pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0008508**
Facility Type	**Industrial**	APS ID	**559775**
Major / Minor	**Major**	Authorization ID	**965602**

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

Applicant and Facility Information

Applicant Name	**Burle Business Park, LP**	Facility Name	**Burle Business Park Industrial Waste Treatment Plant**
Applicant Address	1004 New Holland Avenue	Facility Address	1004 New Holland Avenue
	Lancaster, PA 17601-5606		Lancaster, PA 17601-5606
Applicant Contact	Althea Ramsay Carrigan	Facility Contact	Althea Ramsay Carrigan
Applicant Phone	(717) 669-8861	Facility Phone	(717) 669-8861
Client ID	242333	Site ID	443881
SIC Code	3671	Municipality	Lancaster City
SIC Description	Manufacturing - Electron Tubes	County	Lancaster
Date Application Received	March 1, 2013	EPA Waived?	No
Date Application Accepted	March 6, 2013	If No, Reason	Major Facility

Purpose of Application: NPDES Permit Renewal.

Summary of Review

Burle Business Park, LP has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit. The permit was issued on August 4, 2008 and became effective on September 1, 2008. The permit authorized discharge of treated industrial wastewater from the existing industrial waste treatment plant (IWTP) located in Lancaster City, into the Conestoga River. The existing permit expiration date was August 31, 2013, and the permit has been administratively extended since that time.

Per the previous fact sheet, Burle Industries, Inc. was formed in the 1980's when the previous applicant, RCA, closed the facility. Burle operates at the same building, but does not include all the processes and operations that were performed by RCA. Burle Industries, Inc. is covered under SIC Codes 3671, 3679, and 3471. SIC Code 3671 is for transmitting industrial and specialty purpose electron tubes. SIC Code 3679 is for electronic components not elsewhere classified such as crystals, electric and electronic components, ferrite electronic parts, fuel cells. SIC Code 3471 is for electroplating, plating, polishing, and anodizing. The main operation is electroplating and making specialized electron tubes. Wastewater generated by these operations is treated by a physical/chemical treatment plant. The processes include chrome reduction using sulfuric acid and sodium bisulfite to reduce the more toxic hexavalent chrome to trivalent chrome, a cyanide oxidation tank using chlorine and lime, a neutralization step using sulfuric acid or lime, a flash mix tank to add cation polymers, a clarifier for settling and then sand filters for tertiary filtration. Sewage is directed to public sewers. The facility has one outfall with two internal monitoring points. Outfall 101 discharges 0.193 mgd from the physical/chemical treatment plant where technology limits must be met. Outfall 201 monitors the quality of the 0.128 mgd of noncontact cooling water (NCCW). Outfall 001 is the combined flow of 0.321 mgd that discharges to the Conestoga River at the confluence of the unnamed tributary. Flows have been greatly reduced at this facility due to permanent reductions in the manufacturing activity. Outfall 101 has now been reduced to about

Approve	Deny	Signatures	Date
X		*Benjamin Lockwood* Benjamin R. Lockwood / Environmental Engineering Specialist	February 19, 2021
X		Daniel W. Martin, P.E. / Environmental Engineer Manager	March 11, 2021
X		Maria D. Bebenek, P.E. / Program Manager	March 11, 2021

Summary of Review

10,000 gpd and Outfall 201 has been reduced to about 24,000 gpd. The applicant is hoping to reduce the flows further with reuse and conservation.

The treatment process consists of an equalization tank which flows to a chrome reduction tank where sodium metabisulfite is added. The wastewater then flows to a neutralization tank where lime, caustic soda, and sodium metabisulfite are added. Flow enters a flocculation tank where pH is monitored. The flocculation tank also receives flow from filter backwash, filtrate and overflow from the sludge thickener. Forward flow continues to the lamella separator. The lamella effluent enters a splitter box and is divided between the two sand filters. Flow finally passes through the effluent full pipe magmeter and the internal monitoring point 101 before it discharges to outfall 001. Cyanide waste enters a separate waste storage tank and is fed to the cyanide oxidation tank where HTH chlorine is added. Flow from the cyanide oxidation tank merges with the remaining influent in the neutralization tank. Sludge from the lamella separator is collected in the sludge thickener and passes through the filter press to be collected in a dumpster.

Changes to the renewal: Total Nitrogen monitoring has been added to Outfall 001. Total Dissolved Solids, Chloride, Bromide and Sulfate monitoring has been added to Outfall 101.

Supplemental Information is located at the end of this fact sheet.

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.321
Latitude	40º 3' 0"	Longitude	76º 16' 47"
Quad Name	Lancaster	Quad Code	1835
Wastewater Description:	Industrial wastewater from metal finishing and electroplating process, NCCW, Stormwater		
Receiving Waters	Conestoga River (WWF, MF)	Stream Code	07548
NHD Com ID	57463625	RMI	23.4
Drainage Area	324 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	38.9	Q_{7-10} Basis	USGS Gage # 01576500
Elevation (ft)	246	Slope (ft/ft)	
Watershed No.	7-J	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	Organic Enrichment, Siltation, Siltation, Pathogens, Pathogens		
Source(s) of Impairment	Agriculture, Rural (Residential Areas), Dam or Impoundment, Agriculture, Urban Runoff/Storm Sewers		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Holtwood Power Plant		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	9.85	Distance from Outfall (mi)	30.5

Other Comments: A drainage area of 324 mi^2 and a Q_{7-10} flow of 38.9 cubic feet per second (cfs) were determined by establishing a correlation to the yield of USGS Gage Station #01576500 on the Conestoga River. The Q_{7-10} and drainage area at the gage are 38.6 cfs and 324 mi^2, respectively. These values are taken from the USGS document “Selected Streamflow Statistics for Streamgage Locations in and near Pennsylvania”. The Q_{7-10} runoff rate at the gage station was calculated as follows:

Yield = (38.6 cfs)/ 324 mi^2 = 0.12 cfs/mi^2

The drainage area at the discharge point, taken from USGS PA StreamStats = 324 mi^2

The Q_{7-10} at the discharge point = 324 mi^2 x 0.12 cfs/mi^2 = 38.9 cfs

Discharge, Receiving Waters and Water Supply Information

Outfall No.	101	Design Flow (MGD)	0.193
Latitude	40º 3' 8"	Longitude	76º 17' 3"
Quad Name	Lancaster	Quad Code	1835
Wastewater Description:	Industrial wastewater from metal finishing and electroplating process		
Receiving Waters	Conestoga River (WWF, MF)	Stream Code	07548
NHD Com ID	57463625	RMI	23.4
Drainage Area	324 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	38.9	Q_{7-10} Basis	USGS Gage # 01576500
Elevation (ft)	246	Slope (ft/ft)	
Watershed No.	7-J	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	Organic Enrichment, Siltation, Siltation, Pathogens, Pathogens		
Source(s) of Impairment	Agriculture, Rural (Residential Areas), Dam or Impoundment, Agriculture, Urban Runoff/Storm Sewers		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Holtwood Power Plant		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	9.85	Distance from Outfall (mi)	30.5

Other Comments: None

Discharge, Receiving Waters and Water Supply Information

Outfall No.	201	Design Flow (MGD)	0.128
Latitude	40º 3' 5"	Longitude	76º 16' 55"
Quad Name	Lancaster	Quad Code	1835
Wastewater Description:	NCCW and Stormwater		
Receiving Waters	Conestoga River (WWF, MF)	Stream Code	07548
NHD Com ID	57463629	RMI	23.4
Drainage Area	324 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	38.9	Q_{7-10} Basis	USGS Gage # 01576500
Elevation (ft)	246	Slope (ft/ft)	
Watershed No.	7-J	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	Organic Enrichment, Siltation, Siltation, Pathogens, Pathogens		
Source(s) of Impairment	Agriculture, Rural (Residential Areas), Dam or Impoundment, Agriculture, Urban Runoff/Storm Sewers		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Holtwood Power Plant		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	9.85	Distance from Outfall (mi)	30.5

Other Comments: None

Compliance History	
Summary of DMRs:	A summary of the past 12-month DMR effluent data is presented on the next page of this fact sheet.
Summary of Inspections:	4/23/2009: A routine inspection was conducted. It was noted that the flow was very low, and the facility was not discharging at the time of inspection. All treatment units were online and appeared to be operating properly with no noticeable problems. Outfall 201 and 001 were both listed as good and clear. 4/14/2011: A routine inspection was conducted. It was noted that the flow was very low. The facility is mostly office space, with very little manufacturing, and the IWTP only operates 3 days/week for a few hours. The facility was not in operation at the time of inspection. All treatment units appeared to be operable. Outfall 201 and 001 were both inspected and listed as good and clear. 6/28/2012: A routine inspection was conducted. The flow was very low, as the IWTP only operates 3 days/week for a few hours. The facility was not in operation at the time of inspection, and there was no discharge. Outfall 201 and 001 were both inspected and listed as good and clear. 2/28/2013: A routine inspection was conducted. The flow was very low, as the IWTP only operates 3 days/week for a few hours. The facility was not in operation at the time of inspection, and there was no discharge. Outfall 201 and 001 were both inspected and listed as good and clear. 8/11/2014: A routine inspection was conducted. It was noted that due to the limited flow the IWTP receives, former treatment tanks are now used as holding tanks. This allows them to operate on a limited basis, usually 2-3 days/week for 3-4 hours. The pH in the flocculation tank was 7.3 at the time of inspection, and the pH at the sand filter effluent was 7.95. To meet its permit requirements, the facility is taking a 24-hr composite sample, but is only discharging 1-4 hours during sampling days. Effluent is held in their monitoring tank, and aliquots are drawn while the facility isn't discharging from Outfall 101. It was noted that this is not proportionally representative of the effluent, and DEP requested a 200 ml aliquot be taken every 15 minutes over the discharge period. The field reading for pH was 9.27, exceeding the maximum permit limit of 9.0. The operator's portable probe used for monitoring was broken. pH monitoring was being conducted by the inflow continuous meter, and there was no calibration records or calibration buffers. It was recommended that pH meters be calibrated on a daily basis, and buffers be kept onsite. 10/15/2014: A follow-up inspection was conducted. Since the previous inspection, Burle had installed a new handheld pH meter. Buffers are now kept onsite with daily calibrations completed, and a new in-stream pH meter was installed in the effluent wet well. The composite aliquot had been increased to 200 ml. The facility was currently discharging, and the effluent was clear. pH and temperature field readings were within permitted limits. 4/15/2015: A routine inspection was conducted. A walkthrough of the facility revealed no concerns. No discharge was occurring at the time of inspection. The EQ tanks were practically empty with very little wastewater. Rainwater does accumulate in the outside tanks, and water is transferred to the primary EQ tank for treatment. This transfer was occurring at the time of inspection. All agitators were operable in the neutralization tanks. The lamella and sand filters were operable. Outfall 201 effluent was clear, and the area was free of debris, discoloration, or sheening. 6/12/2016: A routine inspection was conducted. Field measurements were taken and were within permitted limits. It was noted that the IWTP is significantly under used, and the operator runs the IWTP 3/week for a couple hours.

	9/4/2018: A routine inspection was conducted. It was noted that the IWTP is still greatly under design capacity, and only discharges approximately 3/week for a few hours. The outside EQ had a very low level. The sand filter supernatant appeared clear with a slightly green tint. The IWTP was not discharging upon inspection. The sludge thickener trough had significant corrosion, and due to the corrosion, the supernatant was not passing over the weir in certain locations. The thickener contents appeared to be ark green/brown with algae growth on the walls. The stormwater pond was inspected. A significant amount of sediment was observed in certain locations, and it was recommended that the pond be cleaned of sediment on an as needed basis. The inspector also recommended that sodium hypochlorite or calcium hypochlorite be used in place of HTH. 9/26/2019: A routine inspection was conducted. It was noted that the IWTP is still greatly under design capacity, and only discharges approximately 1,000 – 3,000 gallons 3 days a week. The agitator in the chromate reduction tank is no longer operational and has been out of service for several years. The sand filter supernatant appeared clear. Field sampling results were within permitted limits. The pond sediment accumulation appeared similar to the previous year's inspection. 11/1/2019: A Notice of Violation (NOV) was issued regarding DMR violations from July 2016 to August 2019.

Other Comments: There is an open violation from 2/26/2020 for violations of NPDES permit limits.

Compliance History

DMR Data for Outfall 001 (from January 1, 2020 to December 31, 2020)

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.003	0.006	0.005	0.010	0.014	0.007	0.004	0.008	0.006	0.030	0.003	0.004
Flow (MGD) Daily Maximum	0.003	0.009	0.008	0.010	0.020	0.010	0.006	0.011	0.010	0.050	0.003	0.004
pH (S.U.) Minimum	7.600	7.7	7.400	7.300	7.300	7.700	7.700	7.900	8.000	7.300	8.100	8.000
pH (S.U.) Maximum	7.800	8.0	7.500	7.600	7.600	7.900	7.900	8.100	8.100	7.900	8.100	8.100
Oil and Grease (mg/L) Average Monthly	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Oil and Grease (mg/L) Instantaneous Maximum	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Total Phosphorus (mg/L) Average Monthly	1.7	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.9	1.3
Total Phosphorus (mg/L) Daily Maximum	1.700	0.290	0.250	0.380	0.360	0.360	0.370	0.420	0.340	0.470	0.880	1.300

DMR Data for Outfall 101 (from January 1, 2020 to December 31, 2020)

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.00300	0.00400	0.00400	0.02000	0.01700	0.00800	0.00400	0.00500	0.00600	0.02200	0.00300	0.00400
Flow (MGD) Daily Maximum	0.00300	0.00900	0.00800	0.02000	0.02000	0.01000	0.00700	0.01100	0.01000	0.05000	0.00300	0.00500
pH (S.U.) Minimum	7.70000	8.00000	7.80000	7.60000	7.70000	7.60000	7.90000	7.90000	8.10000	7.30000	8.2000	8.00000
pH (S.U.) Maximum	7.90000	8.20000	7.90000	7.90000	8.10000	8.00000	8.00000	8.10000	8.30000	8.10000	8.20000	8.10000
TSS (lbs/day) Average Monthly	0.06000	0.10000	0.09000	0.40000	0.50000	0.40000	0.10000	0.08000	0.20000	1.00000	0.07000	0.10000
TSS (lbs/day) Daily Maximum	0.06000	0.20000	0.20000	0.50000	0.80000	0.40000	0.20000	0.10000	0.40000	2.00000	0.07000	0.20000

TSS (mg/L) Average Monthly	3.00000	3.00000	3.00000	5.00000	5.00000	7.00000	3.00000	3.00000	6.00000	5.00000	3.00000	5.00000
TSS (mg/L) Daily Maximum	2.50000	2.50000	2.50000	5.60000	5.00000	9.20000	3.70000	2.60000	7.30000	4.90000	2.60000	5.50000
Total Cadmium (lbs/day) Average Monthly	0.00003	0.00005	0.00004	0.00008	0.00010	0.00006	0.00003	0.00003	0.00005	0.00020	0.00003	0.00003
Total Cadmium (lbs/day) Daily Maximum	0.00003	0.00008	0.00007	0.00008	0.00020	0.00008	0.00005	0.00004	0.00008	0.00040	0.00003	0.00003
Total Cadmium (mg/L) Average Monthly	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.0100	0.00100	0.00100
Total Cadmium (mg/L) Daily Maximum	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
Total Chromium (lbs/day) Average Monthly	0.00010	0.00009	0.00008	0.00030	0.00040	0.00020	0.00010	0.00020	0.00080	0.00900	0.00030	0.00050
Total Chromium (lbs/day) Daily Maximum	0.00020	0.00020	0.00010	0.00040	0.00050	0.00030	0.00020	0.00020	0.00100	0.02000	0.00030	0.00050
Total Chromium (mg/L) Average Monthly	0.00500	0.00200	0.00300	0.00400	0.00400	0.00300	0.00400	0.00700	0.01000	0.03000	0.0100	0.02000
Total Chromium (mg/L) Daily Maximum	0.00800	0.00200	0.00300	0.00500	0.00500	0.00300	0.00400	0.00900	0.01700	0.03800	0.01000	0.02000
Total Copper (lbs/day) Average Monthly	0.00100	0.00300	0.00300	0.00800	0.01000	0.00700	0.00200	0.00100	0.00300	0.03000	0.00200	0.00300
Total Copper (lbs/day) Daily Maximum	0.00200	0.00500	0.00500	0.01000	0.0200	0.01000	0.00300	0.00200	0.00700	0.05000	0.00200	0.00300
Total Copper (mg/L) Average Monthly	0.06	0.06	0.07	0.09	0.10	0.12	0.05000	0.04000	0.06	0.10	0.07	0.10
Total Copper (mg/L) Daily Maximum	0.07400	0.06400	0.07600	0.11600	0.13400	0.12800	0.06100	0.04800	0.07800	0.11800	0.07300	0.10400
Total Cyanide (lbs/day) Average Monthly	0.00020	0.00020	0.00020	0.00070	0.00080	0.00030	0.00010	0.00010	0.00040	0.00100	0.00010	0.00010
Total Cyanide (lbs/day) Daily Maximum	0.00020	0.00030	0.00030	0.00100	0.00100	0.00040	0.00020	0.00020	0.00070	0.00200	0.00010	0.00010
Total Cyanide (mg/L) Average Monthly	0.00900	0.00400	0.00600	0.00800	0.01000	0.00500	0.00400	0.00400	0.00600	0.00400	0.00400	0.00400
Total Cyanide (mg/L) Daily Maximum	0.00900	0.00400	0.00700	0.01200	0.01700	0.00500	0.00400	0.00400	0.00800	0.00400	0.00400	0.00400

Total Lead (lbs/day) Average Monthly	0.00003	0.00005	0.00007	0.00008	0.00010	0.00006	0.00003	0.00003	0.00005	0.00020	0.00003	0.00003
Total Lead (lbs/day) Daily Maximum	0.00003	0.00008	0.00010	0.00008	0.00020	0.00008	0.00005	0.00004	0.00008	0.00040	0.00003	0.00003
Total Lead (mg/L) Average Monthly	0.00100	0.00100	0.00200	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
Total Lead (mg/L) Daily Maximum	0.00100	0.00100	0.00200	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
Total Nickel (lbs/day) Average Monthly	0.00600	0.01000	0.00700	0.01000	0.03000	0.02000	0.01000	0.00900	0.02000	0.20000	0.03000	0.05000
Total Nickel (lbs/day) Daily Maximum	0.00600	0.02000	0.01000	0.02000	0.05000	0.03000	0.02000	0.01000	0.03000	0.30000	0.03000	0.06000
Total Nickel (mg/L) Average Monthly	0.23	0.21	0.16	0.18	0.27	0.24	0.32	0.32	0.42	0.63	1.13	1.86
Total Nickel (mg/L) Daily Maximum	0.24100	0.23600	0.18900	0.19000	0.28100	0.31200	0.32400	0.37700	0.42400	0.66500	1.13000	2.23000
Total Silver (lbs/day) Average Monthly	0.00004	0.00005	0.00007	0.00020	0.00020	0.00010	0.00003	0.00003	0.00020	0.00100	0.00008	0.00030
Total Silver (lbs/day) Daily Maximum	0.00005	0.00008	0.00010	0.00030	0.00030	0.00020	0.00005	0.00004	0.00003 0	0.00300	0.00008	0.00030
Total Silver (mg/L) Average Monthly	0.00200	0.00100	0.00200	0.00300	0.00200	0.00200	0.00100	0.00100	0.00300	0.00500	0.00300	0.00900
Total Silver (mg/L) Daily Maximum	0.00200	0.00100	0.00200	0.00300	0.00200	0.00200	0.00100	0.00100	0.00400	0.00600	0.00300	0.01000
Total Zinc (lbs/day) Average Monthly	0.00030	0.00300	0.00030	0.00100	0.00070	0.00060	0.00040	0.00030	0.00600	0.00400	0.00030	0.00050
Total Zinc (lbs/day) Daily Maximum	0.00030	0.00500	0.00050	0.00200	0.00080	0.00070	0.00060	0.00050	0.01000	0.00800	0.00030	0.00060
Total Zinc (mg/L) Average Monthly	0.01000	0.04000	0.01000	0.01000	0.00800	0.01000	0.01000	0.01000 0	0.70	0.01000	0.01000	0.02000
Total Zinc (mg/L) Daily Maximum	0.01200	0.07000	0.01100	0.01900	0.01100	0.02100	0.01100	0.01100	1.39000	0.01800	0.01100	0.02400

