

Southwest Regional Office CLEAN WATER PROGRAM

Application Type
Renewal
NonFacility Type
Municipal
Major / Minor
Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0095036

APS ID 1012585

1307571

Authorization ID

Applicant Name	El Do Inc.	Facility Name	Smithton Truck Stop
Applicant Address	700 Atlantic Avenue	Facility Address	Motordrome Road
	Mckeesport, PA 15132		Smithton, PA 15479
Applicant Contact	William Rothbauer	Facility Contact	Todd Rothbauer
Applicant Phone	(412) 670-4144	Facility Phone	724-872-4224
Client ID	63373	Site ID	251328
Ch 94 Load Status	Not Overloaded	Municipality	South Huntingdon Township
Connection Status	N/A	County	Westmoreland
Date Application Rece	ived March 3, 2020	EPA Waived?	Yes
Date Application Acce	oted March 11, 20	0 If No, Reason	

Summary of Review

The above permittee has submitted an NPDES renewal application for an existing 0.03 MGD discharge to an Unnamed Tributary of the Youghiogheny River from their sewage treatment plant that serves the Smithton Truck Stop.

Sludge use and disposal description and location(s): Hapchuck Sanitation Company (septic hauler).

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
Х		Chad A. Jabian Chad A. Fabian / Project Manager	February 21, 2021
Х		Nicholas W. Hartrauft, P.E. Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	February 25, 2021

Outfall No. 001			Design Flow (MGD)	.03
_atitude40° 1	0' 33.10	,II	Longitude	-79° 43' 52.47"
Wastewater Descrip	otion:	Sewage Effluent		
Receiving Waters		med Tributary to niogheny River	Stream Code	37856
NHD Com ID	69914	.003	RMI	1.8
Drainage Area	0.1		Yield (cfs/mi²)	n/a
Q ₇₋₁₀ Flow (cfs)	0		Q ₇₋₁₀ Basis	Previous site inspection
Elevation (ft)	appro	ximately 1000	Slope (ft/ft)	n/a
Watershed No.	19-D	•	Chapter 93 Class.	WWF
Existing Use	WWF		Existing Use Qualifier	n/a
Exceptions to Use	None		Exceptions to Criteria	none
Assessment Status		Impaired	<u> </u>	
Cause(s) of Impairn	nent	OIL AND GREASE		
Source(s) of Impair		HIGHWAY/ROAD/BRIDGE	RUNOFF (NON-CONSTRUC	TION RELATED)
TMDL Status		Pending	Name n/a	,

Changes Since Last Permit Issuance: None

Other Comments: The discharge is to a swale that drains to an Unnamed Tributary of the Youghiogheny River.

	Treatment Facility Summary								
Treatment Facility Na	me: Smithton Truck Stop	STP							
WQM Permit No.	Issuance Date								
6584405	08/08/1984								
	Degree of			Avg Annual					
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)					
	Secondary with			-					
Sewage	Ammonia Reduction	Extended Aeration	Gas Chlorine	0.023					
Hydraulic Capacity	Organic Capacity			Biosolids					
(MGD)	(lbs/day)	Load Status	Biosolids Treatment	Use/Disposal					
0.03	_12.5	Not Overloaded							

Changes Since Last Permit Issuance:

NPDES Permit Fact Sheet Smithton Truck Stop

Other Comments: The existing treatment process consists of flow equalization, extended aeration, final clarification, Pyra Deck Tertiary Filter and chlorination.

	Compliance History						
Summary of DMRs:	The facility utilizes the Department's eDMR system. In the past 12 months, the only effluent violation was an exceedance for dissolved oxygen in February of 2020. A summary of the effluent results for the past 12 months are shown in the table on the next page.						
Summary of Inspections:	The most recent inspection was performed by the Department on $1/24/2020$. The inspection noted several effluent violations for TRC in 2019 and one effluent violation for CBOD ₅ in 2019. The inspection also noted the facility failed to submit their NPDES renewal application. There are no pending compliance actions at the facility.						

