pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0232785**
Facility Type	**Industrial**	APS ID	**1060263**
Major / Minor	**Minor**	Authorization ID	**1390855**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Cargill Inc.**	Facility Name	**Cargill Feed & Nutrition**
Applicant Address	70 Agway Lane	Facility Address	70 Agway Lane
	Winfield, PA 17889-9131		Winfield, PA 17889-9131
Applicant Contact	Ryan Scow	Facility Contact	Ryan Scow
Applicant Phone	(570) 524-4777	Facility Phone	(570) 524-4777
Client ID	274866	Site ID	815964
SIC Code	2048	Municipality	Union Township
SIC Description	Manufacturing - Prepared Feeds, NEC	County	Union
Date Application Received	April 4, 2022	EPA Waived?	Yes
Date Application Accepted	April 12, 2022	If No, Reason	
Purpose of Application	Renewal of an existing NPDES permit for the discharge of industrial waste and storm waters.		

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
X		*Derek S. Garner* Derek S. Garner / Project Manager	February 9, 2023
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	February 21, 2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	**001**	Design Flow (MGD)	n/a
Latitude	40º 54' 27.45"	Longitude	-76º 51' 19.11"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Boiler blowdown, reverse osmosis concentrate, stormwater		

Receiving Waters	UNT to Winfield Creek	Stream Code	18679
NHD Com ID	66921219	RMI	0.0900
Drainage Area	1.59	Yield (cfs/mi^2)	0.223
Q_{7-10} Flow (cfs)	0.355	Q_{7-10} Basis	Streamgage No. 01553130
Elevation (ft)	460	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Unknown		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	5.98

IMP No.	**101**	Design Flow (MGD)	0.006798
Latitude	40º 54' 28.22"	Longitude	-76º 51' 15.21"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Boiler blowdown, reverse osmosis concentrate		

Receiving Waters	UNT to Winfield Creek	Stream Code	18679
NHD Com ID	66921219	RMI	0.09
Drainage Area	1.59	Yield (cfs/mi^2)	0.223
Q_{7-10} Flow (cfs)	0.355	Q_{7-10} Basis	Streamgage No. 01553130
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired (1)		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Unknown		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	5.98

(1) Boiler blowdown and reverse osmosis concentrate waste streams are not expected to not contribute to the pathogen impairment of the unnamed tributary to Winfield Creek.

IMP No.	**201**	Design Flow (MGD)	n/a
Latitude	40º 54' 27.57"	Longitude	-76º 51' 17.24"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Stormwater		

Receiving Waters	UNT to Winfield Creek	Stream Code	18679
NHD Com ID	66921219	RMI	0.09
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired [(1)]		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Unknown		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	5.98

(1) The stormwater discharged from this facility's property is not expected to not contribute to the pathogen impairment of the unnamed tributary to Winfield Creek.

Outfall No.	**002**	Design Flow (MGD)	n/a
Latitude	40º 54' 34.20"	Longitude	-76º 51' 10.81"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Stormwater		

Receiving Waters	Winfield Creek	Stream Code	18678
NHD Com ID	66921163	RMI	0.5
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired [1]		
Cause(s) of Impairment	Habitat alterations, siltation		
Source(s) of Impairment	Channelization, crop production		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	5.25

[1] The impairment is from agricultural sources. The stormwater discharge from this facility should not contribute to Winfield Creek's impairment.

Outfall No.	**003**	Design Flow (MGD)	n/a
Latitude	40º 54' 25.76"	Longitude	-76º 51' 20.14"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Stormwater		

Receiving Waters	UNT to Winfield Creek	Stream Code	18679
NHD Com ID	66921169	RMI	0.12
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired [(1)]		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Unknown		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	6.01

(1) The stormwater discharged from this facility's property is not expected to not contribute to the pathogen impairment of the unnamed tributary to Winfield Creek.

Outfall No.	**004**	Design Flow (MGD)	n/a
Latitude	40º 54' 34.20"	Longitude	-76º 51' 10.81"
Quad Name	Northumberland	Quad Code	11131
Wastewater Description:	Stormwater		

Receiving Waters	Winfield Creek	Stream Code	18678
NHD Com ID	66921213	RMI	0.5
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	10-C	Chapter 93 Class.	WWF, MF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired (1)		
Cause(s) of Impairment	Habitat alterations, siltation		
Source(s) of Impairment	Channelization, crop production		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,830
PWS RMI	124.14	Distance from Outfall (mi)	5.25

(1) The impairment is from agricultural sources. The stormwater discharge from this facility should not contribute to Winfield Creek's impairment.