DMR Data for Outfall 201 (from January 1, 2020 to December 31, 2020)

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.006	0.006	0.006	6	0.006	0.006	0.006	0.006	0.006	0.012	0.006	0.006
Flow (MGD) Daily Maximum	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.017	0.006	0.006
Temperature (ºF) Daily Average	47.0	55.0	68.0	77.0	85.0	84.0	78.0	74.0	64.0	65.0	54.0	45.0

Existing Effluent Limitations and Monitoring Requirements

The tables below summarize the effluent limits and monitoring requirements implemented in the existing NPDES permit.

Outfall 101

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	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
TSS	Report	Report	XXX	31	60	77.5	1/week	24-Hr Composite
Total Cadmium	Report	Report	XXX	0.26	0.69	0.86	1/week	24-Hr Composite
Total Chromium	Report	Report	XXX	1.71	2.77	4.3	1/week	24-Hr Composite
Total Copper	Report	Report	XXX	2.07	3.38	5.2	1/week	24-Hr Composite
Total Lead	Report	Report	XXX	0.43	0.69	1.0	1/week	24-Hr Composite
Total Nickel	Report	Report	XXX	2.38	3.98	6.0	1/week	24-Hr Composite
Total Silver	Report	Report	XXX	0.24	0.43	0.6	1/week	24-Hr Composite
Total Zinc	Report	Report	XXX	1.48	2.61	3.7	1/week	24-Hr Composite
Total Cyanide	Report	Report	XXX	0.65	1.2	1.6	1/week	24-Hr Composite
Total Toxic Organics	Report	Report	XXX	XXX	2.13	XXX	1/year	See Part C

Compliance Sampling Location: At discharge prior to mixing with the noncontact cooling water from Outfall 201.

Outfall 001

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/week	Calculation
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Phosphorus	XXX	XXX	XXX	2.0	4.0	5.0	1/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab

Compliance Sampling Location: After mixing of Outfalls 101 and 201 and prior to entry of Outfall 001 discharge pipe

Outfall 201

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Daily Average	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/week	Measured
Temperature (ºF)	XXX	XXX	XXX	110	XXX	XXX	1/week	I-S

Compliance Sampling Location: Prior to mixing with process water from Outfall 101.

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	.321
Latitude	40º 3' 0"	**Longitude**	76º 16' 47"

Wastewater Description: Industrial wastewater from metal finishing and electroplating process, NCCW, Stormwater

pH

PA Code §§ 95.2(1) requires effluent pH limits of 6.0 to 9.0 standard units (S.U.) at all times in effluent. The permit will continue to require pH limit of 6.0 to 9.0 S.U.

Chesapeake Bay Total Maximum Daily Load (TMDL)

DEP developed a strategy to comply with the EPA and Chesapeake Bay Foundation requirements by reducing point source loadings of Total Nitrogen (TN) and Total Phosphorus (TP). This strategy can be located in the Pennsylvania Chesapeake Watershed Implementation Plan (WIP), dated January 11, 2011. Subsequently, an update to the WIP was published as the Phase 2 WIP. As part of the Phase 2 WIP, a Phase 2 Watershed Implementation Plan Wastewater Supplement (Phase 2 Supplement) was developed, providing an update on TMDL implementation for point sources and DEP's current implementation strategy for wastewater. The Phase 2 Supplement was most recently revised on September 6, 2017. A new update to the WIP was published as the Phase 3 WIP in August 2019. As part of the Phase 3 WIP, a *Phase 3 Watershed Implementation Plan Wastewater Supplement* (Phase 3 Supplement) was developed, and was most recently revised on December 17, 2019, and is the basis for the development of any Chesapeake Bay related permit parameters. Industrial discharges have been prioritized by Central Office based on their delivered TN and TP loadings to the Bay. Significant industrial wastewater dischargers are facilities that discharge more than 75 lbs/day of TN or 25 lbs/day of TP on an average annual basis and the rest are classified as non-significant dischargers. This facility is classified as a non-significant discharger, From the Phase 3 Supplement, for non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. The Phase 3 Supplement recommends nutrient monitoring at a frequency of 1/quarter for discharges from metal finishing and related processes. Therefore, TN monitoring has been added to the permit. There is an existing TP limit, which will remain in the permit due to anti-backsliding.

Oil and Grease

DEP's SOP No. BPNPSM-PMT-032 states that if the maximum concentration of oil and grease in the discharge is 8 mg/l or greater, establish an effluent limitation of 15 mg/l average monthly and 30 mg/l Instantaneous Maximum (IMAX). There are already existing limits of 15 mg/l average monthly and 30 mg/l IMAX in the permit for Oil and Grease, so they will remain in the renewal permit.

Development of Effluent Limitations

Outfall No. 101 **Design Flow (MGD)** 0.193
Latitude 40º 3' 8" **Longitude** 76º 17' 3"
Wastewater Description: Industrial wastewater from metal finishing and electroplating process

Technology-Based Limitations

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

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Cadmium	0.69	Daily Maximum	433.14(a)	
Cadmium	0.26	Average Monthly	433.14(a)	
Chromium	2.77	Daily Maximum	433.14(a)	
Chromium	1.71	Average Monthly	433.14(a)	
Copper	3.38	Daily Maximum	433.14(a)	
Copper	2.07	Average Monthly	433.14(a)	
Lead	0.69	Daily Maximum	433.14(a)	
Lead	0.43	Average Monthly	433.14(a)	
Nickel	3.98	Daily Maximum	433.14(a)	
Nickel	2.38	Average Monthly	433.14(a)	
Silver	0.43	Daily Maximum	433.14(a)	
Silver	0.24	Average Monthly	433.14(a)	
Zinc	2.61	Daily Maximum	433.14(a)	
Zinc	1.48	Average Monthly	433.14(a)	
Cyanide	1.20	Daily Maximum	433.14(a)	
Cyanide	0.65	Average Monthly	433.14(a)	
TTO	2.13	Daily Maximum	433.14(a)	

This facility is regulated by an Effluent Limitation Guideline (ELG) from the Code of Federal Regulations 40 CFR Part 433 Metal Finishing Point Source Category. The majority of work performed at this facility relative to SIC Code 3471 is electroplating, and the Part 433 provisions apply to plants which perform any of the following six metal finishing operations on any basis material: Electroplating, Electroless Plating, Anodizing, Coating (chromating, phosphating, and coloring), Chemical Etching and Milling, and Printed Circuit Board Manufacture. Part 433.14(a) provides best available technology economically achievable (BAT) limits, which are shown in the table above.

SIC Code 3671 and 3679 relate to the production of electron tubes. The specialized electron tubes manufactured at this facility are covered under Part 469 Subpart C – Cathode Ray Tube Subcategory. Subpart C does not require any limits for existing dischargers, only for new source performance standards and pretreatment standards for existing sources. Section 8.1 of the Development Document for Effluent Limitations Guidelines and Standards for the Electrical and Electronic Components – Phase II explains that no limitations were regulated for existing dischargers as decreed in a Settlement Agreement dated March 9, 1979, NRDC v. Costle.

Toxics

Effluent sample results for toxic pollutants reported on the renewal application were entered into DEP's Toxics Management Spreadsheet Version 1.0 to develop appropriate permit requirements for toxic pollutants of concern. The Toxics Management Spreadsheet combines the functions of PENTOXSD and DEP's Toxics Screening Analysis. Based on effluent sample results reported on the application, the Toxics Management Spreadsheet recommended a monitoring requirement for Hexavalent Chromium and Total Copper. Stream pH and temperature inputs for this model run were based on data acquired from the National Water Quality Monitoring Council website. Data was analyzed from the Water Quality Network (WQN) Station ID 273 on the Conestoga River from October 2004 to December 2018 for pH and hardness. A 90th percentile analysis was performed on the data and resulted in a Stream pH of 8.4 and a Stream Hardness of 270 mg/l.

This data was analyzed based on the guidelines found in DEP's Water Quality Toxics Management Strategy (Document No. 361-0100-003) and DEP's SOP No. BPNPSM-PMT-033. Spreadsheet results are attached to this fact sheet. The Toxics Management Spreadsheet uses the following logic:

a. Establish average monthly and IMAX limits in the draft permit where the maximum reported concentration exceeds 50% of the WQBEL.
b. For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.
c. For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10%-50% of the WQBEL.