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)	0.00546	0.00546	0.00275	0.00546						0.00605		
Average Monthly	2	2	1	2	0.002	0.00275	0.01057	0.01195	0.00727	1	0.01325	0.0115
pH (S.U.)												
Instantaneous												
Minimum	7.0	6.6	6.3	6.6	7.1	7.1	7.1	6.3	6.5	6.5	6.79	6.5
pH (S.U.)												
Instantaneous												
Maximum	8.4	7.4	7.2	7.3	7.7	7.7	7.7	6.9	7.4	7.7	7.1	7.2
DO (mg/L)												
Instantaneous												
Minimum	6.4	7.0	6.5	6.0	6.1	6.1	6.1	7.2	7.5	4.0	3.5	2.6
TRC (mg/L)										0.36451		
Average Monthly	0.3	0.31667	0.30968	0.33667	0.03	0.3	0.3	0.34	0.31	6	0.5	1.6
TRC (mg/L)												
Instantaneous												
Maximum	0.4	0.6	0.4	0.6	0.04	0.4	0.4	0.5	0.5	0.6	0.8	2.3
CBOD5 (mg/L)												
Average Monthly	2.05	2.1	2.1	< 2	< 2.0	3.05	2.2	3.4	< 2	< 7.5	6.65	3.15
CBOD5 (mg/L)												
Instantaneous				_					_			
Maximum	< 2.1	2.2	2.2	< 2	< 2.0	4.1	2.4	3.4	< 2	7.5	7.17	3.22
TSS (mg/L)	_	_	_	_			_		_		_	_
Average Monthly	< 5	< 5	< 5	< 5	< 5.0	6.5	< 5	< 5.0	< 5	< 8	< 5	< 5
TSS (mg/L)												
Instantaneous	_	_	_	_	5.0	0	_	5.0	_		_	_
Maximum	< 5	< 5	< 5	< 5	< 5.0	8	< 5	< 5.0	< 5	8	< 5	< 5
Fecal Coliform												
(No./100 ml) Geometric Mean	< 1.41	< 1		< 1.414	< 1	. 1 5	< 1	. 4	. 4 5		15.87	4.1
Fecal Coliform	< 1.41	< 1	< 1	< 1.414	< 1	< 1.5	< 1	< 1	< 1.5	< 1	15.87	4.1
(No./100 ml)												
Instantaneous												
Maximum	< 2	< 1	< 1	< 2	< 1	< 2	< 1	< 1	< 2	< 1	21	6.38
Ammonia (mg/L)	\ \ \ \	<u> </u>	<u> </u>	\ <u>\</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	\ <u>\</u>	<u> </u>	<u> </u>	0.30
Arimonia (mg/L) Average Monthly	2.95	0.3	0.55	0.1	0.1	0.2	0.3	0.7	0.3	0.4	3.645	3.0
Ammonia (mg/L)	2.30	0.5	0.55	0.1	0.1	0.2	0.5	0.7	0.5	0.4	3.043	5.0
Instantaneous												
Maximum	3.1	0.9	0.9	0.1	0.1	0.2	0.3	0.9	0.3	0.5	5.12	3.66
ινιαλιιτιαιτι	J. I	0.0	0.3	U. I	U. I	٥.۷	0.0	0.5	0.0	0.5	J. 12	5.00

Development of Effluent Limitations									
Outfall No.	001	Design Flow (MGD)	.03						
Latitude	40° 10' 17.00"	Longitude	-79° 43' 38.00"						
Wastewater D	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)
CBOD5	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Solids	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
рН	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	2.000 / 100 ml	CooMoon		, , , ,
(10/1 – 4/30) Fecal Coliform	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
(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: None

Water Quality-Based Limitations

No "Reasonable Potential Analysis" was performed for toxics since they are not expected to be present in the wastewater nor are they required to be sampled for in the renewal application.

The Department's WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD (CBOD₅), and ammonia-nitrogen (NH₃-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH₃-N in the stream and the mixing and consumption of DO in the stream due to the degradation of CBOD₅ and NH₃-N. WQM7.0 modeling was previously performed to determine the existing effluent limitations.

The Department's previously determined the Total Residual Chlorine Limit of 0.5 mg/l established by Chapter 92a.48(b)(2) was sufficient.

New modeling is not required, according the Department's SOP for reissuance of NPDES Permits, since there are not any changes to the receiving stream or effluent quality since the last permit issuance.

Best Professional Judgment (BPJ) Limitations

None

Anti-Backsliding

No relaxation of any existing limitation is proposed for the draft permit.

Existing and 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.

			Effluent L	imitations			Monitoring Re	Monitoring Requirements		
Parameter	Mass Units	(lbs/day) (1)		Concentrat	ions (mg/L)		Minimum ⁽²⁾	Required		
r ai ailletei	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type		
Flow (MGD)	0.03	XXX	XXX	XXX	XXX	XXX	2/month	Measured		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab		
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab		
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab		
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	Grab		
TSS	XXX	XXX	XXX	30	XXX	60	2/month	Grab		
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab		
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab		
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab		
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	Grab		
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab		
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab		

Compliance Sampling Location: 001

Other Comments: All of the above proposed effluent limitations and monitoring frequencies are the same as the exiting permit.

It is recommended the permit be drafted as described above.