Facility Summary

Cargill Inc. operates the Cargill Feed & Nutrition facility located in Winfield, PA. The facility is classified under SIC Code 2048; preparing feed and feed ingredients for animals and fowls, except dogs and cats. Waste streams at this facility consist of reverse osmosis concentration, boiler blowdown, and industrial stormwater. The facility does not discharge any process wastewater.

Outfall 001 discharges a combination of boiler blowdown, reverse osmosis concentrate, and stormwater. Monitoring for these waste streams is conducted upstream prior of the discharge point, prior to blending, at IMPs 101 (boiler blowdown, reverse osmosis concentrate) and 201 (stormwater). The stormwater originates from the middle section of the property.

Outfalls 002 and 004 discharge stormwater collected from the eastern side of the property.

Outfall 003 discharges stormwater collected from the western side of the property.

Compliance History

The following eDMR violations occurred during the existing permit's term:

Outfall	Noncompliance Date	Noncompliance Description	Parameter	Sample	Violation	Permit Value	Units	SBC
101	11/22/2017	Sample collection less frequent than required	pH					
101	11/22/2017	Sample collection less frequent than required	TDS					
101	12/11/2017	Sample type not in accordance with permit	Flow					
101	1/18/2018	Sample type not in accordance with permit	Flow					
101	7/10/2018	Violation of permit condition	TDS	2290	>	2000	mg/L	Average Monthly
101	3/29/2019 (1)	Violation of permit condition	TDS	2190	>	2000	mg/L	Average Monthly
	7/12/2019	Sample collection less frequent than required						
101	3/29/2019 (2)	Violation of permit condition	TDS	2120	>	2000	mg/L	Average Monthly
	4/30/2019	Late DMR Submission						
101	8/15/2019 (3)	Violation of permit condition	TDS	2090	>	2000	mg/L	Average Monthly
	10/30/2019	Late DMR Submission						
	11/26/2019	Other						
	3/30/2020	Late DMR Submission						
	6/29/2020	Late DMR Submission						
	9/15/2020	Other						
101	9/15/2020	Violation of permit condition	TDS	2100	>	2000	mg/L	Average Monthly
	10/29/2020	Late DMR Submission						
	6/1/2021	Late DMR Submission						
	8/30/2021	Late DMR Submission						
101	9/28/2021 (4)	Violation of permit condition	TDS	2210	>	2000	mg/L	Average Monthly
	12/29/2021	Late DMR Submission						
	3/30/2022	Late DMR Submission						
	7/29/2022	Late DMR Submission						

Permittee's Comments:
(1) Improve sampling procedure, stirring up sediment in drainage channel during sampling.
(2) Update sampling procedure, clean sampling channel. Stirring up sediment.
(3) The sample point storm drain had acquired some sediment over time that needed to be cleaned out before sampled. This storm drain will be cleaned out monthly before monitoring is performed.
(4) Outfalls have been getting more soil than usual due to the large amount of rain we have been experiencing. Outfalls were cleaned out prior to next month's sample.

The facility was most recently inspected by DEP on March 30, 2022. The inspection report noted a TDS effluent limit violation, recommended implementation of BMPs to improve stormwater effluent quality, and that the permit renewal application was late.

There are no open violations associated with the permittee.

Development of Effluent Limitations

Outfall No.	**001**	**Design Flow (MGD)**	n/a
Latitude	40º 54' 27.45"	**Longitude**	-76º 51' 19.11"

Wastewater Description: Boiler blowdown, reverse osmosis concentrate, stormwater

Outfall 001 is the final discharge points for IMPs 101 and 201.

Technology-Based Limitations

Relevant technology-based effluent limitations have been applied at the appropriate upstream internal monitoring points.

Water Quality-Based Limitations

Relevant water quality-based limitations have been applied at the appropriate upstream internal monitoring points.

Additional Considerations

Temperature limits were considered during this review due to boiler blowdown being included in the discharge. The analysis results show a maximum temperature of 60 °F for samples taken for the application. Since it does not appear that the temperature of the discharge will negatively impact the receiving water, no temperature limits are proposed.

Outfall No.	**101**	**Design Flow (MGD)**	0.006798
Latitude	40º 54' 28.22"	**Longitude**	-76º 51' 15.21"

Wastewater Description: Boiler blowdown, reverse osmosis concentrate

The purpose of IMP 101 is to monitor the boiler blowdown and reverse osmosis backwash waste streams prior to blending with stormwater at Outfall 001 so that the permittee can demonstrate compliance with applicable TBELs.