Since the reported maximum concentrations were greater than 10% of their respective WQBEL, per DEP's SOP No. BPNPSM-PMT-033, monitoring is necessary for Hexavalent Chromium and Total Copper. The existing NPDES permit contains limits for Total Chromium and Total Copper, which are more stringent and will remain in the permit.

Total Dissolved Solids (TDS)

Total Dissolved Solids and its major constituents including Bromide, Chloride, and Sulfate have become statewide pollutants of concern and threats to DEP's mission to prevent violations of water quality standards. The requirement to monitor these pollutants must be considered under the criteria specified in 25 Pa. Code § 95.10 and the following January 23, 2014 DEP Central Office Directive:
For point source discharges and upon issuance or reissuance of an individual NPDES permit:

- Where the concentration of TDS in the discharge exceeds 1,000 mg/L, or the net TDS load from a discharge exceeds 20,000 lbs/day, and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for TDS, sulfate, chloride, and bromide. Discharges of 0.1 MGD or less should monitor and report for TDS, sulfate, chloride, and bromide if the concentration of TDS in the discharge exceeds 5,000 mg/L.

- Where the concentration of bromide in a discharge exceeds 1 mg/L and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for bromide. Discharges of 0.1 MGD or less should monitor and report for bromide if the concentration of bromide in the discharge exceeds 10 mg/L.

- Where the concentration of 1,4-dioxane (CAS 123-91-1) in a discharge exceeds 10 µg/l and the discharge flow exceeds 0.1 mgd, Part A of the permit should include monitor and report for 1,4-dioxane. Discharges of 0.1 mgd or less should monitor and report for 1,4-dioxane if the concentration of 1,4-dioxane in the discharge exceeds 100 µg/l.

Burle reported a maximum effluent concentration of 8,200 mg/l for TDS. Based upon the data provided in the application, monitoring of TDS, Bromide, Chloride, and Sulfate will be required. A monitoring frequency of 1/month and 24-hour composite sample type will be used for these parameters.

Sampling Frequency & Sample Type

The monitoring requirements were established based on BPJ and/or Table 6-3 and Table 6-4 of DEP's Technical Guidance No. 362-0400-001.

Anti-Degradation

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303(d) Listed Streams

The discharge is located on a stream segment that is designated on the 303(d) list as impaired. There is an aquatic life impairment from organic enrichment due to agriculture, siltation due to rural (residential areas), and siltation due to dam or impoundment. There is a recreational impairment due to pathogens from agriculture and urban runoff/storm sewers.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Backsliding

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented in the existing NPDES permit unless any exceptions are addressed by DEP in this fact sheet.

Development of Effluent Limitations

Outfall No.	201	**Design Flow (MGD)**	0.128
Latitude	40º 3' 5"	**Longitude**	76º 16' 55"
Wastewater Description:	NCCW and Stormwater		

Temperature

Outfall 201 has a design flow of 0.128 mgd, which consists of NCCW and stormwater. A reasonable potential (RP) analysis was performed for temperature. Effluent limitations for temperature were calculated using the Case 2 Thermal Worksheet with a wastewater flow of 0.128 mgd. A stream Q_{7-10} flow of 38.9 cfs was used in the temperature worksheet. The worksheet recommended permit limits for a discharge to WWF of 110°F, which is the cap for limits generated by the worksheet. This recommendation is based on the total design flow which includes stormwater. Additionally, the existing flow is much lower than the design flow. It is recommended to continue the temperature limit of 110°F in the permit renewal. A printout of the worksheet is attached.

Stormwater Limitations

Burle Business Park, LP is classified under SIC Code 3671, 3679, and 3471. The facility's stormwater discharge does fall under the EPA definition of storm water associated with industrial activity per 40 CFR 122.26(b)(14); however, the site does not allow any raw, intermediate, or final products to be exposed to the stormwater. Due to this, the permit will not include any monitoring requirements.

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.

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	Calculation
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	1/month	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	Report Avg Quarterly	XXX	XXX	1/quarter	24-Hr Composite
Total Kjeldahl Nitrogen	XXX	XXX	XXX	Report Avg Quarterly	XXX	XXX	1/quarter	24-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Avg Quarterly	XXX	XXX	1/quarter	Calculation
Total Phosphorus	XXX	XXX	XXX	2.0	4.0	5.0	1/month	24-Hr Composite

Compliance Sampling Location: After mixing of Outfalls 101 and 201 and prior to entry of Outfall 001 discharge pipe

Other Comments: None

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.

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
TSS	Report	Report	XXX	31.0	60.0	77.5	1/week	24-Hr Composite
Total Cadmium	Report	Report	XXX	0.26	0.69	0.86	1/week	24-Hr Composite
Total Chromium	Report	Report	XXX	1.71	2.77	4.3	1/week	24-Hr Composite
Total Copper	Report	Report	XXX	2.07	3.38	5.2	1/week	24-Hr Composite
Total Cyanide	Report	Report	XXX	0.65	1.2	1.6	1/week	24-Hr Composite
Total Lead	Report	Report	XXX	0.43	0.69	1	1/week	24-Hr Composite
Total Nickel	Report	Report	XXX	2.38	3.98	6	1/week	24-Hr Composite
Total Silver	Report	Report	XXX	0.24	0.43	0.6	1/week	24-Hr Composite
Total Zinc	Report	Report	XXX	1.48	2.61	3.7	1/week	24-Hr Composite
Total Toxic Organics	Report Annl Avg	Report	XXX	XXX	2.13	XXX	1/year	24-Hr Composite
TDS	XXX	XXX	XXX	XXX	Report	XXX	1/month	24-Hr Composite
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/month	24-Hr Composite
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/month	24-Hr Composite
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/month	24-Hr Composite

Compliance Sampling Location: At discharge prior to mixing with the noncontact cooling water from Outfall 201.

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.

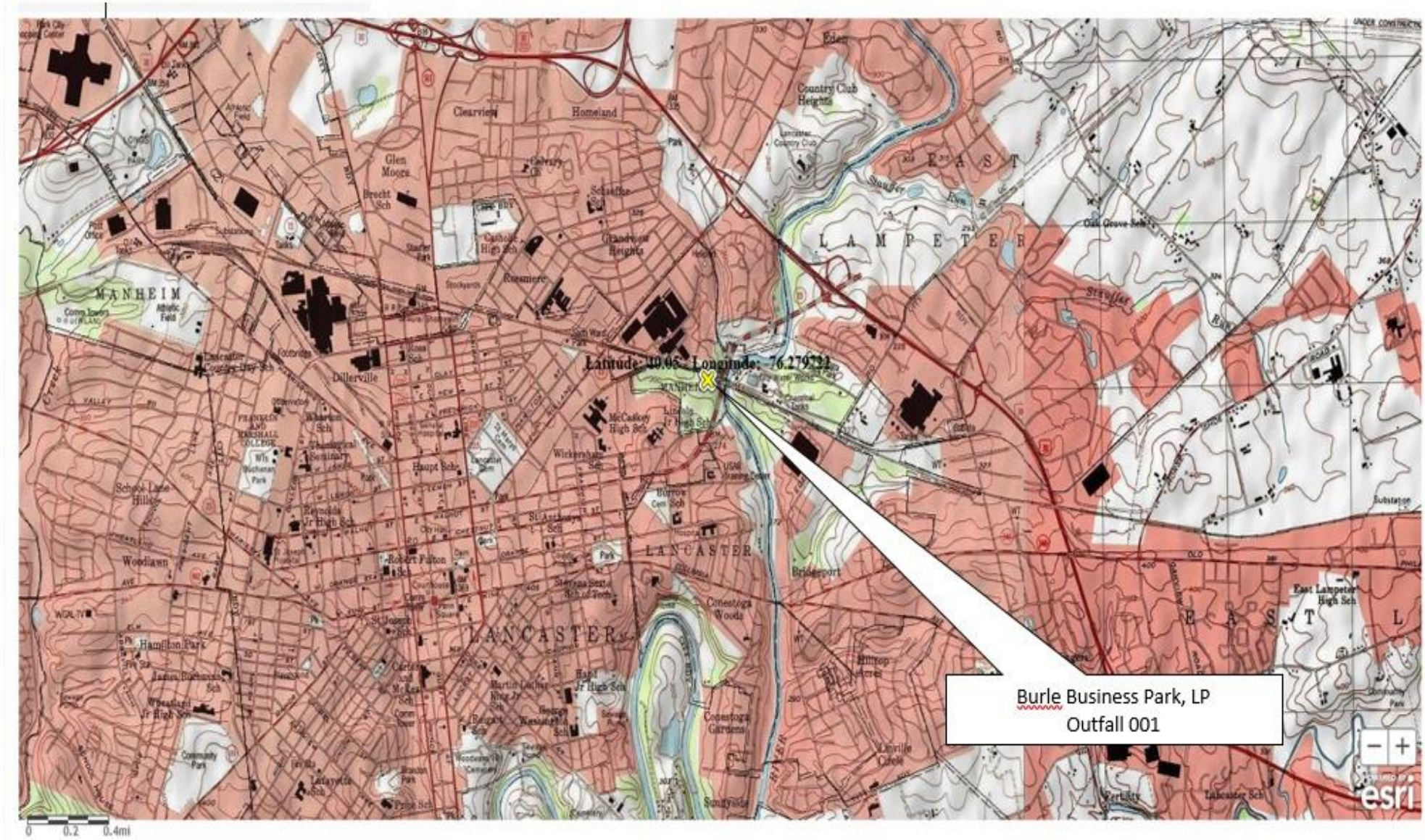
Outfall 201, Effective Period: Permit Effective Date through Permit Expiration Date.

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
Temperature (ºF)	XXX	XXX	XXX	110.0	XXX	XXX	1/week	I-S

Compliance Sampling Location: Prior to mixing with process water from Outfall 101.

Other Comments: None

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☒	Temperature Model Spreadsheet (see Attachment)
☒	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☒	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP: BCW-PMT-032
☐	Other:



Enter report title:

Burle Business Park, LP PA0008508 Outfall 001

Enter comments:

Some comments here

Burle Business Park, LP PA0008508 Outfall 001

Region ID:	PA
Workspace ID:	PA20210209194414839000
Clicked Point (Latitude, Longitude):	40.04871, -76.27809
Time:	2021-02-09 14:44:38 -0500

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	324	square miles
BSLOPD	Mean basin slope measured in degrees		degrees
ROCKDEP	Depth to rock		feet
URBAN	Percentage of basin with urban development		percent

Low-Flow Statistics Parameters[100 Percent (323 square miles) Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	324	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees		degrees	1.7	6.4
ROCKDEP	Depth to Rock		feet	4.13	5.21
URBAN	Percent Urban		percent	0	89

Low-Flow Statistics Flow Report[100 Percent (323 square miles) Low Flow Region 1]

Statistic	Value	Unit

Low-Flow Statistics Citations

Application Version: 4.4.0

Enter report title:

Burle Business Park, LP PA0008508 RMI = 22.57

Enter comments:

Some comments here

Burle Business Park, LP PA0008508 RMI = 22.57

Region ID:	PA
Workspace ID:	PA20210209195054689000
Clicked Point (Latitude, Longitude):	40.03713, -76.27329
Time:	2021-02-09 14:51:14 -0500

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	325	square miles
BSLOPD	Mean basin slope measured in degrees	4.2775	degrees
ROCKDEP	Depth to rock	4.8	feet
URBAN	Percentage of basin with urban development	8.7129	percent

Low-Flow Statistics Parameters[100 Percent (325 square miles) Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	325	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	4.2775	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4.8	feet	4.13	5.21
URBAN	Percent Urban	8.7129	percent	0	89

Low-Flow Statistics Flow Report[100 Percent (325 square miles) Low Flow Region 1]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	73.4	ft^3/s	46	46
30 Day 2 Year Low Flow	93.5	ft^3/s	38	38
7 Day 10 Year Low Flow	40.8	ft^3/s	51	51
30 Day 10 Year Low Flow	51.4	ft^3/s	46	46
90 Day 10 Year Low Flow	76.7	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p.

Application Version: 4.4.0

Facility: Burle Business Park, LP
Permit Number: PA0008508
Stream Name: Conestoga River
Analyst/Engineer: Benjamin Lockwood
Stream Q7-10 (cfs): 38.9

	Facility Flows				Stream Flows			
	Intake (Stream) (MGD)	Intake (External) (MGD)	Consumptive Loss (MGD)	Discharge Flow (MGD)	PMF	Upstream Stream Flow (cfs)	Adjusted Stream Flow (cfs)	Downstream Stream Flow (cfs)
Jan 1-31	0	0.128	0	0.128	1.00	124.48	124.48	124.68
Feb 1-29	0	0.128	0	0.128	1.00	136.15	136.15	136.35
Mar 1-31	0	0.128	0	0.128	1.00	272.30	272.30	272.50
Apr 1-15	0	0.128	0	0.128	1.00	361.77	361.77	361.97
Apr 16-30	0	0.128	0	0.128	1.00	361.77	361.77	361.97
May 1-15	0	0.128	0	0.128	1.00	198.39	198.39	198.59
May 16-31	0	0.128	0	0.128	1.00	198.39	198.39	198.59
Jun 1-15	0	0.128	0	0.128	1.00	116.70	116.70	116.90
Jun 16-30	0	0.128	0	0.128	1.00	116.70	116.70	116.90
Jul 1-31	0	0.128	0	0.128	1.00	66.13	66.13	66.33
Aug 1-15	0	0.128	0	0.128	1.00	54.46	54.46	54.66
Aug 16-31	0	0.128	0	0.128	1.00	54.46	54.46	54.66
Sep 1-15	0	0.128	0	0.128	1.00	42.79	42.79	42.99
Sep 16-30	0	0.128	0	0.128	1.00	42.79	42.79	42.99
Oct 1-15	0	0.128	0	0.128	1.00	46.68	46.68	46.88
Oct 16-31	0	0.128	0	0.128	1.00	46.68	46.68	46.88
Nov 1-15	0	0.128	0	0.128	1.00	62.24	62.24	62.44
Nov 16-30	0	0.128	0	0.128	1.00	62.24	62.24	62.44
Dec 1-31	0	0.128	0	0.128	1.00	93.36	93.36	93.56

Please forward all comments to Tom Starosta at 717-787-4317, tstarosta@state.pa.us.
Version 2.0 -- 07/01/2005 Reference: Implementation Guidance for Temperature Criteria, DEP-ID: 391-2000-017
NOTE: The user can only edit fields that are blue.
NOTE: MGD x 1.547 = cfs.

Facility: **Burle Business Park, LP**
Permit Number: PA0008508
Stream: Conestoga River

	WWF Criteria (°F)	CWF Criteria (°F)	TSF Criteria (°F)	316 Criteria (°F)	Q7-10 Multipliers (Used in Analysis)	Q7-10 Multipliers (Default - Info Only)
Jan 1-31	40	38	40	58	3.2	3.2
Feb 1-29	40	38	40	58	3.5	3.5
Mar 1-31	46	42	46	58	7	7
Apr 1-15	52	48	52	58	9.3	9.3
Apr 16-30	58	52	58	58	9.3	9.3
May 1-15	64	54	64	64	5.1	5.1
May 16-31	72	58	68	72	5.1	5.1
Jun 1-15	80	60	70	80	3	3
Jun 16-30	84	64	72	84	3	3
Jul 1-31	87	66	74	87	1.7	1.7
Aug 1-15	87	66	80	87	1.4	1.4
Aug 16-31	87	66	87	87	1.4	1.4
Sep 1-15	84	64	84	84	1.1	1.1
Sep 16-30	78	60	78	78	1.1	1.1
Oct 1-15	72	54	72	72	1.2	1.2
Oct 16-31	66	50	66	66	1.2	1.2
Nov 1-15	58	46	58	58	1.6	1.6
Nov 16-30	50	42	50	58	1.6	1.6
Dec 1-31	42	40	42	58	2.4	2.4

NOTES:
WWF= Warm water fishes
CWF= Cold water fishes
TSF= Trout stocking

Facility: **Burle Business Park, LP**
Permit Number: PA0008508
Stream: Conestoga River

	WWF Ambient Stream Temperature (ºF) (Default)	Ambient Stream Temperature (ºF) (Site-specific data)	Target Maximum Stream Temp.[1] (ºF)	WWF Daily WLA[2] (Million BTUs/day)	WWF Daily WLA[3] (ºF)	at Discharge Flow (MGD)	PMF
Jan 1-31	35	0	40	N/A -- Case 2	110.0	0.128	1.00
Feb 1-29	35	0	40	N/A -- Case 2	110.0	0.128	1.00
Mar 1-31	40	0	46	N/A -- Case 2	110.0	0.128	1.00
Apr 1-15	47	0	52	N/A -- Case 2	110.0	0.128	1.00
Apr 16-30	53	0	58	N/A -- Case 2	110.0	0.128	1.00
May 1-15	58	0	64	N/A -- Case 2	110.0	0.128	1.00
May 16-31	62	0	72	N/A -- Case 2	110.0	0.128	1.00
Jun 1-15	67	0	80	N/A -- Case 2	110.0	0.128	1.00
Jun 16-30	71	0	84	N/A -- Case 2	110.0	0.128	1.00
Jul 1-31	75	0	87	N/A -- Case 2	110.0	0.128	1.00
Aug 1-15	74	0	87	N/A -- Case 2	110.0	0.128	1.00
Aug 16-31	74	0	87	N/A -- Case 2	110.0	0.128	1.00
Sep 1-15	71	0	84	N/A -- Case 2	110.0	0.128	1.00
Sep 16-30	65	0	78	N/A -- Case 2	110.0	0.128	1.00
Oct 1-15	60	0	72	N/A -- Case 2	110.0	0.128	1.00
Oct 16-31	54	0	66	N/A -- Case 2	110.0	0.128	1.00
Nov 1-15	48	0	58	N/A -- Case 2	110.0	0.128	1.00
Nov 16-30	42	0	50	N/A -- Case 2	110.0	0.128	1.00
Dec 1-31	37	0	42	N/A -- Case 2	110.0	0.128	1.00

[1] This is the maximum of the WWF WQ criterion or the ambient temperature. The ambient temperature may be either the design (median) temperature for WWF, or the ambient stream temperature based on site-specific data entered by the user. A minimum of 1ºF above ambient stream temperature is allocated.
[2] The WLA expressed in Million BTUs/day is valid for Case 1 scenarios, and disabled for Case 2 scenarios.
[3] The WLA expressed in ºF is valid only if the limit is tied to a daily discharge flow limit (may be used for Case 1 or Case 2). WLAs greater than 110ºF are displayed as 110ºF.

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Toxics Management Spreadsheet
Version 1.1, October 2020

Discharge Information

Instructions | Discharge | Stream

Facility: **Burle Business Park, LP** NPDES Permit No.: **PA0008508** Outfall No.: **101**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Industrial wastewater**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.193	180	7.2						

	Discharge Pollutant	Units	Max Discharge Conc		0 if left blank: Trib Conc	0 if left blank: Stream Conc	0.5 if left blank: Daily CV	0.5 if left blank: Hourly CV	0 if left blank: Strea m CV	0 if left blank: Fate Coeff	0 if left blank: FOS	1 if left blank: Criteri a Mod	1 if left blank: Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L		8200									
	Chloride (PWS)	mg/L											
	Bromide	mg/L											
	Sulfate (PWS)	mg/L											
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L											
	Total Antimony	µg/L	<	2.5									
	Total Arsenic	µg/L	<	2.5									
	Total Barium	µg/L											
	Total Beryllium	µg/L	<	1									
	Total Boron	µg/L											
	Total Cadmium	µg/L	<	2.5									
	Total Chromium (III)	µg/L	<	10									
	Hexavalent Chromium	µg/L		41									
	Total Cobalt	µg/L											
	Total Copper	µg/L		94									
	Free Cyanide	µg/L	<	10									
	Total Cyanide	µg/L		39									
	Dissolved Iron	µg/L											
	Total Iron	µg/L											
	Total Lead	µg/L		0.4									
	Total Manganese	µg/L											
	Total Mercury	µg/L	<	0.1									
	Total Nickel	µg/L		803									
	Total Phenols (Phenolics) (PWS)	µg/L	<	50									
	Total Selenium	µg/L	<	2.5									
	Total Silver	µg/L		8									
	Total Thallium	µg/L	<	0.1									
	Total Zinc	µg/L		26									
	Total Molybdenum	µg/L											
	Acrolein	µg/L	<	5									
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<	1									
	Benzene	µg/L	<	1									
	Bromoform	µg/L	<	2									

Group 3	Carbon Tetrachloride	µg/L	<	1										
	Chlorobenzene	µg/L	<	2										
	Chlorodibromomethane	µg/L		1.2										
	Chloroethane	µg/L	<	2										
	2-Chloroethyl Vinyl Ether	µg/L	<	2										
	Chloroform	µg/L		3.1										
	Dichlorobromomethane	µg/L		1.5										
	1,1-Dichloroethane	µg/L	<	2										
	1,2-Dichloroethane	µg/L	<	1										
	1,1-Dichloroethylene	µg/L	<	2										
	1,2-Dichloropropane	µg/L	<	1										
	1,3-Dichloropropylene	µg/L	<	2										
	1,4-Dioxane	µg/L	<											
	Ethylbenzene	µg/L	<	2										
	Methyl Bromide	µg/L	<	2										
	Methyl Chloride	µg/L	<	2										
	Methylene Chloride	µg/L	<	2										
	1,1,2,2-Tetrachloroethane	µg/L	<	1										
	Tetrachloroethylene	µg/L	<	1										
	Toluene	µg/L	<	2										
	1,2-trans-Dichloroethylene	µg/L	<	2										
	1,1,1-Trichloroethane	µg/L	<	2										
	1,1,2-Trichloroethane	µg/L	<	2										
	Trichloroethylene	µg/L		1.3										
	Vinyl Chloride	µg/L	<	1										
Group 4	2-Chlorophenol	µg/L	<	2										
	2,4-Dichlorophenol	µg/L	<	2										
	2,4-Dimethylphenol	µg/L	<	2										
	4,6-Dinitro-o-Cresol	µg/L	<	2										
	2,4-Dinitrophenol	µg/L	<	10										
	2-Nitrophenol	µg/L	<	2										
	4-Nitrophenol	µg/L	<	10										
	p-Chloro-m-Cresol	µg/L	<	2										
	Pentachlorophenol	µg/L		29										
	Phenol	µg/L	<	2										
	2,4,6-Trichlorophenol	µg/L	<	2										
Group 5	Acenaphthene	µg/L	<	2										
	Acenaphthylene	µg/L	<	2										
	Anthracene	µg/L	<	2										
	Benzidine	µg/L	<	10										
	Benzo(a)Anthracene	µg/L	<	0.5										
	Benzo(a)Pyrene	µg/L	<	0.5										
	3,4-Benzofluoranthene	µg/L	<	0.9										
	Benzo(ghi)Perylene	µg/L	<	0.5										
	Benzo(k)Fluoranthene	µg/L	<	0.55										
	Bis(2-Chloroethoxy)Methane	µg/L	<	2										
	Bis(2-Chloroethyl)Ether	µg/L	<	0.5										
	Bis(2-Chloroisopropyl)Ether	µg/L	<	2										
	Bis(2-Ethylhexyl)Phthalate	µg/L	<	3										
	4-Bromophenyl Phenyl Ether	µg/L	<	2										
	Butyl Benzyl Phthalate	µg/L	<	2										
	2-Chloronaphthalene	µg/L	<	2										
	4-Chlorophenyl Phenyl Ether	µg/L	<	2										
	Chrysene	µg/L	<	1.8										
	Dibenzo(a,h)Anthrancene	µg/L	<	0.5										
	1,2-Dichlorobenzene	µg/L	<	2										
	1,3-Dichlorobenzene	µg/L	<	2										
	1,4-Dichlorobenzene	µg/L	<	2										
	3,3-Dichlorobenzidine	µg/L	<	2										
	Diethyl Phthalate	µg/L	<	2										
	Dimethyl Phthalate	µg/L	<	2										
	Di-n-Butyl Phthalate	µg/L	<	1										
	2,4-Dinitrotoluene	µg/L	<	2										

	2,6-Dinitrotoluene	µg/L	<	2										
	Di-n-Octyl Phthalate	µg/L	<	2										
	1,2-Diphenylhydrazine	µg/L	<	2										
	Fluoranthene	µg/L	<	2										
	Fluorene	µg/L	<	2										
	Hexachlorobenzene	µg/L	<	1										
	Hexachlorobutadiene	µg/L	<	1										
	Hexachlorocyclopentadiene	µg/L	<	2										
	Hexachloroethane	µg/L	<	1										
	Indeno(1,2,3-cd)Pyrene	µg/L	<	0.5										
	Isophorone	µg/L	<	2										
	Naphthalene	µg/L	<	2										
	Nitrobenzene	µg/L	<	2										
	n-Nitrosodimethylamine	µg/L	<	1										
	n-Nitrosodi-n-Propylamine	µg/L	<	1										
	n-Nitrosodiphenylamine	µg/L	<	1										
	Phenanthrene	µg/L	<	2										
	Pyrene	µg/L	<	2										
	1,2,4-Trichlorobenzene	µg/L	<	2										
Group 6	Aldrin	µg/L	<											
	alpha-BHC	µg/L	<											
	beta-BHC	µg/L	<											
	gamma-BHC	µg/L	<											
	delta BHC	µg/L	<											
	Chlordane	µg/L	<											
	4,4-DDT	µg/L	<											
	4,4-DDE	µg/L	<											
	4,4-DDD	µg/L	<											
	Dieldrin	µg/L	<											
	alpha-Endosulfan	µg/L	<											
	beta-Endosulfan	µg/L	<											
	Endosulfan Sulfate	µg/L	<											
	Endrin	µg/L	<											
	Endrin Aldehyde	µg/L	<											
	Heptachlor	µg/L	<											
	Heptachlor Epoxide	µg/L	<											
	PCB-1016	µg/L	<											
	PCB-1221	µg/L	<											
	PCB-1232	µg/L	<											
	PCB-1242	µg/L	<											
	PCB-1248	µg/L	<											
	PCB-1254	µg/L	<											
	PCB-1260	µg/L	<											
	PCBs, Total	µg/L	<											
	Toxaphene	µg/L	<											
	2,3,7,8-TCDD	ng/L	<											
Group 7	Gross Alpha	pCi/L												
	Total Beta	pCi/L	<											
	Radium 226/228	pCi/L	<											
	Total Strontium	µg/L	<											
	Total Uranium	µg/L	<											
	Osmotic Pressure	mOs/kg												

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Toxics Management Spreadsheet
Version 1.1, October 2020

Stream / Surface Water Information

Burle Business Park, LP, NPDES Permit No. PA0008508, Outfall 101

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Conestoga River** No. Reaches to Model: **1**

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	007548	23.4	246	324			Yes
End of Reach 1	007548	22.57	243	325			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	23.4	0.1	38.9									270	8.4		
End of Reach 1	22.57	0.1	39									270	8.4		

Q_h

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	23.4														
End of Reach 1	22.57														

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Toxics Management Spreadsheet
Version 1.1, October 2020

Model Results

Burle Business Park, LP, NPDES Permit No. PA0008508, Outfall 101

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | ◉ All ○ Inputs ○ Results ○ Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 15 PMF: 0.162 Analysis Hardness (mg/l): 265.93 Analysis pH: 8.18

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	1,100	1,100	24,322	
Total Arsenic	0	0		0	340	340	7,518	Chem Translator of 1 applied
Total Cadmium	0	0		0	5.207	5.77	127	Chem Translator of 0.903 applied
Total Chromium (III)	0	0		0	1269.342	4,017	88,819	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	360	Chem Translator of 0.982 applied
Total Copper	0	0		0	33.774	35.2	778	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	22	22.0	486	
Total Lead	0	0		0	183.890	284	6,270	Chem Translator of 0.648 applied
Total Mercury	0	0		0	1.400	1.65	36.4	Chem Translator of 0.85 applied
Total Nickel	0	0		0	1071.069	1,073	23,730	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	17.299	20.4	450	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	1,437	
Total Zinc	0	0		0	268.386	274	6,068	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	66.3	
Acrylonitrile	0	0		0	650	650	14,372	
Benzene	0	0		0	640	640	14,151	
Bromoform	0	0		0	1,800	1,800	39,800	
Carbon Tetrachloride	0	0		0	2,800	2,800	61,911	
Chlorobenzene	0	0		0	1,200	1,200	26,533	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	398,001	
Chloroform	0	0		0	1,900	1,900	42,011	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	

1,2-Dichloroethane	0	0		0	15,000	15,000	331,668	
1,1-Dichloroethylene	0	0		0	7,500	7,500	165,834	
1,2-Dichloropropane	0	0		0	11,000	11,000	243,223	
1,3-Dichloropropylene	0	0		0	310	310	6,854	
Ethylbenzene	0	0		0	2,900	2,900	64,122	
Methyl Bromide	0	0		0	550	550	12,161	
Methyl Chloride	0	0		0	28,000	28,000	619,113	
Methylene Chloride	0	0		0	12,000	12,000	265,334	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	22,111	
Tetrachloroethylene	0	0		0	700	700	15,478	
Toluene	0	0		0	1,700	1,700	37,589	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	150,356	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	66,334	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	75,178	
Trichloroethylene	0	0		0	2,300	2,300	50,856	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	12,382	
2,4-Dichlorophenol	0	0		0	1,700	1,700	37,589	
2,4-Dimethylphenol	0	0		0	660	660	14,593	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	1,769	
2,4-Dinitrophenol	0	0		0	660	660	14,593	
2-Nitrophenol	0	0		0	8,000	8,000	176,890	
4-Nitrophenol	0	0		0	2,300	2,300	50,856	
p-Chloro-m-Cresol	0	0		0	160	160	3,538	
Pentachlorophenol	0	0		0	28.468	28.5	629	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	460	460	10,171	
Acenaphthene	0	0		0	83	83.0	1,835	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	300	300	6,633	
Benzo(a)Anthracene	0	0		0	0.5	0.5	11.1	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	30,000	30,000	663,336	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	99,500	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	5,970	
Butyl Benzyl Phthalate	0	0		0	140	140	3,096	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	820	820	18,131	
1,3-Dichlorobenzene	0	0		0	350	350	7,739	
1,4-Dichlorobenzene	0	0		0	730	730	16,141	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	88,445	
Dimethyl Phthalate	0	0		0	2,500	2,500	55,278	

Di-n-Butyl Phthalate	0	0		0	110	110	2,432	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	35,378	
2,6-Dinitrotoluene	0	0		0	990	990	21,890	
1,2-Diphenylhydrazine	0	0		0	15	15.0	332	
Fluoranthene	0	0		0	200	200	4,422	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	10	10.0	221	
Hexachlorocyclopentadiene	0	0		0	5	5.0	111	
Hexachloroethane	0	0		0	60	60.0	1,327	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	221,112	
Naphthalene	0	0		0	140	140	3,096	
Nitrobenzene	0	0		0	4,000	4,000	88,445	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	375,890	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	6,633	
Phenanthrene	0	0		0	5	5.0	111	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	2,874	

☑ *CFC* CCT (min): ###### PMF: 1 Analysis Hardness (mg/l): 269.31 Analysis pH: 8.35

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	28,883	
Total Arsenic	0	0		0	150	150	19,693	Chem Translator of 1 applied
Total Cadmium	0	0		0	0.489	0.56	74.0	Chem Translator of 0.868 applied
Total Chromium (III)	0	0		0	166.835	194	25,469	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	1,365	Chem Translator of 0.962 applied
Total Copper	0	0		0	20.881	21.8	2,856	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	5.2	5.2	683	
Total Lead	0	0		0	7.262	11.2	1,474	Chem Translator of 0.647 applied
Total Mercury	0	0		0	0.770	0.91	119	Chem Translator of 0.85 applied
Total Nickel	0	0		0	120.242	121	15,834	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	655	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	1,707	
Total Zinc	0	0		0	273.497	277	36,416	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	394	
Acrylonitrile	0	0		0	130	130	17,067	
Benzene	0	0		0	130	130	17,067	
Bromoform	0	0		0	370	370	48,576	
Carbon Tetrachloride	0	0		0	560	560	73,521	

Chlorobenzene	0	0		0	240	240	31,509	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	459,505	
Chloroform	0	0		0	390	390	51,202	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	406,991	
1,1-Dichloroethylene	0	0		0	1,500	1,500	196,931	
1,2-Dichloropropane	0	0		0	2,200	2,200	288,832	
1,3-Dichloropropylene	0	0		0	61	61.0	8,009	
Ethylbenzene	0	0		0	580	580	76,147	
Methyl Bromide	0	0		0	110	110	14,442	
Methyl Chloride	0	0		0	5,500	5,500	722,080	
Methylene Chloride	0	0		0	2,400	2,400	315,089	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	27,570	
Tetrachloroethylene	0	0		0	140	140	18,380	
Toluene	0	0		0	330	330	43,325	
1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	183,802	
1,1,1-Trichloroethane	0	0		0	610	610	80,085	
1,1,2-Trichloroethane	0	0		0	680	680	89,275	
Trichloroethylene	0	0		0	450	450	59,079	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	14,442	
2,4-Dichlorophenol	0	0		0	340	340	44,638	
2,4-Dimethylphenol	0	0		0	130	130	17,067	
4,6-Dinitro-o-Cresol	0	0		0	16	16.0	2,101	
2,4-Dinitrophenol	0	0		0	130	130	17,067	
2-Nitrophenol	0	0		0	1,600	1,600	210,060	
4-Nitrophenol	0	0		0	470	470	61,705	
p-Chloro-m-Cresol	0	0		0	30	30.0	3,939	
Pentachlorophenol	0	0		0	21.840	21.8	2,867	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	11,947	
Acenaphthene	0	0		0	17	17.0	2,232	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	59	59.0	7,746	
Benzo(a)Anthracene	0	0		0	0.1	0.1	13.1	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	6,000	6,000	787,724	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	119,471	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	7,090	
Butyl Benzyl Phthalate	0	0		0	35	35.0	4,595	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	

Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	160	160	21,006	
1,3-Dichlorobenzene	0	0		0	69	69.0	9,059	
1,4-Dichlorobenzene	0	0		0	150	150	19,693	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	105,030	
Dimethyl Phthalate	0	0		0	500	500	65,644	
Di-n-Butyl Phthalate	0	0		0	21	21.0	2,757	
2,4-Dinitrotoluene	0	0		0	320	320	42,012	
2,6-Dinitrotoluene	0	0		0	200	200	26,257	
1,2-Diphenylhydrazine	0	0		0	3	3.0	394	
Fluoranthene	0	0		0	40	40.0	5,251	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	2	2.0	263	
Hexachlorocyclopentadiene	0	0		0	1	1.0	131	
Hexachloroethane	0	0		0	12	12.0	1,575	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	275,703	
Naphthalene	0	0		0	43	43.0	5,645	
Nitrobenzene	0	0		0	810	810	106,343	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	446,377	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	7,746	
Phenanthrene	0	0		0	1	1.0	131	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	3,413	

☑ ***THH*** CCT (min): ###### PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Total Antimony	0	0		0	5.6	5.6	735	
Total Arsenic	0	0		0	10	10.0	1,313	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Free Cyanide	0	0		0	140	140	18,380	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.050	0.05	6.56	
Total Nickel	0	0		0	610	610	80,085	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	

Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	31.5	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	6	6.0	788	
Acrylonitrile	0	0		0	N/A	N/A	N/A	
Benzene	0	0		0	N/A	N/A	N/A	
Bromoform	0	0		0	N/A	N/A	N/A	
Carbon Tetrachloride	0	0		0	N/A	N/A	N/A	
Chlorobenzene	0	0		0	130	130	17,067	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	N/A	N/A	N/A	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	N/A	N/A	N/A	
1,1-Dichloroethylene	0	0		0	33	33.0	4,332	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
1,3-Dichloropropylene	0	0		0	N/A	N/A	N/A	
Ethylbenzene	0	0		0	530	530	69,582	
Methyl Bromide	0	0		0	47	47.0	6,171	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	N/A	N/A	N/A	
Toluene	0	0		0	1,300	1,300	170,673	
1,2-trans-Dichloroethylene	0	0		0	140	140	18,380	
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A	
1,1,2-Trichloroethane	0	0		0	N/A	N/A	N/A	
Trichloroethylene	0	0		0	N/A	N/A	N/A	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	81	81.0	10,634	
2,4-Dichlorophenol	0	0		0	77	77.0	10,109	
2,4-Dimethylphenol	0	0		0	380	380	49,889	
4,6-Dinitro-o-Cresol	0	0		0	13	13.0	1,707	
2,4-Dinitrophenol	0	0		0	69	69.0	9,059	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	N/A	N/A	N/A	
Phenol	0	0		0	10,400	10,400	1,365,388	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	670	670	87,962	
Anthracene	0	0		0	8,300	8,300	1,089,684	
Benzidine	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene	0	0		0	N/A	N/A	N/A	

Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroisopropyl)Ether	0	0		0	1,400	1,400	183,802	
Bis(2-Ethylhexyl)Phthalate	0	0		0	N/A	N/A	N/A	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	150	150	19,693	
2-Chloronaphthalene	0	0		0	1,000	1,000	131,287	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	420	420	55,141	
1,3-Dichlorobenzene	0	0		0	420	420	55,141	
1,4-Dichlorobenzene	0	0		0	420	420	55,141	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	17,000	17,000	2,231,884	
Dimethyl Phthalate	0	0		0	270,000	270,000	35,447,562	
Di-n-Butyl Phthalate	0	0		0	2,000	2,000	262,575	
2,4-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
2,6-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
1,2-Diphenylhydrazine	0	0		0	N/A	N/A	N/A	
Fluoranthene	0	0		0	130	130	17,067	
Fluorene	0	0		0	1,100	1,100	144,416	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	N/A	N/A	N/A	
Hexachlorocyclopentadiene	0	0		0	40	40.0	5,251	
Hexachloroethane	0	0		0	N/A	N/A	N/A	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.0038	0.004	0.5	
Isophorone	0	0		0	35	35.0	4,595	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	17	17.0	2,232	
n-Nitrosodimethylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	N/A	N/A	N/A	
Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	830	830	108,968	
1,2,4-Trichlorobenzene	0	0		0	35	35.0	4,595	

☑ *CRL* CCT (min): ####### PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	

Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Free Cyanide	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	0.051	0.051	31.2	
Benzene	0	0		0	1.2	1.2	734	
Bromoform	0	0		0	4.3	4.3	2,629	
Carbon Tetrachloride	0	0		0	0.23	0.23	141	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.4	0.4	245	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	5.7	5.7	3,485	
Dichlorobromomethane	0	0		0	0.55	0.55	336	
1,2-Dichloroethane	0	0		0	0.38	0.38	232	
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
1,3-Dichloropropylene	0	0		0	0.34	0.34	208	
Ethylbenzene	0	0		0	N/A	N/A	N/A	
Methyl Bromide	0	0		0	N/A	N/A	N/A	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	4.6	4.6	2,812	
1,1,2,2-Tetrachloroethane	0	0		0	0.17	0.17	104	
Tetrachloroethylene	0	0		0	0.69	0.69	422	
Toluene	0	0		0	N/A	N/A	N/A	
1,2-trans-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A	
1,1,2-Trichloroethane	0	0		0	0.59	0.59	361	
Trichloroethylene	0	0		0	2.5	2.5	1,528	
Vinyl Chloride	0	0		0	0.025	0.025	15.3	
2-Chlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dichlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dimethylphenol	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol	0	0		0	N/A	N/A	N/A	
2,4-Dinitrophenol	0	0		0	N/A	N/A	N/A	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	

4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	0.270	0.27	165	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.4	1.4	856	
Acenaphthene	0	0		0	N/A	N/A	N/A	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	0.000086	0.00009	0.053	
Benzo(a)Anthracene	0	0		0	0.0038	0.004	2.32	
Benzo(a)Pyrene	0	0		0	0.0038	0.004	2.32	
3,4-Benzofluoranthene	0	0		0	0.0038	0.004	2.32	
Benzo(k)Fluoranthene	0	0		0	0.0038	0.004	2.32	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	18.3	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	1.2	1.2	734	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	N/A	N/A	N/A	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	0.0038	0.004	2.32	
Dibenzo(a,h)Anthrancene	0	0		0	0.0038	0.004	2.32	
1,2-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,3-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,4-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
3,3-Dichlorobenzidine	0	0		0	0.021	0.021	12.8	
Diethyl Phthalate	0	0		0	N/A	N/A	N/A	
Dimethyl Phthalate	0	0		0	N/A	N/A	N/A	
Di-n-Butyl Phthalate	0	0		0	N/A	N/A	N/A	
2,4-Dinitrotoluene	0	0		0	0.05	0.05	30.6	
2,6-Dinitrotoluene	0	0		0	0.05	0.05	30.6	
1,2-Diphenylhydrazine	0	0		0	0.036	0.036	22.0	
Fluoranthene	0	0		0	N/A	N/A	N/A	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	0.00028	0.0003	0.17	
Hexachlorobutadiene	0	0		0	0.44	0.44	269	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	1.4	1.4	856	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	N/A	N/A	N/A	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	N/A	N/A	N/A	
n-Nitrosodimethylamine	0	0		0	0.00069	0.0007	0.42	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	3.06	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	2,017	
Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	N/A	N/A	N/A	

1,2,4-Trichlorobenzene	0	0		0	N/A	N/A	N/A

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Hexavalent Chromium	Report	Report	Report	Report	Report	µg/L	231	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Copper	Report	Report	Report	Report	Report	µg/L	499	AFC	Discharge Conc > 10% WQBEL (no RP)

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Total Antimony	735	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	N/A	N/A	Discharge Conc < TQL
Total Beryllium	N/A	N/A	No WQS
Total Cadmium	74.0	µg/L	Discharge Conc ≤ 10% WQBEL
Total Chromium (III)	25,469	µg/L	Discharge Conc ≤ 10% WQBEL
Free Cyanide	312	µg/L	Discharge Conc ≤ 25% WQBEL
Total Cyanide	N/A	N/A	No WQS
Total Lead	1,474	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	6.56	µg/L	Discharge Conc < TQL
Total Nickel	15,210	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	655	µg/L	Discharge Conc < TQL
Total Silver	288	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	31.5	µg/L	Discharge Conc < TQL
Total Zinc	3,889	µg/L	Discharge Conc ≤ 10% WQBEL
Acrolein	42.5	µg/L	Discharge Conc ≤ 25% WQBEL
Acrylonitrile	31.2	µg/L	Discharge Conc < TQL
Benzene	734	µg/L	Discharge Conc ≤ 25% WQBEL
Bromoform	2,629	µg/L	Discharge Conc ≤ 25% WQBEL
Carbon Tetrachloride	141	µg/L	Discharge Conc ≤ 25% WQBEL
Chlorobenzene	17,007	µg/L	Discharge Conc ≤ 25% WQBEL
Chlorodibromomethane	245	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	255,103	µg/L	Discharge Conc < TQL
Chloroform	3,485	µg/L	Discharge Conc ≤ 25% WQBEL
Dichlorobromomethane	336	µg/L	Discharge Conc ≤ 25% WQBEL

1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	232	µg/L	Discharge Conc ≤ 25% WQBEL
1,1-Dichloroethylene	4,332	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-Dichloropropane	155,896	µg/L	Discharge Conc ≤ 25% WQBEL
1,3-Dichloropropylene	208	µg/L	Discharge Conc ≤ 25% WQBEL
Ethylbenzene	41,100	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Bromide	6,171	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Chloride	396,827	µg/L	Discharge Conc ≤ 25% WQBEL
Methylene Chloride	2,812	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2,2-Tetrachloroethane	104	µg/L	Discharge Conc ≤ 25% WQBEL
Tetrachloroethylene	422	µg/L	Discharge Conc ≤ 25% WQBEL
Toluene	24,093	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-trans-Dichloroethylene	18,380	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,1-Trichloroethane	42,517	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2-Trichloroethane	361	µg/L	Discharge Conc ≤ 25% WQBEL
Trichloroethylene	1,528	µg/L	Discharge Conc ≤ 25% WQBEL
Vinyl Chloride	15.3	µg/L	Discharge Conc ≤ 25% WQBEL
2-Chlorophenol	7,937	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	10,109	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	9,354	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	1,134	µg/L	Discharge Conc < TQL
2,4-Dinitrophenol	9,059	µg/L	Discharge Conc < TQL
2-Nitrophenol	113,379	µg/L	Discharge Conc < TQL
4-Nitrophenol	32,596	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	2,268	µg/L	Discharge Conc < TQL
Pentachlorophenol	165	µg/L	Discharge Conc ≤ 25% WQBEL
Phenol	1,365,388	µg/L	Discharge Conc < TQL
2,4,6-Trichlorophenol	856	µg/L	Discharge Conc < TQL
Acenaphthene	1,176	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	1,089,684	µg/L	Discharge Conc < TQL
Benzidine	0.053	µg/L	Discharge Conc < TQL
Benzo(a)Anthracene	2.32	µg/L	Discharge Conc < TQL
Benzo(a)Pyrene	2.32	µg/L	Discharge Conc < TQL
3,4-Benzofluoranthene	2.32	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Benzo(k)Fluoranthene	2.32	µg/L	Discharge Conc < TQL
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	18.3	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	183,802	µg/L	Discharge Conc < TQL
Bis(2-Ethylhexyl)Phthalate	734	µg/L	Discharge Conc < TQL
4-Bromophenyl Phenyl Ether	3,827	µg/L	Discharge Conc < TQL
Butyl Benzyl Phthalate	1,984	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	131,287	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS

Chrysene	2.32	µg/L	Discharge Conc < TQL
Dibenzo(a,h)Anthrancene	2.32	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	11,621	µg/L	Discharge Conc ≤ 25% WQBEL
1,3-Dichlorobenzene	4,960	µg/L	Discharge Conc ≤ 25% WQBEL
1,4-Dichlorobenzene	10,346	µg/L	Discharge Conc ≤ 25% WQBEL
3,3-Dichlorobenzidine	12.8	µg/L	Discharge Conc < TQL
Diethyl Phthalate	56,690	µg/L	Discharge Conc < TQL
Dimethyl Phthalate	35,431	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	1,559	µg/L	Discharge Conc < TQL
2,4-Dinitrotoluene	30.6	µg/L	Discharge Conc < TQL
2,6-Dinitrotoluene	30.6	µg/L	Discharge Conc < TQL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	22.0	µg/L	Discharge Conc < TQL
Fluoranthene	2,834	µg/L	Discharge Conc < TQL
Fluorene	144,416	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.17	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	142	µg/L	Discharge Conc ≤ 25% WQBEL
Hexachlorocyclopentadiene	70.9	µg/L	Discharge Conc < TQL
Hexachloroethane	850	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	0.5	µg/L	Discharge Conc < TQL
Isophorone	4,595	µg/L	Discharge Conc < TQL
Naphthalene	1,984	µg/L	Discharge Conc ≤ 25% WQBEL
Nitrobenzene	2,232	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	0.42	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	3.06	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	2,017	µg/L	Discharge Conc < TQL
Phenanthrene	70.9	µg/L	Discharge Conc < TQL
Pyrene	108,968	µg/L	Discharge Conc < TQL
1,2,4-Trichlorobenzene	1,842	µg/L	Discharge Conc ≤ 25% WQBEL