

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0252638
APS ID 1045022
Authorization ID 1364489

Applicant and Facility Information

Applicant Name	<u>Perry Township Municipal Authority</u>	Facility Name	<u>Perry Township Municipal Authority STP</u>
Applicant Address	<u>P.O. Box 306</u> <u>Star Junction, PA 15482-0306</u>	Facility Address	<u>290 Wickhaven Hollow Road</u> <u>Wickhaven, PA 15492</u>
Applicant Contact	<u>Janet Galla</u>	Facility Contact	<u>Edgar Harris</u>
Applicant Phone	<u>(724) 736-8157</u>	Facility Phone	<u>(724) 966-2278</u>
Client ID	<u>275871</u>	Site ID	<u>626810</u>
Ch 94 Load Status	<u>Projected Hydraulic Overload</u>	Municipality	<u>Perry Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Fayette</u>
Date Application Received	<u>July 22, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>August 9, 2021</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES Permit for an existing discharge of treated sewage from a POTW.</u>		

Summary of Review

This is a municipal sewage treatment plant serving approximately 353 EDUs in Perry Township, Fayette County. There are no industrial users. The Authority subcontracts the operation of the plant to H&H Water Controls, based out of Carmichaels, PA.

The facility has been using the eDMR system for reporting since June 2016.

There are currently no open violations listed in EFACTS for this permittee (10/19/2021).

Sludge use and disposal description and location(s): Sewage sludge is hauled offsite by Liquid Assets Disposal in Wheeling, WV.

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		Adam Pesek Adam J. Pesek, E.I.T. / Environmental Engineer	October 19, 2021
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	November 7, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.1</u>
Latitude	<u>40° 7' 16"</u>	Longitude	<u>-79° 45' 18"</u>
Quad Name	<u>Fayette City</u>	Quad Code	<u>1807</u>
Wastewater Description: <u>Domestic sewage</u>			
Receiving Waters	<u>Youghiogheny River</u>	Stream Code	<u>37456</u>
NHD Com ID	<u>69915549</u>	RMI	<u>27.85</u>
Drainage Area	<u>1410</u>	Yield (cfs/mi ²)	<u>0.1315 (accrued)</u>
Q ₇₋₁₀ Flow (cfs)	<u>470.5 (460+10.5)</u>	Q ₇₋₁₀ Basis	<u>ACOE Q7-10 @ Connellsville (2017)</u>
Elevation (ft)	<u>1008</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>19-D</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>Delete Temp₂, Add Temp₁</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>METALS, PH</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE</u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u>8.02</u>		<u>6/18/2018 stream sample above confluence of Browneller Run</u>
Temperature (°C)	<u>25</u>		<u>Default (WWF)</u>
Hardness (mg/L)	<u>125</u>		<u></u>
Other: NH ₃ -N	<u>0.1</u>		<u>Default</u>
Nearest Downstream Public Water Supply Intake	<u>Municipal Authority of Westmoreland County - McKeesport</u>		
PWS Waters	<u>Youghiogheny River</u>	Flow at Intake (cfs)	<u>510</u>
PWS RMI	<u>1.36</u>	Distance from Outfall (mi)	<u>26.5</u>

Changes Since Last Permit Issuance:

Other Comments: A D.O. goal of 6.0 will be used in WQM modeling due to the exceptions to criteria listed in 25 Pa Code Chapter 93 for this stream segment.

Treatment Facility Summary				
Treatment Facility Name: Perry Township Municipal Authority STP				
WQM Permit No.		Issuance Date		
2604401		5/05/2005		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Sequential Batch Reactors	UV light	0.1
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.1	167	Projected Hydraulic Overload	Other STP	

Changes Since Last Permit Issuance:

Other Comments: The plant has been in a condition of projected hydraulic overload since 2018.

