pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0013323**
Facility Type	**Industrial**	APS ID	**1110920**
Major / Minor	**Minor**	Authorization ID	**1479518**

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

Applicant and Facility Information

Applicant Name	**The Boeing Co.**	Facility Name	**Boeing Helicopters Ridley Facility**
Applicant Address	PO Box 16858, Mail Code: P60-201	Facility Address	Stewart Avenue & Rte. 291
	Philadelphia, PA 19142		Ridley Park, PA 19078
Applicant Contact	Jeffery Webb	Facility Contact	Jeffrey Holmes
Applicant Phone	(610) 390-7651	Facility Phone	(610) 390-7651
Client ID	74664	Site ID	270165
SIC Code	3721	Municipality	Ridley Township
SIC Description	Manufacturing - Aircraft	County	Delaware
Date Application Received	April 3, 2024	EPA Waived?	No
Date Application Accepted		If No, Reason	PCB TMDL
Purpose of Application	Permit Renewal		

Summary of Review

The Boeing Company requests approval for renewal of an NPDES permit to discharge industrial wastewater and stormwater from Boeing Helicopters Ridley Facility.

Wastewater produced from the metal finishing processes contains oil, acids, alkalis and heavy metals combined with other chemical substances. At times other wastewater (such as accumulated rainwater in oil product tank contaminated areas when contamination is identified or suspected) is also added to the treatment process. Wastewater arrives at the wastewater treatment plant via pipeline and tanker truck from various processes across the site.

The treatment process (depending on type of wastewater) includes oil/water gravity separation, ferrous sulfate addition for hexavalent chrome reduction, lime and HCl addition for pH adjustment and polymer addition for flocculation and improved solids settling. Solids are thickened in a sludge holding tank and then dewatered using a filter press. Additionally, there are two holding tanks. One of these two tanks is designated for alkaline (soapy) wastewater. The second tank is designated for wastewater that has the potential to contain PFAS/PFOA or for other specialty wastewaters as needed. These wastewater holding tanks are used to accumulate these types of wastewater until a tanker full volume is met. Then this wastewater is shipped off site for treatment/disposal.

The facility uses municipal water supply as the source water.

DEP inspection was conducted at the facility on 09-14-2023. No violations were noted.

Approve	Deny	Signatures	Date
X		*Sara Abraham* Sara Reji Abraham, E.I.T. / Project Manager	October 31, 2024
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	*10/31/2024*

The chemical additives listed in the application are: CL-1455, CL-49, CL-2150, Smart Release Bio-Clear, and CL 1456SR. Revised chemical additive notifications are submitted.

The following outfalls are discharging stormwater from the site: 001 (combined discharge), 002, 003, 004, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 019, 020, 021, 022, 023, and 025.

Facility submitted PCB PMP 2023 annual report in March 2024. Report shows a 90.7 % overall reduction since inception of the PMP. PCB/PMP and monitoring requirement is included in the permit similar to the existing permit. Outfalls 001, 002, 003, 007 and 016 are required to be sampled for PCBs. Delaware River PCB TMDL includes a WLA for outfall 008, however it has been excluded historically from the permit requirement. The following justification was given in the previous fact sheet which is carried over from the original fact sheet when this Outfall 008 was excluded from the requirement:

"Outfall 008 discharges a small volume of stormwater with low PCB concentrations (<750 pg/l) and hence a small load from an oil water separator immediately to a storm water pipe which exits the property. Access to the discharge pipe is difficult and dangerous as it is on a steep slope. Furthermore, the sampling location may not be representative of PCB concentration as it is tidally influenced. Boeing has used outfall 007 as a surrogate for outfall 008 in calculating loads and has sampled other stormwater outfalls including 004, 012 and 022 (not required by NPDES permit) to better characterize PCB loading from the entire facility. Given the relatively small load for outfall 008, <1% of the load for the facility and the potential error associated with a tidally influenced sample location, we believe that the current outfalls identified in the NPDES permit adequately characterizes the PCB loading from the facility".

There are no changes proposed in the application. The applicable ELG for this facility is under 40 CFR: 433 subpart A. The proposed limits are very similar to the existing limits.

As part of the permit renewal, facility provided the PFAS sampling results. The reported concentrations for MP101 are 43 ng/l for PFOA, 150 ng/l for PFOS, 58 ng/l for PFBS and <6.4 ng/l for HFPO-DA. For Outfall 001, the concentrations are 34 ng/l for PFOA, 150 ng/l for PFOS, 9.2 ng/l for PFBS and <6.4 for HFPO-DA. Non-Detect results are reported only for HFPO-DA. Quarterly monitoring for these PFAS parameters is included in the permit for MP 101 and Outfall 001. A part C condition requiring PFAS reduction plan is also included in the permit according to our guidance.

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.

Act 14 Notifications:

Eddystone Borough	-	March 14, 2024
Ridley Township	-	March 14, 2024
Delaware County	-	March 14, 2024

Permit Conditions:

A. Acquire Necessary Property Rights
B. Proper Sludge Disposal
C. WQM Permit Condition
D. BAT/ELG Reopener
E. TTO Definition
F. TTO Monitoring
G. Thermal Requirement

H. Cooling Tower Maintenance Chemicals
I. TMDL/WLA Data
J. Non-Stormwater Discharges
K. Chemical Additives Requirement
L. Stormwater Requirement
M. PCB PMP Requirement
N. PFAS Reduction Plan

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.087
Latitude	39º 51' 50.96"	Longitude	-75º 19' 32.02"
Quad Name	Bridgeport	Quad Code	2043
Wastewater Description:	IW Process Effluent with ELG		
Receiving Waters	Crum Creek (WWF) (Delaware Estuary Zone 4)	Stream Code	00692
NHD Com ID	25590671	RMI	0.5
Q_{7-10} Flow (cfs)	1% of flow at Trenton = 25 cfs	Q_{7-10} Basis	For tidal discharge to Estuary using 1% of the Delaware River flow available for dilution.
Watershed No.	3-G	Chapter 93 Class.	WWF
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated biphenyls (PCBs)		
Source(s) of Impairment	Source unknown		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Discharge, Receiving Waters and Water Supply Information

Monitoring Point.	101	Design Flow (MGD)	.05
Latitude	39º 51' 50.64"	Longitude	-75º 19' 31.14"
Quad Name	Bridge port	Quad Code	2043
Wastewater Description:	IW Process Effluent with ELG, Metal surface treatment wastewater (alkaline cleaning, chemical etching, conversion coating)		
Receiving Waters	Crum Creek (WWF)	Stream Code	00692
NHD Com ID	25590671	RMI	0.5
Watershed No.	3-G	Chapter 93 Class.	WWF
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated biphenyls (PCBs)		
Source(s) of Impairment	source unknown		
TMDL Status	Final	Name	Delaware River Estuary PCB TMDLs

Compliance History

DMR Data for Outfall 001 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
Flow (MGD) Average Monthly	0.36216	0.139320	0.22522	0.27396	0.08698	0.09245	0.1242	0.70877	0.1746	0.16452	0.09677	0.09036
Flow (MGD) Daily Maximum	0.9216	0.184320	0.4176	0.51696	0.14256	0.13248	0.16128	2.86648	0.24768	0.3168	0.15552	0.12096
pH (S.U.) Instantaneous Minimum	6.8	7.4	6.6	6.4	6.4	6.6	6.4	6.4	6.5	6.8	6.6	6.7
pH (S.U.) Instantaneous Maximum	7.1	7.5	7.4	7.0	6.9	6.8	7.3	7.2	7.2	7.1	7.3	7.2
Free Available Chlorine (mg/L) Average Monthly	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Temperature (ºF) Instantaneous Maximum	55	52	55	58	64	70	75	75	73	69	64	59
TSS (mg/L) Average Monthly	< 17	< 6	< 5	< 6	< 5.0	< 6	9	< 10	9.0	< 7	< 7	6
TSS (mg/L) Daily Maximum	50	7	6	6	6.0	7	13	18	13.0	12	10	7
Total Dissolved Solids (mg/L) Average Monthly	768.0	825.0	818.0	706.0	798.0	900.0	841.0	821.0	966.0	1121.0	1028.0	1012.0
Total Dissolved Solids (mg/L) Daily Maximum	956.0	1080.0	1090.0	836.0	978.0	1000.0	1010.0	1130.0	1030.0	1290.0	1130.0	1100.0
Oil and Grease (mg/L) Average Monthly	< 6.5	< 4.4	< 4.3	< 4.4	< 5.4	< 4.4	< 4.1	< 4.1	< 4.1	< 3.8	< 4.1	< 4.0
Oil and Grease (mg/L) Instantaneous Maximum	13.5	4.8	< 4.6	< 4.5	8.2	4.9	< 4.4	< 4.1	< 4.4	< 3.9	< 4.3	< 4.1
PCBs (Dry Weather) (pg/L) Daily Maximum				2468.9								

PCBs (Wet Weather) (pg/L) Daily Maximum				2544.3								

DMR Data for Outfall 002 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				6.8						6.7		
BOD5 (mg/L) Daily Maximum				< 2						3.4		
COD (mg/L) Daily Maximum				< 15						< 15		
TSS (mg/L) Daily Maximum				< 5						34		
Oil and Grease (mg/L) Daily Maximum				< 4.6						< 3.9		
Total Nitrogen (mg/L) Daily Maximum				< 3.0						1.6		
Total Phosphorus (mg/L) Daily Maximum				< 0.1						0.21		
PCBs (Wet Weather) (pg/L) Daily Maximum				473.5								

DMR Data for Outfall 003 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				6.8						7.0		
BOD5 (mg/L) Daily Maximum				4.9						2.1		
COD (mg/L) Daily Maximum				18						< 5		
TSS (mg/L) Daily Maximum				5						47		
Oil and Grease (mg/L) Daily Maximum				< 2.4						< 1.2		
Total Nitrogen (mg/L) Daily Maximum				< 4.24						< 3.0		

Total Phosphorus (mg/L) Daily Maximum				0.45						0.12		
PCBs (Wet Weather) (pg/L) Daily Maximum				185821.2								

DMR Data for Outfall 004 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				6.6						6.6		
BOD5 (mg/L) Daily Maximum				5.2						8.9		
COD (mg/L) Daily Maximum				< 15						42		
TSS (mg/L) Daily Maximum				8						6		
Oil and Grease (mg/L) Daily Maximum				< 2.0						< 4.0		
Total Nitrogen (mg/L) Daily Maximum				< 3.0						2.1		
Total Phosphorus (mg/L) Daily Maximum				< 0.1						0.12		

DMR Data for Outfall 007 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Instantaneous Minimum	6.8	7.0	6.5	6.4	6.5	GG	6.5	6.2	6.5	6.3	GG	6.6
pH (S.U.) Instantaneous Maximum	6.8	7.0	7.0	6.4	6.5	GG	6.5	6.2	6.5	6.3	GG	6.6
COD (mg/L) Daily Maximum				< 15						26		
Oil and Grease (mg/L) Average Monthly	< 4.9	< 3.8	< 4.7	< 4.7	< 4.3	GG	< 4.0	< 4.2	< 4.0	< 4.4	GG	< 4.0
Oil and Grease (mg/L) Instantaneous Maximum	< 4.9	< 3.8	< 4.7	< 4.7	< 4.3	GG	< 4.0	< 4.2	< 4.0	< 4.4	GG	< 4.0

PCBs (Wet Weather) (pg/L) Daily Maximum				2258.4								

DMR Data for Outfall 008 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Instantaneous Minimum	7.1	7.9	6.9	6.8	6.8	GG	6.8	6.1	6.6	6.1	GG	6.6
pH (S.U.) Instantaneous Maximum	7.1	7.9	7.4	6.8	6.8	GG	6.8	6.1	6.6	6.1	GG	6.6
COD (mg/L) Daily Maximum				< 15						80		
Oil and Grease (mg/L) Average Monthly	< 4.2	< 4.2	< 4.3	< 4.5	< 4.6	GG	< 3.8	< 4.2	4.8	< 4.0	GG	< 4.0
Oil and Grease (mg/L) Instantaneous Maximum	< 4.2	< 4.2	< 4.3	< 4.5	< 4.6	GG	< 3.8	< 4.2	4.8	< 4.0	GG	< 4.0

DMR Data for Outfall 012 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				7.0						6.9		
BOD5 (mg/L) Daily Maximum				2.4						10		
COD (mg/L) Daily Maximum				< 15						40		
TSS (mg/L) Daily Maximum				10						123		
Oil and Grease (mg/L) Daily Maximum				< 4.0						< 4.0		
Total Nitrogen (mg/L) Daily Maximum				< 3.0						2.1		
Total Phosphorus (mg/L) Daily Maximum				< 0.1						0.15		

DMR Data for Outfall 016 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				6.6						6.7		
BOD5 (mg/L) Daily Maximum				< 2.0						10.7		
COD (mg/L) Daily Maximum				< 15						30		
TSS (mg/L) Daily Maximum				< 5						92		
Oil and Grease (mg/L) Daily Maximum				< 4.5						< 3.9		
Total Nitrogen (mg/L) Daily Maximum				< 3.0						2.6		
Total Phosphorus (mg/L) Daily Maximum				0.33						0.15		
Hexavalent Chromium (mg/L) Daily Maximum				< 0.24						< 0.01		
Total Copper (mg/L) Daily Maximum				0.0038						0.0077		
Total Lead (mg/L) Daily Maximum				0.0048						0.0056		
PCBs (Wet Weather) (pg/L) Daily Maximum				39532								

DMR Data for Outfall 025 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
pH (S.U.) Daily Maximum				6.5						6.7		
BOD5 (mg/L) Daily Maximum				4.0						10.1		
COD (mg/L) Daily Maximum				15						35		
TSS (mg/L) Daily Maximum				7						73		
Oil and Grease (mg/L) Daily Maximum				< 2.0						< 4.0		
Total Nitrogen (mg/L) Daily Maximum				< 3.0						< 3.9		

