required by the Department.
10. If the test results of any two consecutive valid toxicity tests show acute or chronic toxicity (LC₅₀ equal to or less than 100% for acute tests and an IC₂₅ equal to or less than the in-stream waste concentration for chronic tests), the permittee shall repeat the test within 30 days to confirm the findings of acute or chronic toxicity. Intermittent toxicity or other concerns may require additional testing or limits. If acute and/or chronic toxicity is confirmed, the permittee shall:
 - a. Eliminate the source of toxicity through operational changes as soon as possible but in any case not longer than within three months, or
 - b. Perform a TRE. If the permittee repeats the toxicity testing as stated above and the results of the repeat test do not confirm the acute or chronic toxicity, the Department will require the permittee to repeat the toxicity testing as stated above to reconfirm a finding of no acute or chronic toxicity. After reconfirmation, the permittee shall complete any remaining quarterly testing required.
11. If the permittee completes a TRE in accordance with 10.b and unacceptable toxicity is confirmed, a Whole Effluent Toxicity (WET) permit limit and a compliance schedule will be required.
12. To address federal NPDES requirements for WET testing and limits, MDE shall implement permit limits in a new or renewal permit when a WET test result shows reasonable potential for toxicity

unless it can be demonstrated that the source of toxicity has been eliminated, inappropriate test procedures were utilized, or the source has been controlled via a chemical specific permit limitation. Where reasonable potential has been assumed based on one test result, the permit shall include a WET limit effective within three years unless the effluent shows no toxicity in six follow-up quarterly tests. The permit may be modified to remove the WET limit if the six follow-up quarterly tests show no toxicity.

13. If plant processes or operations change so that there is a significant change in the nature of the wastewater, the Department may require the permittee to conduct a new set of tests.
14. Submit all Biomonitoring related materials to:

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

L. TOXICITY REDUCTION EVALUATION

A Toxicity Reduction Evaluation (TRE) is an investigation conducted to identify the causative agents of effluent toxicity, isolate the source(s), determine the effectiveness of control options, implement necessary control measures and confirm the reduction in toxicity. The permittee shall conduct a TRE when a review of toxicity test data by the Department indicates unacceptable, acute, or chronic effluent toxicity.

1. Within 90 days following notification by the Department that a TRE is required the permittee shall submit a study plan and schedule for conducting the TRE. The permittee shall conduct the TRE in a manner consistent with the plan and schedule submitted to the Department.
2. The plan should follow the framework set forth in *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989).
3. Beginning 60 days following the date of the Department's acceptance of a TRE study plan and every 60 days thereafter the permittee shall submit progress reports including all relevant test data to the Department. The permittee shall continue to submit progress reports every 60 days until the toxicity reduction confirmation is completed.

All TRE-related materials shall be submitted electronically to the Department if the permittee has already been approved for the NetDMR tool. The material shall be attached as a separate single file and labeled as "TRE" in the NetDMR tool. Otherwise, the permittee shall submit all pertinent physical documents to:

Attention: Whole Effluent Toxicity Coordinator
Compliance Program
Water and Science Administration
Maryland Department of the Environment
Montgomery Park Business Center
1800 Washington Boulevard, Suite 420
Baltimore, MD 21230-1708

The permittee shall notify the Department at the above address or via email at mde.biomonitoring@maryland.gov immediately upon electronic submission of TRE material through NetDMR tool.

4. Within 60 days following completion of the toxicity identification (source isolation) phase of the TRE the permittee shall submit a plan and schedule to the Department for implementing measures necessary to eliminate acute toxicity and/or reduce chronic toxicity to acceptable levels. Implementation of the measures identified shall begin immediately upon submission of this plan.
5. Within 60 days after completing the implementation of control measures to eliminate or reduce toxicity the permittee shall submit a study plan to the Department for approval, to confirm the elimination or reduction of toxicity using biomonitoring.
6. If for any reason the implemented measures do not result in compliance with the Department's toxicity limitations the permittee shall continue the TRE.

M. MIXING ZONES AND POLLUTION PREVENTION – [Reserved]

N. PROTECTION OF WATER QUALITY

It is a violation of this permit to discharge any substance not otherwise listed under this permit's "Effluent Limitations and Monitoring Requirements" at levels which would cause or contribute to any exceedance of numerical water quality standards set forth in COMAR 26.08.02.03, unless the level and substance were disclosed in writing in the permit application prior to issuance of the permit. If a discharge regulated by this permit causes or contributes to an exceedance of water quality standards in COMAR 26.08.02.03, including but not limited to general water quality standards, or if the discharge includes a pollutant not disclosed or addressed in the public record for the permit determination; the Department is authorized to modify, suspend or revoke this permit or take enforcement action to address unlawful discharges.

O. ODOR CONTROL REQUIREMENTS

1. The permittee shall maintain a scum layer over the anaerobic lagoons when necessary to control odor. Additional material shall be added to maintain the scum layer.
2. The permittee shall submit an annual report to the Department no later than each anniversary of the permit's effective date which describes measures taken during the previous 12 months to minimize odors arising from storage, treatment, or disposal of wastewater and describes any future plans for facility improvement and housekeeping measures to minimize such odors.

P. GROUNDWATER MONITORING REQUIREMENTS

1. 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:

WSA-Wastewater Permits Program
 Industrial and General Permits Division
 Maryland Department of the Environment
 1800 Washington Boulevard, STE-455
 Baltimore, MD 21230-1708

2. Monitoring Well Installation - The monitoring wells shall be installed according to the following specifications:
- a. Installation of the wells shall be by a licensed Maryland Well Driller in accordance with the following:
 - i. Schedule 40 P.V.C. or better quality well casing, 4-inch diameter shall be used.
 - ii. Commercial well screen or neatly slotted well casing, approved by the Department, shall be used in conjunction with a gravel pack.
 - iii. The screen, or slotted casing, shall extend from the seasonally high water table downward approximately 15 feet.
 - iv. The wells shall be grouted from near the top of the screen to ground surface.
 - v. The wells shall be equipped with locking watertight removal caps.
 - b. The well driller selected to install the observation

3. Monitoring Well Sampling and Analysis - Each monitoring well shall contain the necessary apparatus and fittings to allow for the proper evacuation and sampling of groundwater. Each well shall be provided with a cap designed to ensure the integrity of samples and to prevent surface water runoff and precipitation from entering the well.

Water samples may be obtained by either pumping or bailing the monitoring wells. Prior to taking a sample, the static water level shall be measured and a volume of water equal to 300% of the wetted volume of the casing and screen shall be removed. An alternative sampling methodology may also be used if prior written approval is received from the Department in writing. Such approval must be requested from WSA-Wastewater Permits Program - Industrial and General Permits Division.

Each calendar year, the permittee shall take and analyze a groundwater samples from each of the monitoring wells. The wells to be sampled include monitoring wells 1 through 8 and the two new background monitoring wells. The wells shall be sampled according to the table below. The groundwater monitoring results shall be submitted to the Department in accordance with General Condition A.2.

PARAMETER	DAILY MAXIMUM	UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Total Kjeldahl Nitrogen	Report	mg/L	1/Quarter	Grab
Ammonia	Report	mg/L	1/Quarter	Grab
Nitrate	Report	mg/L	1/Quarter	Grab
Total Dissolved Solids	Report	mg/L	1/Quarter	Grab
Fecal Coliform	Report	MPN/100 ml	1/Quarter	Grab

Q. SLUDGE MANAGEMENT

- 1. Sludge is prohibited from being land applied on any Valley Protein property associated with this discharge permit.

2. These requirements are specific to sludge generated from processing food wastes. The land application of Municipal sludge requires the prior authorization via MDE's Sewage Sludge Utilization Permit.
3. Annual Reports - 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. The report shall include the quantities to be land applied under a nutrient management plan (NMP) and the quantities to be disposed of by other methods. Each type of sludge to be removed from each different step in the treatment process shall be reported on separately. This report shall be submitted electronically using NetDMR in accordance with General Condition II.A.2. Results shall be submitted to the Department via NetDMR no later than December 28th of each year for the next calendar year. If requested by the Department, the permittee must provide a copy of the most recent report within 30 days.
4. Removed Substances Reports - The permittee shall manage and report the removal of sludge to offsite locations in accordance with Special Condition D.1 - Removed Substances. Information from the previous calendar year regarding the disposal of any sludge shall be compiled and submitted. A separate form must be completed for each type of sludge removed from each different step in the treatment process. Reports must include all chemical analysis necessary for the preparation of a NMP for each of the different sludges. Reports shall be submitted electronically using NetDMR in accordance with General Condition II.A.2. Results shall be submitted to the Department via NetDMR no later than March 28th of each year. If requested by the Department, the permittee must provide a copy of the most recent report within 30 days.

R. PROHIBITION ON APPLICATION OF WASTEWATER TO GROUND

The permittee is prohibited from disposing of wastewater to the ground by spray irrigation or any other means.

S. VEHICLE WASHING AND BOILER BLOWDOWN

1. Discharges authorized under this condition shall be limited to wastewater generated from washing vehicle exteriors in the vehicle wash area. The permittee is prohibited from discharging or causing to be discharged any waste oil, ethylene glycol, solvent, or product that contains chlorinated hydrocarbons, paint or any other waste material or toxic substance, into wash drains or any other place that would allow these substances to reach surface or ground waters of the State, including wetlands.
2. The permittee shall inspect the wastewater treatment system including grit traps, oil/water separator and sand filter if installed, at least once per month and while doing so shall measure the accumulation of oil and sediments. The permittee shall remove these materials before they accumulate to a thickness greater than 50% of the liquid depth or before such materials cause effluent limits to be exceeded but not less than once per year.
3. The permittee shall maintain a log book that is available for inspection upon request by Department personnel in which the permittee shall note the dates of inspection, any observations or measurements and any actions taken on the treatment system.
4. The Department recommends the use of oil absorbent material in the floor drain or an oil water separator as an added treatment.

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 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>Provide notification (as detailed in Step 1) to the Department that this task is complete.</p>
3	1 month	9 months	<p>Prepare a 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>

Item No.	Duration	Due Date (from effective date of permit)	Action Required
6	20 months	32 months	Substantially complete construction of the WWTP Expansion and Upgrade unit process or modifications necessary for compliance with new limits. Provide notification (as detailed in Step 1) to the Department that this task is complete.
7	2 months	34 months	Final Completion of WWTP Expansion and Upgrade. Provide notification (as detailed in Step 1) to the Department that this task is complete.
8	2 months	36 months	Start up and shakedown of WWTP complete for compliance with new section I.A.2. or I.A.3. Note (9) limits. Provide notification (as detailed in Step 1) to the Department that this task is complete.

- 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

U. USE OF SUFFICIENTLY SENSITIVE TEST METHODS

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters limited in this permit. A method is considered “sufficiently sensitive” when either: (1) the method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence. For the purposes of this permit, the detection limit is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions (i.e., the level above which an actual value is reported for an analyte, and the level below which an analyte is reported as non-detect).

V. STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES

1. 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 Stormwater Associated with Industrial Activities 12 SW-A (“Declaration of Intent”), or an application for other coverage for its stormwater discharges associated with industrial activity. A copy of the

Declaration of Intent, the Consent Order to Comply with the Terms and Conditions of the General Permit for Stormwater Associated with Industrial Activity 12 SW-A (“Consent Order”), and associated guidance are available at "<https://mdewwp.page.link/isw>". The application submitted should, minimally, address the following:

- a. The NOI submitted with the Declaration of Intent shall address all storm water associated with industrial activity, including but not limited to any storm water discharging via the outfalls authorized under this permit.
 - b. The storm water pollution prevention plan (SWPPP) submitted must be updated in accordance with the requirements of the *General Permit for Discharges from Stormwater Associated with Industrial Activities* (State Permit No. 12-SW, NPDES Permit No. MDR0000). These requirements are found in Part III, sections C. and D. of the 12-SW permit.
2. Until the permittee either signs a Declaration of Intent and receives approval of its Notice of Intent, or obtains other coverage for its stormwater discharges associated with industrial activity, the permittee shall keep updated and continue to implement the SWPPP prepared in accordance with the requirements of the previous permit, 99-DP-0024.
 3. Once the permittee either signs a Declaration of Intent and receives approval of its Notice of Intent, or obtains other coverage for its stormwater discharges associated with industrial activity, stormwater coverage will cease under this individual permit, except for the following Outfall: 001. For this outfall, violations of the limitations and monitoring specified in section I.A. is only a violation of this permit and is not to be considered a violation of the Declaration of Intent or other coverage for its stormwater discharges associated with industrial activity. Violations of the conditions of either the Consent Order or other coverage for its stormwater discharges associated with industrial activity, unrelated to Outfall 001, are not to be considered violations of this permit.

II. GENERAL CONDITIONS

A. MONITORING AND REPORTING

1. REPRESENTATIVE SAMPLING

Samples and measurements taken as required herein shall be taken at such times as to be representative of the quantity and quality of the discharges during the specified monitoring periods.

2. REPORTING-MONITORING RESULTS SUBMITTED MONTHLY

Monitoring results obtained during each calendar month shall be summarized and submitted electronically using NetDMR. Results shall be submitted to the Department via NetDMR no later than the 28th of the month following the end of the reporting month. Specific requirements regarding submittal of data and reports using NetDMR are described below:

- a. NetDMR is a U.S. EPA tool allowing regulated Clean Water Act permittees to submit monitoring reports electronically via a secure Internet application. The permittee must apply for access to NetDMR at www.epa.gov/netdmr and register for a NetDMR Webinar. Before the permittee can submit official DMRs using NetDMR the permittee must attend a training Webinar and successfully set-up and submit test monitoring results electronically.
- b. The permittee may be eligible for a temporary waiver by MDE from NPDES electronic reporting requirements if the permittee has no current internet access and is physically located in a geographic area (i.e., zip code) that is identified as under-served for broadband internet access in the most recent National Broadband Map from the Federal Communications Commission (FCC); or if the permittee can demonstrate that such electronic reporting of the monitoring data and reports would pose an unreasonable burden or expense to the NPDES-permitted facility. Waiver requests must be submitted in writing to the Department for written approval at least 120 days prior to the date the permittee would be required under this permit to begin using NetDMR. This demonstration shall be valid for one (1) year from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department unless the permittee submits a renewed waiver request and such request is approved by the Department.

3. SAMPLING AND ANALYSIS METHODS

The analytical and sampling methods used shall conform to procedures for the analysis of pollutants as identified in Title 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified.

4. DATA RECORDING REQUIREMENTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. the exact place, date, and time of sampling or measurement;
- b. the person(s) who performed the sampling or measurement;
- c. the dates and times the analyses were performed;
- d. the person(s) who performed the analyses;
- e. the analytical techniques or methods used; and

f. the results of all required analyses.

5. MONITORING EQUIPMENT MAINTENANCE

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation to ensure accuracy of measurements.

6. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors any pollutant, using approved analytical methods as specified above, at the locations designated herein more frequently than required by this permit, the results of such monitoring, including the increased frequency, shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report form (EPA No. 3320-1).

7. RECORDS RETENTION

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and original recordings from continuous monitoring instrumentation shall be retained for a minimum of five years. This period shall be automatically extended during the course of litigation, or when requested by the Department.

B. MANAGEMENT REQUIREMENTS

1. CHANGE IN DISCHARGE

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the terms and conditions of this permit. The permittee shall report any anticipated facility expansions, production increases, or process modifications which will result in new, different or an increased discharge of pollutants by submitting a new application at least 180 days prior to the commencement of the changed discharge except that if the change only affects a listed pollutant and will not violate the effluent limitations specified in this permit, by providing written notice to the Department. Following such notice, the permit may be modified by the Department to include new effluent limitations on those pollutants.