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	State Regulation
pH (S.U.) (1)	6.0	Minimum	95.2(1)
	9.0	IMAX	95.2(1)
Oil and Grease (2)	15.0	Average Monthly	95.2(2)
	30.0	IMAX	95.2(2)
Dissolved Iron (3)	7.0	IMAX	95.2(4)
Total Dissolved Solids (4)	2,000	Average Monthly	95.10(c)

(1) Industrial waste standards at 25 PA § 95.2(1) require a discharge pH range between 6.0 and 9.0 for all discharges of industrial wastewater.

(2) Section 95.2(2) requires discharges of industrial wastewater meet 15.0 mg/l average monthly and 30.0 mg/l instantaneous maximum for Oil and Grease. Sampling results submitted with the application indicate that oil and grease is not present in the wastewater at detectable concentrations. Since there does not appear to be a reasonable potential to exceed the oil and grease technology-based standards at § 95.2(1) it is not necessary to establish limits in the permit.

(3) Section 95.2(4) requires discharges of industrial wastewater meet an instantaneous maximum limit of 7.0 mg/l for dissolved iron. Past sampling results indicate dissolved iron is present at concentrations that do not approach 7.0 mg/l. Since there does not appear to be a reasonable potential to exceed the dissolved iron technology-based standards at § 95.2(4) it is not necessary to establish limits in the permit.

(4) The previous permit established a TDS limit of 2,000 mg/l monthly average based on requirements for new and expanding discharges at § 95.10(c). The permittee has exceeded this concentration several times throughout the existing permit's term. DEP recommends that the limit remains in the permit.

Water Quality-Based Limitations

Discharges of non-process wastewater are not required by the application to submit sample results for pollutants that are generally candidates for modeling (i.e., metals, volatiles, acids, etc.). Accordingly, an analysis of water quality-based limitations was not conducted.

Chesapeake Bay

The only industrial wastes being discharged from the facility are boiler blowdown and reverse osmosis concentrate. Neither of these streams are expected to contribute to a net increase in the loading of Total Nitrogen (TN) and Phosphorus (TP). Accordingly, monitoring requirements for TN and TP are not necessary.

Outfall No.	**201**	**Design Flow (MGD)**	n/a
Latitude	40º 54' 27.57"	**Longitude**	-76º 51' 17.24"
Wastewater Description:	Stormwater		

Technology-Based Limitations

There are no applicable technology-based effluent limitations for industrial stormwater.

Water Quality-Based Limitations

A water quality analysis for a stormwater discharge is not appropriate.

Best Professional Judgment (BPJ) Limitations

Parameter	Limit (mg/l)	Sample Type	Benchmark Values	Basis
Total Nitrogen (1)	Report	Calculation	XXX	Appendix I, PAG-03
Total Phosphorus	Report	Grab	XXX	
pH (S.U.)	Report	Grab	9.0	
Biochemical Oxygen Demand (BOD5)	Report	Grab	30	
Chemical Oxygen Demand (COD)	Report	Grab	120	
Total Suspended Solids	Report	Grab	100	
Oil and Grease	Report	Grab	30	
Nitrate-Nitrite as N	Report	Grab	XXX	

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

The above monitoring requirements are pollutants of concern for facilities with standard industrial classification (SIC) codes that are covered by Appendix I of the PAG-03 industrial stormwater general permit. Numeric benchmarks will be included in Part C of the permit.

The PAG-03 has been updated since the permit was last issued. Appendix I now requires total nitrogen and phosphorus analyses. So that this individual permit is at least as stringent as the PAG-03, DEP recommends total nitrogen and total phosphorus reporting requirements are added to the permit.

Outfall No.	**002**	**Design Flow (MGD)**	n/a
Latitude	40º 54' 34.20"	**Longitude**	-76º 51' 10.81"
Wastewater Description:	Stormwater		

Technology-Based Limitations

There are no applicable technology-based effluent limitations for industrial stormwater.

Water Quality-Based Limitations

A water quality analysis for a stormwater discharge is not appropriate.