Total Phosphorus (mg/L) Daily Maximum				0.19						0.13		

DMR Data for Outfall 101 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
Flow (MGD) Average Monthly	0.008	0.014835	0.0173	0.0131	0.01855		0.0181	0.0218	0.0194	0.0108	0.01519	0.0143
Flow (MGD) Daily Maximum	0.010	0.01717	0.0173	0.0131	0.0186		0.0181	0.0218	0.0194	0.0151	0.01519	0.0143
pH (S.U.) Instantaneous Minimum	7.3	8.0	8.3	7.4	7.2		8.0	7.8	8.2	7.8	7.9	7.9
pH (S.U.) Instantaneous Maximum	7.8	8.7	8.3	7.4	7.7		8.0	7.8	8.2	8.0	7.9	7.9
CBOD5 (mg/L) Daily Maximum	28.1	30	13.2	30.4	31		24.1	24.7	13.8	60.3	70.5	9.3
CBOD5 (mg/L) Industrial Influent Daily Maximum	72.3	43.7	36.1	35.7	44.2	13	12.3	57.0	34.6	125	143	91
TSS (mg/L) Average Monthly	< 10	26	18	8	< 12		12.0	10	19.0	25	< 5	21
TSS (mg/L) Daily Maximum	19	33	18	8	18		12.0	10	19.0	40	< 5	21
Oil and Grease (mg/L) Average Monthly	< 4.4	< 4.3	< 4.5	< 4.3	< 3.3		< 4.2	5.7	< 3.8	< 3.9	< 4.3	< 4.4
Oil and Grease (mg/L) Instantaneous Maximum	< 4.5	< 4.4	< 4.5	< 4.3	< 4.5		< 4.2	5.7	< 3.8	< 4.1	< 4.3	< 4.4
Ammonia (mg/L) Daily Maximum				2.9						4.16		
Total Cadmium (mg/L) Average Monthly	0.0108	0.0029	0.00077	0.0051	0.012		0.0004	< 0.001	0.00054	0.00085	0.0076	< 0.001
Total Cadmium (mg/L) Daily Maximum	0.031	0.0037	0.00077	0.0051	0.023		0.0004	< 0.001	0.00054	0.00094	0.0076	< 0.001
Hexavalent Chromium (mg/L) Average Monthly	< 0.007	0.00053	0.00049	< 0.24	< 0.01		< 0.01	< 0.01	< 0.50	< 0.105	< 0.01	< 0.20
Hexavalent Chromium (mg/L) Daily Maximum	< 0.01	0.00086	0.00049	< 0.24	< 0.01		< 0.01	< 0.01	< 0.50	< 0.20	< 0.01	< 0.20

Total Copper (mg/L) Average Monthly	0.0051	0.0083	0.0073	0.015	0.0353		0.0052	0.014	0.0071	0.0116	0.024	< 0.013
Total Copper (mg/L) Daily Maximum	0.0055	0.012	0.0073	0.015	0.067		0.0052	0.014	0.0071	0.017	0.024	< 0.013
Total Cyanide (mg/L) Daily Maximum	< 0.004			< 0.004			< 0.004			< 0.04		
Total Lead (mg/L) Daily Maximum	0.0012			< 0.001			< 0.005			< 0.005		
Total Nickel (mg/L) Average Monthly	0.059	0.018	0.027	0.041	0.0395		0.03	0.039	0.039	0.049	0.19	0.059
Total Nickel (mg/L) Daily Maximum	0.15	0.025	0.027	0.041	0.044		0.03	0.039	0.039	0.05	0.19	0.059
Total Silver (mg/L) Average Monthly	< 0.0005	< 0.0015	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.003	< 0.0005	< 0.0008	< 0.0005	< 0.0025
Total Silver (mg/L) Daily Maximum	< 0.0005	0.0024	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.003	< 0.0005	< 0.001	< 0.0005	< 0.0025
Total Zinc (mg/L) Average Monthly	0.016	0.108	0.063	0.16	0.063		0.015	0.027	0.029	0.032	0.027	0.04
Total Zinc (mg/L) Daily Maximum	0.017	0.20	0.063	0.16	0.11		0.015	0.027	0.029	0.042	0.027	0.04
Total Toxic Organics (mg/L) Daily Maximum				0.0014								

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .087
Latitude 39º 51' 51.00" **Longitude** -75º 19' 32.00"
Wastewater Description: Wastewater from metal surface treatment, cooling tower blowdown and stormwater

EFFLUENT PARAMETER	WATER QUALITY BASED LIMITS					
	MONTHLY AVERAGE		DAILY MAXIMUM		INST. MAX.	BASIS FOR LIMIT
	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	
Temperature					110 º F	DRBC
Total Suspended Solids	30		60		75	DRBC
Total Dissolved Solids	2000		2500		5000	DRBC*
Oil and Grease	15				30	Chapter 95
Free Available Chlorine	0.5					Existing due to the use of chemical additives
PCBs			Monitor			PCB TMDL
pH	6.0 to 9.0 std units at all times					Chapter 95

* TDS determination was approved by DRBC via Docket No. D-1994-030-3. Although these numbers exceed DRBC's basin-wide TDS effluent limit of 1000 mg/l, DRBC staff determined the facility's discharge to be compatible with the DRBC's designated water uses and water quality objectives in conformance with DRBC water quality regulations since the in-stream concentrations in Crum Creek are not expected to exceed DRBC's criteria of 133% of background as a result of facility's discharge.