Compliance History	
Summary of DMRs:	No effluent limit violations reported in the last five years.
Summary of Inspections:	NOV issued on 8/9/2017 for raw sewage discharge into Browneller Run. NOV issued 11/6/2019 for an unauthorized bypass of sewage which occurred on 10/30/2019.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
Flow (MGD) Average Monthly	0.05713	0.08198	0.06847	0.09433	0.10541	0.09765	0.10055	0.05758	0.03938	0.03940	0.04372	0.04831
Flow (MGD) Daily Maximum	0.12260	0.13840	0.09627	0.17925	0.21103	0.17560	0.17560	0.13795	0.10090	0.11035	0.10670	0.09310
pH (S.U.) Minimum	6.8	6.7	6.8	6.7	6.8	6.4	6.7	6.8	6.3	6.8	6.7	6.5
pH (S.U.) Maximum	7.3	7.2	7.2	7.2	7.2	7.2	7.8	7.2	7.4	7.1	7.2	7.4
DO (mg/L) Minimum	4.3	5.8	5.2	5.6	5.1	5.1	6.0	4.5	5.1	4.8	4.5	5.0
CBOD5 (lbs/day) Average Monthly	1.6	3.9	1.3	2.8	5.1	2.6	5.7	2.1	1.8	1.0	0.6	1.2
CBOD5 (lbs/day) Weekly Average	2.6	9.7	1.4	5.2	13.4	4.0	16.5	4.7	4.9	1.8	0.8	2.1
CBOD5 (mg/L) Average Monthly	3.2	4.9	2.3	3.7	5.3	3.4	6.5	4.8	3.4	2.7	2.0	3.2
CBOD5 (mg/L) Weekly Average	6.9	8.4	3.2	5.3	9.6	5.0	17.0	13.1	5.8	5.7	2.0	6.8
BOD5 (lbs/day) Influent Average Monthly	128.9	17.9	49.2	28.2	46.0	30.7	54.6	35.8	80.1	65.2	52.6	30.7
BOD5 (lbs/day) Influent Weekly Average	350.2	22.3	108.3	45.1	74.9	42.2	168.7	49.0	141.6	168.2	95.9	50.4
BOD5 (mg/L) Influent Average Monthly	213.9	87.4	99.5	47.2	60.8	40.3	75.3	89.6	208.3	149.6	170.2	85.6
BOD5 (mg/L) Influent Weekly Average	342.5	166.4	251.1	64.2	102.3	55.0	173.6	137.1	320.0	230.8	236.7	160.0
TSS (lbs/day) Average Monthly	2.7	3.5	2.8	3.3	4.1	4.2	3.7	2.7	2.2	2.0	1.5	2.0
TSS (lbs/day) Influent Average Monthly	137.3	26.3	42.7	41.9	43.8	43.3	71.7	34.6	45.6	76.5	43.4	220

**NPDES Permit Fact Sheet
Perry Township Municipal Authority STP**

NPDES Permit No. PA0252638

TSS (lbs/day) Influent Weekly Average	306.7	41.5	63.8	69.6	67.2	70.6	121.1	50.3	65.6	243.0	72.7	32.7
TSS (lbs/day) Weekly Average	5.1	5.8	3.5	4.9	7.0	5.6	4.9	5.0	4.2	4.6	2.1	2.6
TSS (mg/L) Average Monthly	5.0	5.0	5.0	5.0	5.0	5.5	5.0	5.0	5.5	5.0	5.0	5.0
TSS (mg/L) Influent Average Monthly	243.6	109.5	81.5	62.8	54.5	57.0	104.4	81.5	137.5	152.4	143.0	59.6
TSS (mg/L) Influent Weekly Average	576.0	180.0	148.0	76.0	84.0	92.0	176.0	124.0	228.0	264.0	204.0	104.0
TSS (mg/L) Weekly Average	5.0	5.0	5.0	5.0	5.0	7.0	5.0	5.0	7.0	5.0	5.0	5.0
Fecal Coliform (No./100 ml) Geometric Mean	1	1	1	1	1	1	1	4	1	1	1	1
Fecal Coliform (No./100 ml) Instantaneous Maximum			1	2	1	1	2	56	2			
UV Transmittance (%) Average Monthly	68.6	69.1	66.7	73.1	70.6	76	74.9	73.5	74	76.5	77.2	70.1
UV Transmittance (%) Weekly Average	80.0	78.0	79.0	84.0	79.0	86	86.0	80.0	87	82.0	83.0	84.0
Total Nitrogen (mg/L) Daily Maximum	7.4	7.20	GG	10.1	GG	GG	3.56	GG	GG	2.96	GG	GG
Ammonia (lbs/day) Average Monthly	1.5	3.5	2.5	4.3	3.5	5.8	2.9	7.4	3.8	0.1	0.1	1.0
Ammonia (mg/L) Average Monthly	3.2	4.0	3.7	7.1	3.3	7.5	3.1	12.1	4.7	0.2	0.3	2.4
Ammonia (mg/L) Instantaneous Maximum	11.5	9.3	8.4	9.7	7.7	14.2	7.3	28.7	17.8	0.4	0.5	5.1
Total Phosphorus (mg/L) Daily Maximum	1.1	1.1	GG	1.09	GG	GG	0.90	GG	GG	2.10	GG	GG

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.1
Latitude 40° 7' 16.00" **Longitude** -79° 45' 18.00"
Wastewater Description: Treated domestic sewage

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)

Comments: The facility uses UV light for disinfection. Therefore, technology-based TRC limits are not applicable.

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
N/A			

Comments: No WQBELs were calculated as a result of water quality modeling.

Best Professional Judgment (BPJ) Limitations

A dissolved oxygen limit of 4.0 mg/l as a daily minimum is placed in the permit in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Sewage Permits."