2. NONCOMPLIANCE WITH EFFLUENT LIMITATIONS

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum or daily minimum effluent limitation specified in this permit, the permittee shall notify the Inspection and Compliance Program by telephone at (410) 537-3510 within 24 hours of becoming aware of the noncompliance. 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 taken by the permittee to reduce and eliminate the non-complying discharge;

- e. steps to be taken by the permittee to prevent recurrence of the condition of noncompliance; and
- f. a description of accelerated or additional monitoring conducted by the permittee to determine the nature and impact of noncompliant discharge.

3. FACILITIES OPERATION

All treatment, control and monitoring facilities, or systems installed or used by the permittee are to be maintained in good working order and operated efficiently.

4. ADVERSE IMPACT

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State or to human health resulting from noncompliance with any effluent limitation specified in this permit, including any accelerated or additional monitoring necessary to determine the nature and impact of the noncompliant discharge.

5. BYPASSING

Any bypass of treatment facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited unless:

- a. the bypass is unavoidable to prevent a loss of life, personal injury or substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources;
- b. there are no feasible alternatives;
- c. notification is received by the Department within 24 hours (if orally notified, then followed by a written submission within five calendar days of the permittee's becoming aware of the bypass). Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Department for approval at least ten calendar days before the date of bypass or at the earliest possible date if the period of advance knowledge is less than ten calendar days; and
- d. the bypass is allowed under conditions determined by the Department to be necessary to minimize adverse effects.

6. CONDITIONS NECESSARY FOR DEMONSTRATION OF AN UPSET

An upset shall constitute an affirmative defense to an action brought for noncompliance with technology-based effluent limitations only if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

- a. an upset occurred and that the permittee can identify the specific cause(s) of the upset;
- b. the permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;

- c. the permittee submitted a 24-hour notification of upset in accordance with the reporting requirements of General Condition II.B.2 above;
- d. the permittee submitted, within five (5) calendar days of becoming aware of the upset, documentation to support and justify the upset; and
- e. the permittee complied with any remedial measures required to minimize adverse impact.

7. REMOVED SUBSTANCES

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.

8. POWER FAILURE

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. provide an alternative power source sufficient to operate the wastewater collection and treatment facilities or,
- b. halt, reduce or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater collection and treatment facilities.

C. RESPONSIBILITIES

1. RIGHT OF ENTRY

The permittee shall permit the Secretary of the Department, the Regional Administrator for the Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials to:

- a. enter upon the permittee's premises where an effluent source is located or where any records are required to be kept under the terms and conditions of this permit;
- b. access and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- c. inspect, at reasonable times, any monitoring equipment or monitoring method required in this permit;
- d. inspect, at reasonable times, any collection, treatment, pollution management, or discharge facilities required under this permit; and
- e. sample, at reasonable times, any discharge of pollutants.

2. TRANSFER OF OWNERSHIP OR CONTROL OF FACILITIES

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

- a. the permittee notifies the Department in writing, of the proposed transfer;
- b. a written agreement, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with the liability for the terms and conditions of this permit, is submitted to the Department; and
- c. neither the current permittee nor the new permittee receive notification from the Department, within 30 calendar days, of intent to modify, revoke, reissue or terminate the existing permit.

3. REAPPLICATION FOR A PERMIT – [Reserved]

4. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Section 308 of the Clean Water Act, 33 U.S.C. § 1318, all submitted data shall be available for public inspection at the offices of the Department and the Regional Administrator of the Environmental Protection Agency.

5. PERMIT MODIFICATION

A permit may be modified by the Department upon written request of the permittee and after notice and opportunity for a public hearing in accordance with and for the reasons set forth in 40 CFR § 122.62 and 122.63.

6. PERMIT MODIFICATION, SUSPENSION, OR REVOCATION

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked and reissued in whole or in part during its term for causes including, but not limited to, the following:

- a. violation of any terms or conditions of this permit;
- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. a determination that the permitted discharge poses a threat to human health or welfare or to the environment and can only be regulated to acceptable levels by permit modification or termination.
- e. upon a final, unreviewable determination that the permittee lacks, or is in violation, of any federal, state, or local approval necessary to conduct the activities by this permit.

7. TOXIC POLLUTANTS

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such toxic effluent standard or prohibition) is established by the U.S. Environmental Protection Agency, or pursuant to Section 9-314 of the Environment Article, Annotated Code of Maryland, for a toxic pollutant which is present in the discharges authorized

herein and such standard is more stringent than any limitation upon such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified. Any effluent standard established in this case for a pollutant which is injurious to human health is effective and enforceable by the time set forth in the promulgated standard, even absent permit modification.

8. OIL AND HAZARDOUS SUBSTANCES PROHIBITED

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibility, liability, or penalties to which the permittee may be subject under Section 311 of the Clean Water Act (33 U.S.C. § 1321), or under the Annotated Code of Maryland.

9. CIVIL AND CRIMINAL LIABILITY

Except as provided in permit conditions on "bypassing," "upset," and "power failure," nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from civil or criminal responsibilities and/or penalties for noncompliance with Title 9 of the Environment Article, Annotated Code of Maryland or any federal, local, or other State law or regulation.

10. PROPERTY RIGHTS/COMPLIANCE WITH OTHER REQUIREMENTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

11. SEVERABILITY

The provisions of this permit are severable. If any provisions of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this permit to any circumstances is held invalid, its application to other circumstances shall not be affected.

12. WATER CONSTRUCTION AND OBSTRUCTION

This permit does not authorize the construction or placing of physical structures, facilities, or debris, or the undertaking of related activities in any waters of the State.

13. COMPLIANCE WITH WATER POLLUTION ABATEMENT STATUTES

The permittee shall comply at all times with the provisions of the Environment Article, Title 7, Subtitle 2 and Title 9, Subtitle 3 of the Annotated Code of Maryland and the Clean Water Act, 33 U.S.C. § 1251 et seq.

14. ACTION ON VIOLATIONS

The issue or reissue of this permit does not constitute a decision by the State not to proceed in administrative, civil, or criminal action for any violations of State law or regulations occurring before the issue or reissue of this permit, nor a waiver of the State's right to do so.

15. ENFORCEMENT OF PERMIT CONDITIONS

Violations of the permit may subject the permittee to the assessment of civil, criminal, and administrative penalties and injunctive relief in accordance with Title 9 of the Environment Article of the Annotated Code of Maryland. In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, the Permittee may also be subject to civil penalties set forth in 33 U.S.C. § 1319 (d) of the Clean Water Act as adjusted for inflation according to 40 CFR, §19.4.

In addition to criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, the Permittee shall be subjected to criminal penalty set forth in 33 U.S.C. § 1319 (c).

16. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

17. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified as required by 40 CFR 122.22.

18. REOPENER CLAUSE FOR PERMITS

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301, 304, and 307 of the Clean Water Act [33 USCS §§ 1311, 1314, 1317] if the effluent standard or limitation so issued or approved:

- a. contains different conditions or is otherwise more stringent than any effluent limitation in this permit or
- b. controls any pollutant not limited in this permit. This permit, as modified or reissued under this paragraph, shall also contain any other requirements of the Act then applicable.

D. AUTHORITY TO ISSUE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS

On September 5, 1974, the Administrator of the U.S. Environmental Protection Agency approved the proposal submitted by the State of Maryland for the operation of a permit program for discharges into navigable waters pursuant to Section 402 of the Clean Water Act, 33 U.S.C. Section 1342.

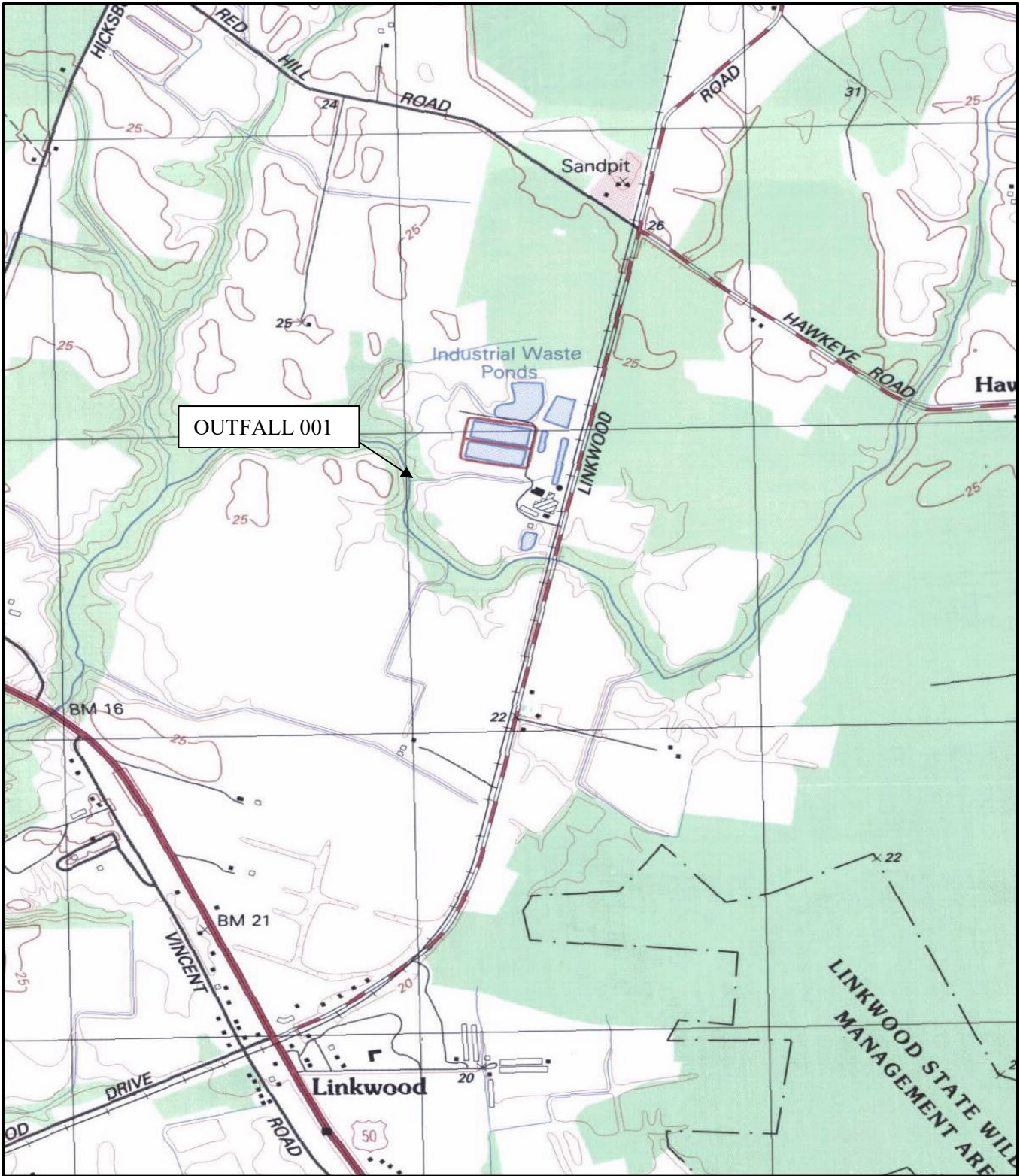
Pursuant to the aforementioned approval, this discharge permit is both a State of Maryland discharge permit and a NPDES permit.

This permit and the authorization to discharge shall expire at midnight on the expiration date. The permittee shall not discharge after that date unless a new application has been submitted to the Department in accordance with the renewal application provisions of this permit.

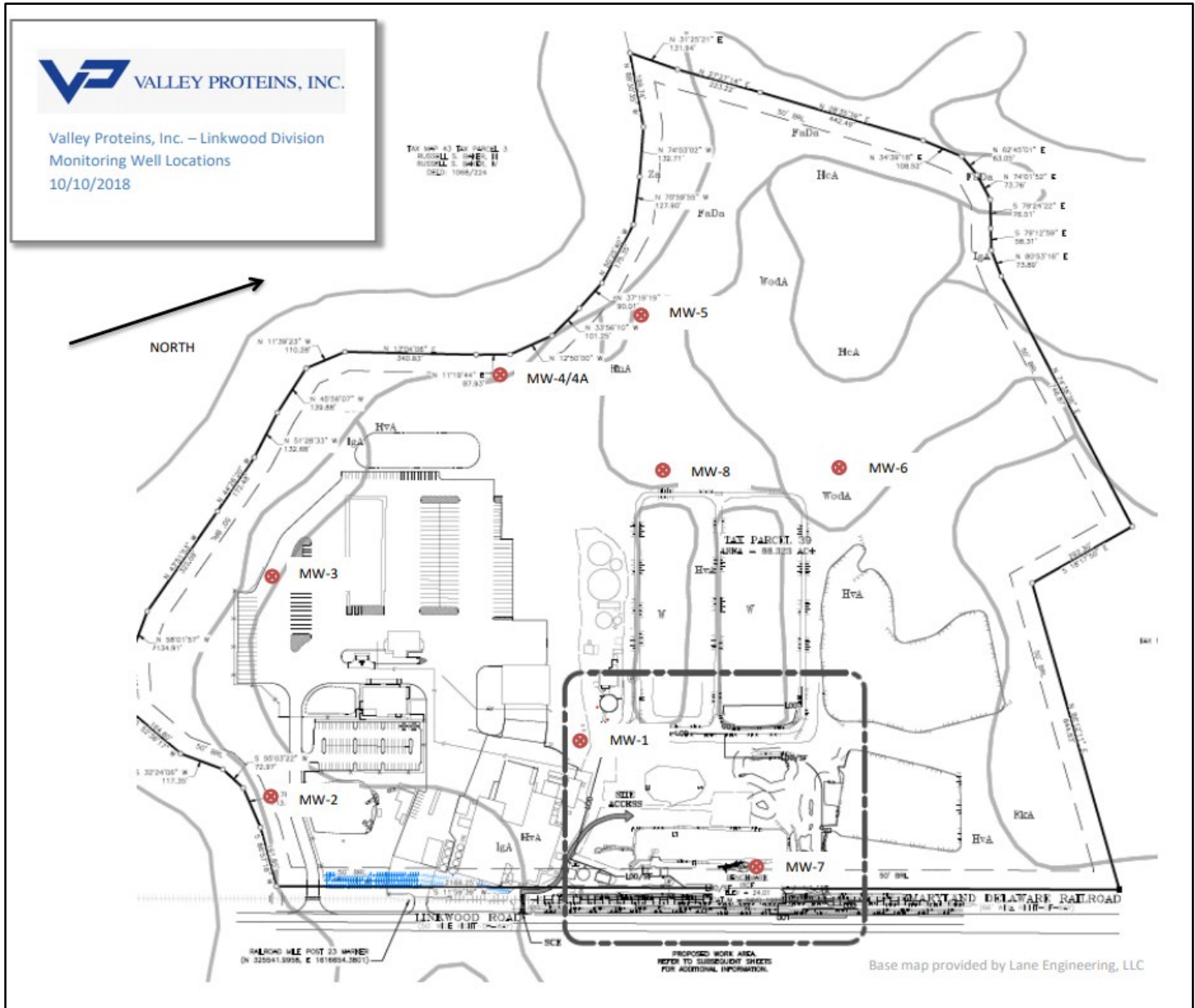
D. Lee Currey, Director
Water and Science Administration

DRAFT

LOCATION OF THE OUTFALL 001 FOR VALLEY PROTEIN, INC.



LOCATION OF THE MONITORING WELLS MW1 - MW8 FOR VALLEY PROTEIN, INC.



LOCATION MAP OF THE TRANSQUAKING RIVER WATERSHED