Best Professional Judgment (BPJ) Limitations

Parameter	Limit (mg/l)	Sample Type	Benchmark Values	Basis
Total Nitrogen (1)	Report	Calculation	XXX	Appendix I, PAG-03
Total Phosphorus	Report	Grab	XXX	
pH (S.U.)	Report	Grab	9.0	
Biochemical Oxygen Demand (BOD5)	Report	Grab	30	
Chemical Oxygen Demand (COD)	Report	Grab	120	
Total Suspended Solids	Report	Grab	100	
Oil and Grease	Report	Grab	30	
Nitrate-Nitrite as N	Report	Grab	XXX	

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

The above monitoring requirements are pollutants of concern for facilities with standard industrial classification (SIC) codes that are covered by Appendix I of the PAG-03 industrial stormwater general permit. Numeric benchmarks will be included in Part C of the permit.

The PAG-03 has been updated since the permit was last issued. Appendix I now requires total nitrogen and phosphorus analyses. So that this individual permit is at least as stringent as the PAG-03, DEP recommends total nitrogen and total phosphorus reporting requirements are added to the permit.

Outfall No.	**003**	**Design Flow (MGD)**	n/a
Latitude	40º 54' 25.76"	**Longitude**	-76º 51' 20.14"
Wastewater Description:	Stormwater		

Technology-Based Limitations

There are no applicable technology-based effluent limitations for industrial stormwater.

Water Quality-Based Limitations

A water quality analysis for a stormwater discharge is not appropriate.

Best Professional Judgment (BPJ) Limitations

Parameter	Limit (mg/l)	Sample Type	Benchmark Values	Basis
Total Nitrogen (1)	Report	Calculation	XXX	Appendix I, PAG-03
Total Phosphorus	Report	Grab	XXX	
pH (S.U.)	Report	Grab	9.0	
Biochemical Oxygen Demand (BOD5)	Report	Grab	30	
Chemical Oxygen Demand (COD)	Report	Grab	120	
Total Suspended Solids	Report	Grab	100	
Oil and Grease	Report	Grab	30	
Nitrate-Nitrite as N	Report	Grab	XXX	

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

The above monitoring requirements are pollutants of concern for facilities with standard industrial classification (SIC) codes that are covered by Appendix I of the PAG-03 industrial stormwater general permit. Numeric benchmarks will be included in Part C of the permit.

The PAG-03 has been updated since the permit was last issued. Appendix I now requires total nitrogen and phosphorus analyses. So that this individual permit is at least as stringent as the PAG-03, DEP recommends total nitrogen and total phosphorus reporting requirements are added to the permit.

Outfall No.	**004**	**Design Flow (MGD)**	n/a
Latitude	40º 54' 34.20"	**Longitude**	-76º 51' 10.81"
Wastewater Description:	Stormwater		

Technology-Based Limitations

There are no applicable technology-based effluent limitations for industrial stormwater.

Water Quality-Based Limitations

A water quality analysis for a stormwater discharge is not appropriate.

Best Professional Judgment (BPJ) Limitations

Parameter	Limit (mg/l)	Sample Type	Benchmark Values	Basis
Total Nitrogen (1)	Report	Calculation	XXX	Appendix I, PAG-03
Total Phosphorus	Report	Grab	XXX	
pH (S.U.)	Report	Grab	9.0	
Biochemical Oxygen Demand (BOD5)	Report	Grab	30	
Chemical Oxygen Demand (COD)	Report	Grab	120	
Total Suspended Solids	Report	Grab	100	
Oil and Grease	Report	Grab	30	
Nitrate-Nitrite as N	Report	Grab	XXX	

(1) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

The above monitoring requirements are pollutants of concern for facilities with standard industrial classification (SIC) codes that are covered by Appendix I of the PAG-03 industrial stormwater general permit. Numeric benchmarks will be included in Part C of the permit.

The PAG-03 has been updated since the permit was last issued. Appendix I now requires total nitrogen and phosphorus analyses. So that this individual permit is at least as stringent as the PAG-03, DEP recommends total nitrogen and total phosphorus reporting requirements are added to the permit.

Existing Effluent Limitations and Monitoring Requirements

The existing effluent limitations and monitoring requirements are as follows:

IMP 101, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Dissolved Solids	113.3	226.7	XXX	2,000.0	4,000.0	5,000	1/month	Grab

Compliance Sampling Location: IMP 101

IMP 201, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: IMP 201

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 002

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 003

Outfall 004, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 004

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

IMP 101, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Dissolved Solids	113.3	226.7 Daily Max	XXX	2000.0	4000.0 Daily Max	5000	1/month	Grab

Compliance Sampling Location: IMP 101

IMP 201, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: IMP 201

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 002

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 003

Outfall 004, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 004