Other Considerations

Comments: Monitoring for influent BOD₅ and influent TSS is placed in the permit in accordance with the Department's SOP entitled "New and Reissuance Individual Sewage NPDES Permit Applications."

Monitoring for E. coli, total nitrogen, total phosphorus, and UV transmittance is placed in the permit in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Sewage Permits."

Anti-Backsliding

N/A

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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
CBOD5	20.9	31.3	XXX	25	37.5	50	1/week	8-Hr Composite
BOD5 Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS	25.0	37.6	XXX	30	45	60	1/week	8-Hr Composite
TSS Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
UV Transmittance (%)	XXX	XXX	XXX	Report	Report	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	8-Hr Composite
Ammonia	Report	XXX	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: N/A

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
19D	37456	YOUGHIOGHENY RIVER	27.850	1008.00	1410.00	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.132	470.50	0.00	0.000	0.000	0.0	360.00	0.00	25.00	8.02	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Perry Twp MA	PA0252638	0.1000	0.0000	0.0000	0.000	20.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	7.54	0.00	0.00
NH3-N	25.00	0.10	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
19D	37456	YOUGHIOGHENY RIVER	27.000	1005.00	1420.00	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.132	0.00	0.00	0.000	0.000	0.0	0.00	0.00	25.00	8.02	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data							
Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00
Parameter Data							
Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)			
CBOD5	25.00	2.00	0.00	1.50			
Dissolved Oxygen	3.00	8.24	0.00	0.00			
NH3-N	25.00	0.00	0.00	0.70			

WQM 7.0 Hydrodynamic Outputs

<u>SWP Basin</u>		<u>Stream Code</u>				<u>Stream Name</u>						
19D		37456				YOUGHIOGHENY RIVER						
RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
27.850	470.50	0.00	470.50	.1547	0.00067	1.151	360	312.84	1.14	0.046	25.00	8.02
Q1-10 Flow												
27.850	301.12	0.00	301.12	.1547	0.00067	NA	NA	NA	0.88	0.059	25.00	8.02
Q30-10 Flow												
27.850	639.88	0.00	639.88	.1547	0.00067	NA	NA	NA	1.35	0.038	25.00	8.02

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		

WQM 7.0 Wasteload Allocations

SWP Basin **Stream Code** **Stream Name**
 19D 37456 YOUGHIOGHENY RIVER

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
27.850	Perry Twp MA	2.49	50	2.49	50	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
27.850	Perry Twp MA	.55	25	.55	25	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
27.85	Perry Twp MA	25	25	25	25	4	4	0	0

WQM 7.0 D.O.Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
19D	37456	YOUGHIOGHENY RIVER		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>	<u>Analysis pH</u>	
27.850	0.100	24.998	8.019	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>	<u>Reach Velocity (fps)</u>	
360.000	1.151	312.840	1.136	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>	<u>Reach Kn (1/days)</u>	
2.01	0.006	0.11	1.028	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>	<u>Reach DO Goal (mg/L)</u>	
7.539	3.988	Tsivoglou	6	
<u>Reach Travel Time (days)</u>	Subreach Results			
0.046	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.005	2.01	0.11	7.54
	0.009	2.01	0.11	7.54
	0.014	2.01	0.11	7.54
	0.018	2.01	0.11	7.54
	0.023	2.01	0.11	7.54
	0.027	2.01	0.11	7.54
	0.032	2.01	0.10	7.54
	0.037	2.01	0.10	7.54
	0.041	2.01	0.10	7.54
	0.046	2.01	0.10	7.54

WQM 7.0 Effluent Limits

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>				
19D		37456	YOUGHIOGHENY RIVER				
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
27.850	Perry Twp MA	PA0252638	0.100	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			4

Perry Township MA STP
 Perry Township, Fayette County
 NPDES# PA025238

Date	pH min	pH max	Ave (10^pH min			
			10^-pH min	10^-pH max	& pH max)	-Log (Ave pH)
Jul-18	6.7	7.7	2E-07	2E-08	1.1E-07	7.0
Aug-18	7.0	7.9	1E-07	1.26E-08	5.63E-08	7.2
Sep-18	7.0	7.9	1E-07	1.26E-08	5.63E-08	7.2
Jul-19	6.9	7.2	1.26E-07	6.31E-08	9.45E-08	7.0
Aug-19	7.0	7.3	1E-07	5.01E-08	7.51E-08	7.1
Sep-19	6.9	7.6	1.26E-07	2.51E-08	7.55E-08	7.1
Jul-20	6.5	7.4	3.16E-07	3.98E-08	1.78E-07	6.7
Aug-20	6.7	7.2	2E-07	6.31E-08	1.31E-07	6.9
Sep-20	6.8	7.1	1.58E-07	7.94E-08	1.19E-07	6.9
Jul-21	6.7	7.3	2E-07	5.01E-08	1.25E-07	6.9
					Median:	7.0