pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**New**	Application No.	**PA0276260**
Facility Type	**Non-Municipal**	APS ID	**1004329**
Major / Minor	**Minor**	Authorization ID	**1293077**

Applicant and Facility Information

Applicant Name	**Haines Nancy**	Facility Name	**Neville's Mobile Home Court**
Applicant Address	377 Neville Road Sr 3007	Facility Address	377 Neville Road Sr 3007
	Moscow, PA 18444		Moscow, PA 18444
Applicant Contact	Nancy Haines	Facility Contact	Nancy Haines
Applicant Phone	(570) 877-7544	Facility Phone	(570) 877-7544
Client ID	353113	Site ID	834706
Ch 94 Load Status	New	Municipality	Salem Township
Connection Status	New	County	Wayne
Date Application Received	October 8, 2019	EPA Waived?	Yes
Date Application Accepted	October 23, 2019	If No, Reason	

Purpose of Application: For a new NPDES Permit to discharge sewage effluent from an existing failing MHC's on-lot system.

Summary of Review

This is an application for a new NPDES permit for a new discharge of treated Sewage from a failing on-lot system for a Mobile Home Court in a high-quality watershed. The receiving stream(s), Unnamed Tributary to Wilcox Creek (HQ-CWF, MF), is located in State Water Plan watershed 1-C and is classified for High Quality-Cold Water and Migratory Fish, aquatic life, water supply and recreation. Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use. The discharge is not expected to affect public water supplies.

The proposed sewage effluent limits for Outfall 001 are based on a hydraulic design flow of .016 MGD. The Organic Design Capacity is for 15 lbs/day that will be disposed of at an approved DEP landfill. Water will be provided by a public water supply, PWS D #2640006.

This project proposes the installation of a wastewater treatment plant to serve an existing 36-unit mobile home park and one (I) existing single-family residence. The mobile home park and the residence are currently served by a community onlot sewage disposal system which is malfunctioning. Testing and evaluation of the lot has shown that the soils types and site conditions present are unsuitable for the use of land disposal methods. The existing collection and conveyance system will be utilized with the new wastewater treatment plant to collect, convey, and treat proposed flows of 6,400 GPD Annual Average (75 gpd/cap. X appx, population: 85). A Part 2 Permit approval will be required and starting construction prior to obtaining that permit is a violation of the Clean Streams Law.

The applicant should notify the Delaware River Basin Commission (DRBC) of this project. DRBC contact information is: Delaware River Basin Commission, 25 Cosey Road, P.O. Box 7360, West Trenton, NJ 08628-0360 or by telephone at 609.883.9500. PA Chapter 92a.12 (b) When interstate or international agencies under an interstate compact or international agreement establish applicable effluent limitations or standards for dischargers of this Commonwealth to surface waters that are more stringent than those required by this title, the more stringent standards and imitations apply.

Approve	Deny	Signatures	Date
X		Bernard Feist, P.E. / Environmental Engineer /s/	November 1, 2019
X		Amy M. Bellanca, P.E. / Environmental Engineer Manager /s/	November 6, 2019

Summary of Review

Other DEP permits may be required for construction if encroachment to streams or wetlands will result. Information regarding the requirements for such permits or approvals can be obtained from DEP's Wetlands and Waterways Program at the letterhead address, or by telephone at 570.826.2511.

The U.S. Environmental Protection Agency (EPA) published the NPDES Electronic Reporting Rule ("eReporting Rule") on October 22, 2015. While use of the eDMR system has been voluntary for most facilities until now, the eReporting Rule requires facilities to start submitting DMRs electronically. DEP requires all facilities not currently using eDMR to register as soon as possible. Please visit DEP's website at www.dep.pa.gov/edmr for the necessary forms and submission information. You are required by the Permit to report the results of your monitoring activities using DEP's electronic Discharge Monitoring Report (eDMR) system. You must submit the necessary registration and trading partner agreement forms to DEP's Bureau of Clean Water (BCW) within 30 days following approval of coverage under this Permit and begin using the eDMR system when notified by DEP BCW to do so. Please visit DEP's website at www.dep.pa.gov/edmr for the necessary forms and submission information. While you are waiting for DEP BCW's notification to begin using eDMR, you should submit DMRs on paper to DEP by the DMR due dates, using a paper DMR form.

Effluent limitation development is shown in the "Development of Effluent Limitations" Section. Monitoring frequencies for all parameters with limitations will reflect the recommended frequencies found in Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations (doc. no. 362-0400-001).

The WMS "Open Violations by Client Report" was run and there are No Open Violations.

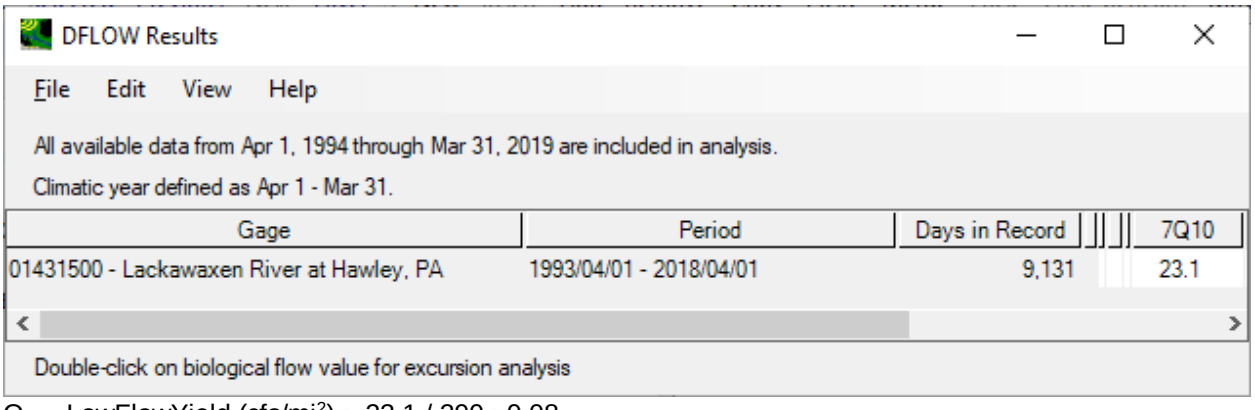
Public Participation

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)	.016
Latitude	41º 22' 30.86"	Longitude	-75º 25' 54.06"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Wilcox Creek (HQ-CWF, MF)	Stream Code	05629
NHD Com ID	25927838	RMI	0.34
Drainage Area	0.25	Yield (cfs/mi^2)	0.08
Q_{7-10} Flow (cfs)	0.02	Q_{7-10} Basis	USGS 01431500 DFlow
Elevation (ft)	1426	Slope (ft/ft)	
Watershed No.	1-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	**na**	Existing Use Qualifier	
Exceptions to Use	**na**	Exceptions to Criteria	
Assessment Status	Attaining Use(s): aquatic life, water supply and recreation		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	**Closed / Revoked**	Name	**Lake Wallenpaupack**
Nearest Downstream Public Water Supply Intake	Easton Area Water System		
PWS Waters	Delaware River	Flow at Intake (cfs)	10 MGD
PWS RMI		Distance from Outfall (mi)	Greater > 75 miles

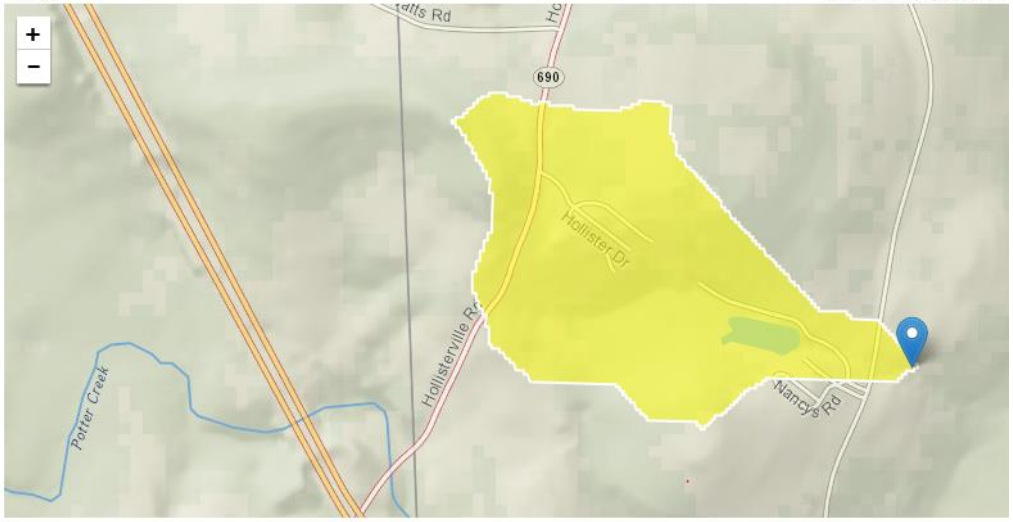
STATION.--01431500 LACKAWAXEN RIVER AT HAWLEY, PA
LOCATION.--Lat 41`28'34", long 75`10'21", Wayne County, Hydrologic Unit 02040103, on left bank at bridge on Church Street in Hawley, 700 ft upstream from Wallenpaupack Creek, and 3,000 ft downstream from Middle Creek.
DRAINAGE AREA.--290 square miles.



Q_{7-10} LowFlowYield (cfs/mi^2)= 23.1 / 290 =0.08

Outfall 001 at RMI 0.34 miles @ 1426 ft
Q7-10 Flow (cfs) = 0.08 * 0.25 = 0.02 cfs

Clicked Point (Latitude, Longitude): 41.37502, -75.43041
Time: 2019-10-30 08:55:31



Low-Flow Statistics Parameters[Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	0.25	square miles

RMI 0.0 @ 1289 ft
Q7-10 Flow (cfs) = 0.08 * 11.5 = 0.92 cfs

Clicked Point (Latitude, Longitude): 41.37401, -75.42509
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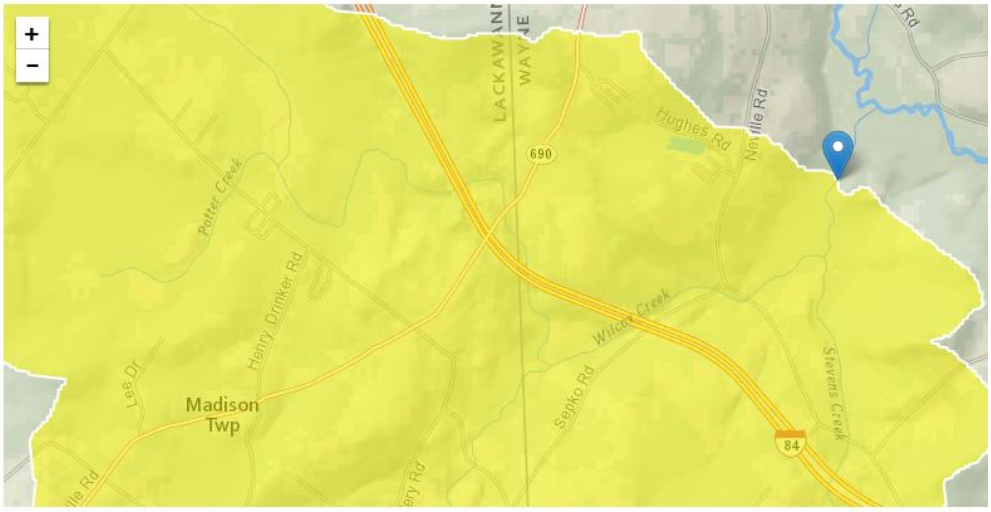


Low-Flow Statistics Parameters[100 Percent (11.4 square miles) Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	11.5	square miles

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .016
Latitude 41º 22' 31.00" **Longitude** -75º 25' 54.00"
Wastewater Description: Sewage Effluent

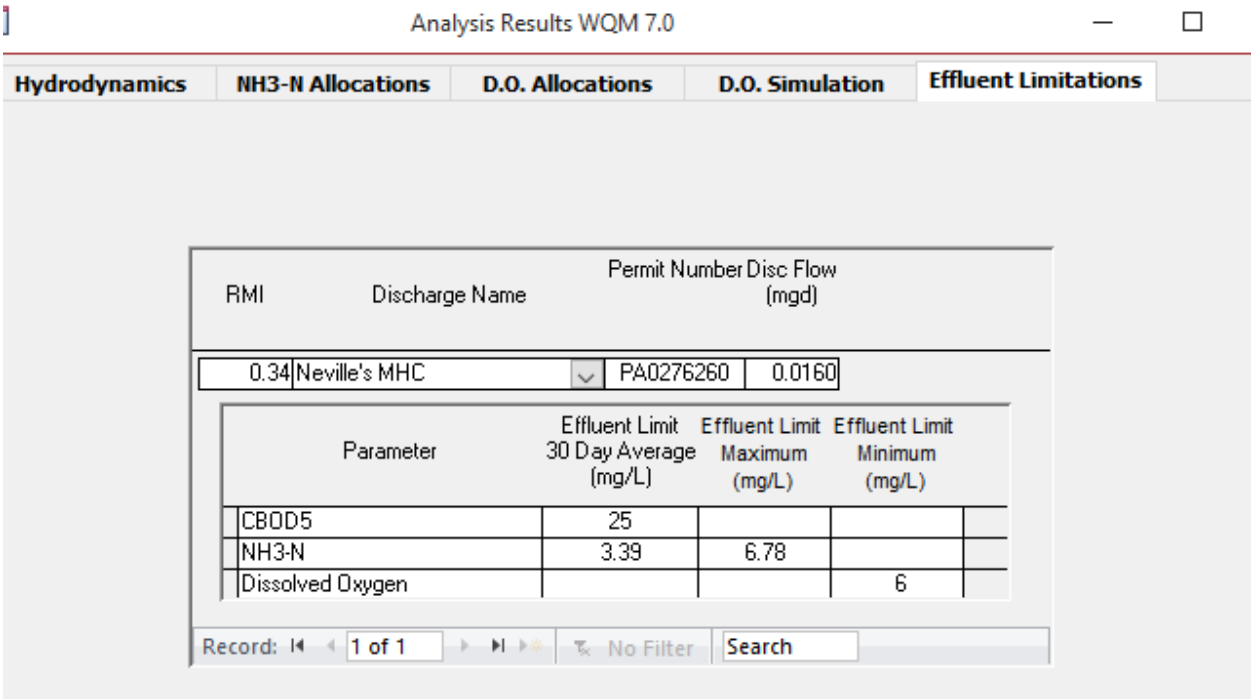
Technology-Based Limitations

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

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Water Quality-Based Limitations

A “Reasonable Potential Analysis” determined the following parameters were candidates for limitations:



Input appropriate values in A3:A9 and D3:D9		Neville MHC	
0.02	= Q stream (cfs)	0.5	= CV Daily
0.16	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.045	1.3.2.iii	WLA cfc = 0.036
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.017	5.1d	LTA_cfc = 0.021

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.021	AFC
		INST MAX LIMIT (mg/l) = 0.067	

Neville Modelling.pdf

ABACT and Non-degradation Limitations

Preliminary Limitations are the more stringent of ABACT, Non-degradation or WQBEL for each parameter of concern.

		ABACT Tech Limits-Sewage cases		
			2000 to	
		<2000 gpd	50,000 gpd	>50,000gpd
Parameter		**Limit**	**Limit**	**Limit**
CBOD5	5/1 to 10/31	10	10	10
CBOD5	11/1 to 4/30	20	20	10
TSS		20	10	10
NH3-N	5/1 to 10/31	5	3	1.5
NH3-N	11/1 to 4/30	15	9	4.5
Disinfection		UV/ND	UV/ND	UV/ND

Spreadsheet to evaluate Non-Degradation of Water Quality

Neville's Mobile Home Court Non-Degradation at RMI 0.0

Parameter	Discharge Flow	WQ Objective	Stream Flow	Mean Concentration	Combined Flow	Concentration			Non degrad	
	Q discharge	C total	Q upstream	C upstream	Q total	C LTA	Units	Multiplier	C AML	Units
CBOD5	0.0248	0.9	6.9078	0.8	6.9325	28.81	mg/L	1.72	**49.55**	mg/L
TSS	0.0248	2	6.9078	2	6.9325	4.80	mg/L	1.72	**8.26**	mg/L
NH3-N	0.0248	0.02	6.9078	0.02	6.9325	1.98	mg/L	1.72	**3.40**	mg/L
NO2/NO3-N	0.0248	0.02	6.9078	0.02	6.9325	1.98	mg/L	1.72	**3.40**	mg/L
Phosphorus	0.0248	0.01	6.9078	0.01	6.9325	0.57	mg/L	1.72	**0.98**	mg/L
TRC	0.0248	0	6.9078	0	6.9325	0.00	mg/L	1.72	**0.00**	mg/L
TDS	0.0248	32	6.9078	24	6.9325	2264.64	mg/L	1.72	**3895.18**	mg/L
	CFS		Qhm-CFS		CFS					

Neville%20Antidegradation%20Analysis

AmbientWaterQuality_UNTWilcoxCreek_

Best Professional Judgment (BPJ) Limitations

Agreement with the PELs developed June 21, 2012->

Parameter	Monthly Average	Instantaneous Maximum
$CBOD_5$	10.0 mg/l	20.0 mg/l
Total Suspended Solids	10.0. mg/l	20.0 mg/l
NH_3-N (5/1 to 10/31)	3.0 mg/l	6.0 mg/l
NH_3-N (11/1 to 4/30)	9.0 mg/l	18.0 mg/l
Total Phosphorus	0.5 mg/l	1.0 mg/l
pH	6 to 9 standard units at all times	
Fecal Coliform (5/1 to 9/30)	200/100 ml (geo. avg.)	
Fecal Coliform (10/1 to 4/30)	2,000/100 ml (geo. avg.)	
Total Residual Chlorine	0.0 mg/l	0.0 mg/l
Dissolved Oxygen	Minimum of 7.0 mg/l at all times	

Preliminary Effluent Limits -Neville Mobil

Anti-Backsliding

Lake Wallenpaupack TMDL- Pennsylvania does not have numeric water quality criteria for nutrients, other than a nitrate criterion that protects only nearby downstream potable water supplies (10 mg/l as nitrogen). The closed Lake Wallenpaupac TMDL recommends Total Phosphorous limits of 0.5 mg/l , the parameter of mercury is not expected from domestic sewage as it is from industrial operations.

Wallenpaupack.pdf

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2019 Planning Approval ->

Neville 2019 approval.pdf

2012 Biological Risk Assessment ->

May 11 2012 Report UNT to Wilcox Creek

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.

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	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	7.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.02	XXX	0.02	See Permit*	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) Nov 1 - Apr 30	XXX	XXX	XXX	20.0	XXX	40.0	2/month	8-Hr Composite
Carbonaceous Biochemical Oxygen Demand (CBOD5) May 1 - Oct 31	XXX	XXX	XXX	10.0	XXX	20.0	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10,000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	8-Hr Composite
Total Phosphorous	XXX	XXX	XXX	0.5	XXX	1.0	2/month	8-Hr Composite

*Daily if used, see part C condition

Compliance Sampling Location: Outfall 001

Other Comments: DRBC may have Stricter limits that will apply ; A Part 2 Permit must be approved before any discharge or construction.