A "reasonable potential analysis" determined the following are parameters of concern:

Parameter	Maximum Concentration in Application	Most Stringent Criterion (ug/l)	Max. Allowable Concentration using dilution factor**	Comments
Total Dissolved Solids	1890000	500000		Existing limit recommended
Chloride	1020000	250000	46500000	*
Total Cadmium	1	0.25		ELG parameter***
Total Copper	12	9		ELG parameter***
Total Iron	1700	1500	279000	*
Total Phenols (Phenolics)	10	5	930	*
Acrylamide	<11	0.07	13.02	****

**Discharge is to Crum Creek, which is considered as tidal Delaware Estuary, Q7-10 = 25cfs = 16.13 mgd

Dilution factor = (Qs+Qd)/Qd = (16.13 +0.087)/0.087 = 186

* No concern due to high dilution.
*** limit is established at MP101
****There is no DEP recommended TQL for this parameter. All results reported as ND. Due to the extremely high dilution available no concern for this parameter.

No changes to the existing limits.

Anti-Backsliding

N/A

Development of Effluent Limitations

Monitoring Point 101 **Design Flow (MGD)** .05
Latitude 39º 51' 51.00" **Longitude** -75º 19' 32.00"
Wastewater Description: Metal surface treatment wastewater (alkaline cleaning, chemical etching, conversion coating)

EFFLUENT PARAMETER	TECHNOLOGY BASED LIMITS								BASIS FOR LIMIT
	BAT				BPT				
	DAILY MAXIMUM		MONTHLY AVERAGE		DAILY MAXIMUM		MONTHLY AVERAGE		
	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	LOAD (LBS/DAY)	
Cadmium (T)	0.69		0.26						40 CFR 433.14
Chromium (T)	2.77		1.71		BPT and BAT are the same				
Copper (T)	3.38		2.07						
Lead (T)***	0.69		0.43						
Nickel (T)	3.98		2.38						
Silver (T)	0.43		0.24						
Zinc (T)	2.61		1.48						
Cyanide (T)***	1.2		0.65						
TTO	2.13								
TSS					60		31		40 CFR 433.13
Oil and Grease					52		26		
pH					6.0 to 9.0				

EFFLUENT PARAMETER	WATER QUALITY BASED LIMITS					
	DAILY AVERAGE		DAILY MAXIMUM		INST. MAX.	BASIS FOR LIMIT
	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	LOAD (LBS/DAY)	CONC. (MG/L)	
Cadmium (T)			0.73			DRBC calculated in 2001
Chromium (T)			2.22 *			
Copper (T)			3.45			
Lead (T)***			6.66			

Nickel (T)			221.56			
Silver (T)			0.72			
Zinc (T)			18.32			
Cyanide (T)***			3.06			
TSS**			No WQ limit			
Oil and Grease**			No WQ limit			

*more stringent than technology limit. **WQ limit at 001 is more stringent than technology limit and that is used in the permit.

***A monitoring waiver was granted for Cyanide and Lead at the 2014 permit renewal since the facility was not using Cyanide compounds or Lead compounds at the site. A quarterly monitoring was included for these parameters in the previous permit to collect data. At this permit renewal the facility again requesting monitoring waiver since these compounds are not used at the facility. The review shows that the sampling results are very low and there is no concern for these parameters. The long-term average for Total Lead result is <1.9 ug/l and the long-term average for Total Cyanide is <4.6 ug/. The monitoring requirements are eliminated from Part A of the permit and a special condition is included in Part C of the permit with these parameters and limits.

A “reasonable potential analysis” determined the following are parameters of concern:

Parameter	Maximum Concentration in Application	Most Stringent Criterion (ug/l)	Max. Allowable Concentration using dilution factor**	Comments
Total Dissolved Solids	985000	500000		Limit at outfall 001
Chloride	300000	250000	81000000	*
Fluoride	2000	2000	648000	*
Total Antimony	10	5.6	1814	*
Total Cadmium	8	0.25		ELG parameter
Chromium, Hexavalent	<240	11	3564	*
Total Cobalt	63	19	6156	*
Total Copper	25	9		ELG parameter
Total Iron	2900	1500	486000	*
Total Lead	<10	2.5	810	*
Total Nickel	190	52		ELG parameter
Total Phenols (Phenolics)	7	5	1620	*
Total Selenium	<10	4.6	1490	*
Total Silver	<5	3.2		ELG parameter
Total Thallium	<10	0.24	78	*
Total Zinc	200	117	37908	*
Carbon Tetrachloride	<1	0.4	130	*
Acrylamide	<12	0.07	23	***
2,4 -Dinitrophenol	<25	10	3240	*
Hexachlorobutadiene	<12.5	0.01	3.24	****
1,2,4 Trichlorobenzene	<13	0.07	22.68	****

** Discharge is to Crum Creek, which is considered as tidal Delaware Estuary, Q7-10 = 16.13 mgd. Dilution factor = (0.05 + 16.13)/0.05 = 324

* no concern due to high dilution.

***There is no DEP recommended TQL for this parameter. All results reported as ND. Due to the extremely high dilution available no concern for this parameter.

****Facility used a higher QL than DEP recommended TQL for analyses and reported all ND results. Due to the extremely high dilution available no concern for these parameters. Moreover, according to the information provided by the facility there is no reason to believe these pollutants are present in the discharge.

We suggest the facility to use the DEP recommended TQL for all future sample analyses.

Existing monitoring requirements for Ammonia and CBOD5 (influent and effluent) are carried over to the new permit. These were incorporated in the permit at the 2019 renewal as per DRBC.

CBOD20 monitoring requirement is eliminated from the permit as per DRBC at the 2019 permit renewal.

No changes to the existing limits.

Anti-Backsliding

N/A

Outfall No.	002	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 51.00”	**Longitude**	75° 18’ 51.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Darby Creek. Existing stormwater parameters Oil and Grease, BOD5, COD, TSS, Total Nitrogen, Total Phosphorus and pH are continued to be monitored. PCBs (wet weather) monitoring is also required.

Outfall No.	003	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 50.00”	**Longitude**	75° 19’ 33.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Existing stormwater parameters Oil and Grease, BOD5, COD, TSS, Total Nitrogen, Total Phosphorus and pH are continued to be monitored.
PCBs (wet weather) monitoring is also required.

Outfall No.	004	**Design Flow (MGD)**	0.000000
Latitude	39° 52’ 2.00”	**Longitude**	75° 18’ 58.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Darby Creek. Based on the similarities in activities in the drainage areas of Outfall 016 and Outfall 004, Outfall 016 is considered as representative of Outfall 004. Therefore, this outfall is not required to be monitored.

Outfall No.	007	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 41.00”	**Longitude**	75° 19’ 22.00”
Wastewater Description:	Stormwater from an oil water separator (from fueling area)		

This outfall discharges to Crum Creek. The existing limits for pH (6.0 to 9.0 S.U.), oil and grease (15 mg/l) and COD monitoring are continued. PCBs (wet weather) monitoring is also required similar to the existing permit. Monitoring for TSS is included as this is a standard stormwater parameter.

Outfall No.	008	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 36.00”	**Longitude**	75° 19’ 20.00”
Wastewater Description:	Stormwater from an oil water separator (from fueling and defueling area)		

This outfall discharges to Crum Creek. The existing limits for pH (6.0 to 9.0 S.U.), and oil and grease (15 mg/l) and COD monitoring are continued. Based on the review of the results BOD5 monitoring is also included. Monitoring for TSS is included as this is a standard stormwater parameter.

Outfall No.	009	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 30.00”	**Longitude**	75° 19’ 11.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	010	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 32.00”	**Longitude**	75° 19’ 5.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	011	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 33.00”	**Longitude**	75° 19’ 5.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	012	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 34.00”	**Longitude**	75° 19’ 2.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Stormwater parameters Oil and Grease, BOD5, COD, TSS, Total Nitrogen, Total Phosphorus and pH are continued to be monitored.

Outfall No.	013	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 34.00”	**Longitude**	75° 18’ 59.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	014	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 35.00”	**Longitude**	75° 18’ 58.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	015	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 47.00”	**Longitude**	75° 18’ 57.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	016	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 35.00”	**Longitude**	75° 18’ 52.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Darby Creek. Existing stormwater parameters Oil and Grease, BOD5, COD, TSS, Total Nitrogen, Total Phosphorus and pH are continued to be monitored. Hexavalent Chromium, Copper Total and Lead Total are also continued to be monitored. PCBs (wet weather) monitoring is also required at this outfall.

Outfall No.	017	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 53.00”	**Longitude**	75° 18’ 56.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Delaware River. Outfall 012 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	019	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 53.00”	**Longitude**	75° 19’ 40.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Outfall 003 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	020	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 53.00”	**Longitude**	75° 19’ 40.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Outfall 003 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	021	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 50.00”	**Longitude**	75° 19’ 40.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Outfall 003 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	022	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 44.00”	**Longitude**	75° 19’ 33.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Outfall 003 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	023	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 51.00”	**Longitude**	75° 18’ 53.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Darby Creek. Outfall 002 is considered as the representative outfall and monitoring is not required for this outfall.

Outfall No.	025	**Design Flow (MGD)**	0.000000
Latitude	39° 51’ 51.00”	**Longitude**	75° 19’ 31.00”
Wastewater Description:	Stormwater from roof drains, parking lot areas and roads		

This outfall discharges to Crum Creek. Existing stormwater parameters Oil and Grease, BOD5, COD, TSS, Total Nitrogen, Total Phosphorus and pH are continued to be monitored.

Proposed Effluent Limitations and Monitoring Requirements

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
Free Available Chlorine	XXX	XXX	XXX	0.5	XXX	XXX	1/week	Grab
Temperature (deg F) (ºF)	XXX	XXX	XXX	XXX	XXX	110	1/week	I-S
Total Suspended Solids	XXX	XXX	XXX	30	60	75	1/week	Grab
Total Dissolved Solids	XXX	XXX	XXX	2000.0	2500.0	5000	1/week	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/week	Grab
PCBs Dry Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Proposed Effluent Limitations and Monitoring Requirements

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Proposed Effluent Limitations and Monitoring Requirements

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 007, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 008, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	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
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 012, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 016, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chromium, Hexavalent	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Copper, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Lead, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs Wet Weather Analysis (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 025, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) 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
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/discharge	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/discharge	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) Industrial Influent	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	1/discharge	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/discharge	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Cadmium, Total	XXX	XXX	XXX	0.26	0.69	XXX	1/discharge	Grab
Chromium, Hexavalent	XXX	XXX	XXX	1.71	2.22	XXX	1/discharge	Grab
Copper, Total	XXX	XXX	XXX	2.07	3.38	XXX	1/discharge	Grab
Nickel, Total	XXX	XXX	XXX	2.38	3.98	XXX	1/discharge	Grab
Silver, Total	XXX	XXX	XXX	0.24	0.43	XXX	1/discharge	Grab
Zinc, Total	XXX	XXX	XXX	1.48	2.61	XXX	1/discharge	Grab
Total Toxic Organics	XXX	XXX	XXX	XXX	2.13	XXX	1/year	Grab

Outfall 101, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab