

Application Type Amendment, Major  
 Facility Type Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0021741 A-1  
 APS ID 1079928  
 Authorization ID 1425175

**Applicant and Facility Information**

Applicant Name	<u>Borough Of Dublin</u>	Facility Name	<u>Dublin Borough STP</u>
Applicant Address	<u>119 Maple Avenue</u> <u>Dublin, PA 18917-2403</u>	Facility Address	<u>517 Stonebridge Road</u> <u>Bedminster, PA 18910</u>
Applicant Contact	<u>Colleen Pursell</u>	Facility Contact	<u>Michael Sullivan</u>
Applicant Phone	<u>(215) 249-3310</u>	Facility Phone	<u>(215) 795-2626</u>
Client ID	<u>65007</u>	Site ID	<u>239886</u>
Ch 94 Load Status	<u>Projected Hydraulic Overload</u>	Municipality	<u>Bedminster Township</u>
Connection Status	<u>Dept. Imposed Connection Prohibitions</u>	County	<u>Bucks</u>
Date Application Received	<u>January 23, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit amendment due to Rerate of wastewater treatment plant's current hydraulic capacity</u>		

**Summary of Review**

The PA Department of Environmental Protection received a Part I & Part II Water Quality Management (WQM) permit application from CKS Engineers on behalf of Dublin Borough STP on January 24, 2023. The application is to amend the permit to rerate the treatment plant's hydraulic design capacity, increase from 0.5 MGD to 0.75 MGD while keeping the Average Annual Design flow the same. The facility is located in Bedminster Township, Bucks County.

The original WQM permit for the treatment plant was issued in September 1987 for an average annual design flow of 0.5 MGD, with a total maximum design flow of 1.25 MGD. The increase in rated capacity would alleviate the occasional exceedances and provide capacity for proposed developments within Dublin Borough WWTP service area.

Due to the design capacity increase, the amendment will also incorporate the Organic Design Capacity increase from 667 lbs. BOD/day to 1001 lbs. BOD5/day.

Since this is a hydraulic design capacity while keeping the average annual design flow the same, there will no changes to the limits.

Public Participation

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

Approve	Deny	Signatures	Date
x		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	March 23, 2023
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	03/30/2023

<b>Discharge, Receiving Waters and Water Supply Information</b>			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.5</u>
Latitude	<u>40° 23' 32.37"</u>	Longitude	<u>-75° 11' 24.00"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Deep Run (WWF, MF)</u>	Stream Code	<u>03125</u>
NHD Com ID	<u>26030746</u>	RMI	<u>5.1</u>
Drainage Area	<u>3.54</u>	Yield (cfs/mi <sup>2</sup> )	_____
Q <sub>7-10</sub> Flow (cfs)	<u>0.0251</u>	Q <sub>7-10</sub> Basis	<u>Previous renewal</u>
Elevation (ft)	<u>424.25</u>	Slope (ft/ft)	_____
Watershed No.	<u>2-D</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>NUTRIENTS, SILTATION</u>		
Source(s) of Impairment	<u>MUNICIPAL POINT SOURCE DISCHARGES, REMOVAL OF RIPARIAN VEGETATION</u>		
TMDL Status	_____	Name	_____

Changes Since Last Permit Issuance: Hydraulic Re-rate

Compliance History

DMR Data for Outfall 001 (from February 1, 2022 to January 31, 2023)

Parameter	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22
Flow (MGD) Average Monthly	0.46419	0.49051 61	0.2752	0.28	0.17497	0.15651 61	0.103	0.2215	0.46487 1	0.18643 33	0.2735	0.33589 29
Flow (MGD) Weekly Average	0.68943	0.55428 6	0.44	0.44	0.24114 3	0.21	0.115	0.2947	0.74	0.27885 71	0.491	0.38814 29
pH (S.U.) Instantaneous Minimum	7.66	7.79	7.41	7.39	7.79	7.71	7.83	7.46	7.23	7.51	7.33	7.48
pH (S.U.) Instantaneous Maximum	8.14	8.12	8.15	8.12	8.11	8.17	8.10	8.1	7.92	8.03	7.92	7.85
DO (mg/L) Minimum	9.98	9.82	8.25	7.68	7.75	6.87	6.17	7.74	8.6	9.01	9.34	9.2
TRC (mg/L) Average Monthly	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
TRC (mg/L) Instantaneous Maximum	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.01	0.02
CBOD5 (lbs/day) Average Monthly	13	18	8	11	< 4	< 4	< 3	9	< 7	< 6	10	9
CBOD5 (lbs/day) Raw Sewage Influent   Average Monthly	581	579	324	311	207	218	252	635	436	182	418	525
CBOD5 (lbs/day) Weekly Average	20	33	16	15	6	7	4	21	13	12	15	14
CBOD5 (mg/L) Average Monthly	3	4	4	5	< 3	< 3	< 3	3	< 2	< 3	4	3
CBOD5 (mg/L) Raw Sewage Influent   Average Monthly	131.7	123.2	187	150.2	185.9	208	267	255	156	125.9	145	168
CBOD5 (mg/L) Weekly Average	4	7	5	7	4	4	4	5	3	6	4	4
BOD5 (lbs/day) Raw Sewage Influent   Average Monthly	909	765	483	519	314	265	270	703	533	229	452	581

**NPDES Permit Fact Sheet  
Dublin Borough STP**

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BOD5 (mg/L) Raw Sewage Influent   Average Monthly	195	156	292	258	264	263	285	276	201	157	156	190
TSS (lbs/day) Average Monthly	26	< 35	26	31	10	10	< 4	< 19	21	12	17	11
TSS (lbs/day) Raw Sewage Influent   Average Monthly	567	539	300	282	313	322	222	422	392	139	343	357
TSS (lbs/day) Weekly Average	40	50	57	48	24	15	8	56	40	27	24	20
TSS (mg/L) Average Monthly	6	< 7	14	14	7	9	< 4	< 6	7	6	7	4
TSS (mg/L) Raw Sewage Influent   Average Monthly	132	108	183	134	281	296	233	174	145	93	124	127
TSS (mg/L) Weekly Average	7	11	20	21	10	11	8	13	10	8	9	6
Fecal Coliform (No./100 ml) Geometric Mean	< 3	< 6	< 17	62	90	50	12	< 10	< 6	< 3	7	< 5
Fecal Coliform (No./100 ml) Instantaneous Maximum	5	42	48	76	290	220	104	40	33	5	28	11
Total Nitrogen (lbs/day) Average Monthly	< 63	< 59	< 36	< 35	< 18	< 9	6	< 42	< 42	< 18	< 41	< 56
Total Nitrogen (mg/L) Average Monthly	< 13.94	< 12.67	< 23.44	< 16.69	< 13.31	< 9.34	6.57	< 16.29	< 14.65	< 11.03	< 14.25	< 16.81
Ammonia (lbs/day) Average Monthly	< 0.1	< 0.2	3	2.0	< 0.2	0.2	0.2	< 0.2	< 0.08	< 0.07	< 0.09	< 0.2
Ammonia (mg/L) Average Monthly	< 0.03	0.04	1.7	0.7	< 0.2	0.2	0.2	< 0.1	< 0.04	< 0.05	< 0.03	< 0.1
Total Phosphorus (lbs/day) Average Monthly	3.2	3.6	1.8	2.1	1.2	1.3	0.7	2.9	2.4	1.1	1.6	1.5
Total Phosphorus (mg/L) Average Monthly	0.8	0.8	1.0	0.9	1.0	1.4	0.8	1.1	0.8	0.6	0.6	0.5
Total Copper (mg/L) Average Monthly	0.010	0.018	0.014	0.011	0.006	0.004	0.062	0.007	0.009	0.009	0.010	0.011

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Total Copper (mg/L) Daily Maximum	0.010	0.018	0.014	0.011	0.006	0.004	0.062	0.007	0.009	0.009	0.010	0.011
Total Hardness (mg/L) Average Monthly	171	190	243	145	232	204	303	189	179	156	228	268

**Compliance History**

**Effluent Violations for Outfall 001, from: March 1, 2022 To: January 31, 2023**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Copper	07/31/22	Avg Mo	0.062	mg/L	.017	mg/L
Total Copper	12/31/22	Avg Mo	0.018	mg/L	.017	mg/L
Total Copper	07/31/22	Daily Max	0.062	mg/L	.026	mg/L

**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: November 1, 2019 through October 31, 2023.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Phosphorus	8.5	XXX	XXX	2.0	XXX	4	1/week	24-Hr Composite

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**Outfall 001, Effective Period: November 1, 2023 through October 31, 2024.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Phosphorus	4.2	XXX	XXX	1.0	XXX	2	1/week	24-Hr Composite

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.02	XXX	0.05	1/day	Grab
CBOD5 Nov 1 - Apr 30	104	156	XXX	25	40	50	1/week	24-Hr Composite
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD5 May 1 - Oct 31	85	125	XXX	20	30	40	1/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS	125	190	XXX	30	45	60	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Ammonia Nov 1 - Apr 30	16	XXX	XXX	3.9	XXX	7.8	1/week	24-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date )

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Ammonia May 1 - Oct 31	5.5	XXX	XXX	1.3	XXX	2.6	1/week	24-Hr Composite
Total Copper	XXX	XXX	XXX	0.017	0.026 Daily Max	0.034	1/month	24-Hr Composite
Total Hardness	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite