

Northcentral Regional Office CLEAN WATER PROGRAM

Application Type
Renewal
NonFacility Type
Maior / Minor
Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0208914

APS ID 1008219

Authorization ID 1299734

oplicant Name	Great	Dane, LLC	Facility Name	Great Dane LP Danville
oplicant Address	222 N	I. La Salle Street, Suite 920	Facility Address	891 Strick Road
	Chica	go, IL 60601-1010	<u></u>	Danville, PA 17821-8084
oplicant Contact	David	Ritchie, EHS Director	Facility Contact	Jeff Olaf, EHS Manager
oplicant Phone	(773)	579-4745	Facility Phone	(570) 437-3141
ient ID	16150	01	Site ID	2905
n 94 Load Status	N/A		Municipality	Limestone Township
onnection Status	N/A		County	Montour
ate Application Rece	eived	December 16, 2019	EPA Waived?	Yes
ate Application Acce	epted	December 23, 2019	If No, Reason	

Summary of Review

The subject facility manufactures truck trailers, truck trailer chassis, and detachable trailer bodies.

A map of the discharge location is attached.

Included in this NDPES renewal is the inclusion of stormwater discharge requirements which are currently covered under PAG03 General Permit approval No. PAR804825. With the issuance of this NPDES Permit No. PA0208914, coverage under PAR804825 will be terminated.

The permittee requested in the application cover letter an increase in the ammonia-nitrogen limits in the permit due to effluent exceedances. The Department cannot loosen these limitations because (a) they were instituted due to the dry stream discharge scenario, (b) the limits should be achievable by the technology, and (c) because the antidegradation requirements of the Clean Water Act and 40 CFR 122.44(l) prevent the loosening of effluent limitations in most situations.

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		Keith C. Allison Keith C. Allison / Project Manager	July 29, 2020
x		Nícholas W. Hartranft Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	July 30, 2020

Discharge, Receiving	g Waters and Water Supply Inforn	nation	
Outfall No. 001		Design Flow (MGD)	0.0046
Latitude 41° 5	5' 6.05"	Longitude	-76° 42' 25.37"
Quad Name Wa	ashingtonville, PA	Quad Code	1032
Wastewater Descri	ption: Sewage Effluent		
Receiving Waters	County Line Branch (WWF)	Stream Code	18825
NHD Com ID	66917825	RMI	1.8 (at County Line Branch)
Drainage Area	_18.3 mi ² (at County Line Branch)	Yield (cfs/mi²)	0.059
Q ₇₋₁₀ Flow (cfs)	1.08 (at County Line Branch)	Q ₇₋₁₀ Basis	USGS StreamStats
Elevation (ft)	Undetermined	Slope (ft/ft)	Undetermined
Watershed No.	10-D	Chapter 93 Class.	WWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Not Assessed		
TMDL Status	_Final	West Branch Name TMDL	n Chilisquaque Watershed
Nearest Downstrea	ım Public Water Supply Intake	Sunbury Municipal Water Auth	nority
PWS Waters	Susquehanna River	Flow at Intake (cfs)	
PWS RMI	108	Distance from Outfall (mi)	Approx. 25

Changes Since Last Permit Issuance: None

Other Comments:

The discharge is to a dry swale that ultimately drains to County Line Branch. Considering the size of the discharge and distance to County Line Branch, it is likely that the discharge does not reach the stream under typically dry conditions.

No downstream water supply is expected to be affected by this discharge with the limitations and monitoring proposed.

The West Branch Chillisquaque Watershed TMDL addresses impairment to the watershed by organic enrichment, low dissolved oxygen, and sediment from agricultural operations. The TMDL includes no specific waste load allocations for any point source discharges such as this sewage effluent or the facility's stormwater discharges. It is not expected that these discharges are contributing significantly to the impairment and the limitations already imposed should be adequate.

	Treatment Facility Summary									
Treatment Facility Na	ame: Great Dane LP									
WQM Permit No.	Issuance Date									
4715401-A1	December 29, 2006									
	Degree of			Avg Annual						
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)						
Sewage	Secondary	Septic Tank Sand Filter	Hypochlorite	0.0046						
Hydraulic Capacity	Organic Capacity			Biosolids						
(MGD)	(lbs/day)	Load Status	Biosolids Treatment	Use/Disposal						
0.0046	30	Not Overloaded		-						

Changes Since Last Permit Issuance: None

Other Comments: The treatment as permitted under WQM permit No. 4715401-A1 consists of 3,000-gallon equalization tank, Cromaglass CA-50 treatment unit, sand filter, erosion chlorinator, a chlorine contact tank, and sludge holding tank.

Sludge/Biosolids Disposal

The facility's sludge is transferred to other wastewater treatment facilities for further processing.

Stormwater Requirements

Stormwater discharges from the facility are currently permitted under the PAG03 General Permit for discharges of stormwater from industrial activities under approval No. PAR804825. That permit coverage was most recently issued on April 20, 2016. The stormwater discharges will now be included in this single NPDES permit. Upon final issuance of this NPDES Permit No. PA0208914, coverage under PAR804825 will be terminated.

The stormwater discharges from the facility meet the definition of storm water discharges associated with industrial activity in 40 CFR §122.26(b)(14)(xi). As a SIC Code 3715 facility it is subject to Appendix J of the PAG03 which currently requires twice per year sampling for Total Suspended Solids and Oil and Grease and includes benchmark values for both of these parameters. Existing monitoring data shows benchmark values being met.

Storm water from the facility drains to an unnamed tributary of County Line Branch from seven defined outfalls and an additional area that drains by sheet flow.

Per a June 10, 2020 inspection report, the permittee has identified Outfall 006 as a representative outfall. Due to the presence of the storage of finished trailers and the hazardous waste storage shed, the Department will include monitoring for Outfall 002 in the permit as well.

Per the most recent PAG03 application, facility PPC plan, and inspection reports BMPs implemented at the facility include:

- All paints, thinners, solvents and wastes are stored indoors.
- Secondary containment around diesel tank and in the hazardous waste storage shed and oil storage area.
- The facility Environmental Manager conducts weekly inspections of catch basins.
- Great Dane employees make bi-weekly inspections of the facility to insure good housekeeping in maintained
- Inspections are conducted weekly of the hazardous waste storage shed and plant trash areas.

These discharges are not expected to affect any downstream water supply at this time with the limitations and monitoring proposed.

Compliance History

DMR Data for Outfall 001 (from June 1, 2019 to May 31, 2020)

Parameter	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19
Flow (MGD)												
Average Monthly	0.0009	0.0005	0.0010	0.0012	0.0014	0.0009	0.0011	0.0015	0.0014	0.0013	0.0017	0.0015
pH (S.U.)												
Minimum	6.18	6.2	6.14	6.18	6.12	6.21	6.37	6.26	6.17	6.21	6.28	6.08
pH (S.U.)												
Maximum	6.88	6.98	7.31	6.45	6.72	7.38	6.89	6.96	6.63	6.67	6.65	6.85
TRC (mg/L)												
Average Monthly	1.66	1.86	1.78	1.91	1.87	1.74	1.71	1.72	1.45	1.7	1.8	1.7
CBOD5 (mg/L)												
Average Monthly	< 3	4	< 3	4	< 3	< 3	< 3	< 3	< 2	< 3	< 2	< 2
TSS (mg/L)												
Average Monthly	1	2	9	< 2	4	< 3	2	< 2	< 3	3	< 3	< 6
Fecal Coliform												
(No./100 ml)												
Geometric Mean	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	< 2	< 1	< 1	10
Fecal Coliform												
(No./100 ml)												
Maximum	< 1	< 1.0	1	< 1	< 1	1	1	4	3	< 1	< 1	12.2
Total Nitrogen (mg/L)												
Daily Maximum						155.4						
Ammonia (mg/L)												
Average Monthly	< 0.1	< 1	7	20	< 3	15	11	10	14	12	6	< 1
Total Phosphorus												
(mg/L)												
Daily Maximum						23.4						

Compliance History, Cont'd

Effluent Violations for Outfall 001, from: June 1, 2019 To: May 31, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Ammonia	08/31/19	Avg Mo	12	mg/L	3	mg/L
Ammonia	07/31/19	Avg Mo	6	mg/L	3	mg/L
Ammonia	12/31/19	Avg Mo	15	mg/L	9	mg/L
Ammonia	02/29/20	Avg Mo	20	mg/L	9	mg/L
Ammonia	11/30/19	Avg Mo	11	mg/L	9	mg/L
Ammonia	09/30/19	Avg Mo	14	mg/L	3	mg/L
Ammonia	10/31/19	Avg Mo	10	mg/L	3	mg/L

	Compliance History, Cont'd								
Summary of Inspections:	The facility has been inspected at least annually over the past permit term. Most recently it was inspected on June 10, 2020 by John Springer, WQS for both the sewage treatment and the stormwater discharges. This inspection identified no violations. An administrative inspection occurred March 19, 2020 which identified ongoing the ammonia-nitrogen effluent violations as reported in DMRs which have not occurred since February 2020.								
Other Comments:	A WMS query found one open violations in eFACTS for Great Dane, LLC for the ongoing Ammonia violations at this facility.								

Existing Effluent Limitations and Monitoring Requirements

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

		Monitoring Requirement						
Parameter	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum ⁽²⁾	Required
Parameter	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/day	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	5/week	Grab
TRC	xxx	XXX	xxx	Report	xxx	XXX	5/week	Grab
CBOD5 Nov 1 - May 31	XXX	XXX	XXX	20	XXX	40	2/month	Grab
CBOD5 Jun 1 - Oct 31	XXX	XXX	XXX	10	XXX	20	2/month	Grab
TSS	XXX	XXX	XXX	10	XXX	20	2/month	Grab
Fecal Coliform (No./100 ml)	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 - May 31	XXX	XXX	XXX	9	XXX	18	2/month	Grab
Ammonia Jun 1 - Oct 31	XXX	XXX	XXX	3	XXX	6	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Development of Effluent Limitations								
Outfall No.	001		Design Flow (MGD)	0.0046				
Latitude	41° 4' 55.30"		Longitude	-76° 42' 25.10"				
Wastewater D	escription:	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)
pН	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 above limits are applicable. However, the discharge has received more stringent limitations for CBOD₅, TSS, and Fecal Coliform due to the discharge to a swale as further discussed below and also because it has previously been treated as a small flow treatment facility, which the department defines as facility designed to treat up to 2,000 gpd. The discharge currently has no TRC limit.

Water Quality-Based Limitations

Discharge to Dry/Intermittent Stream

The facility has existing limitations for CBOD₅, TSS, and NH3-N due in part to the dry stream discharge. Additional requirements in the Department's current Guidance "Implementation Guidance for Evaluating Wastewater Discharges to Drainage Ditches and Swales" (Doc. ID 391-2000-014, April 2008) are not necessary at this time. Due to the facility being existing and because no impacts have been noted in the swale or ultimate receiving stream the Advanced Treatment Requirements listed in that guidance will not be required of the discharge at this time. These requirements include more stringent limitations for TSS, Total Nitrogen, Dissolved Oxygen and Phosphorus as listed below.

Advanced Treatment Requirements for discharges to intermittent and dry streams

Parameter	Limitation
TSS	10 mg/L
Total Nitrogen	5 mg/L
Dissolved Oxygen	Minimum 6 mg/L
Phosphorus	0.5 mg/L

DO, CBOD5 and NH3-N

The Department uses the WQM7.0 model 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. No WQM7.0 modeling was performed at this time due to (a) the existing limitations which are more stringent than secondary treatment and (b) the dry stream discharge. Dissolved oxygen monitoring will now be included consistent with the Department's typical requirements for STP discharges.

Total Residual Chlorine

The discharge currently has no TRC limit but will receive the BAT limit of 0.5 mg/L from 25 Pa. Code 92a.48(b)(2). Because it does not appear that the limit may currently be achievable based on existing TRC data and the used technology (tablet chlorinator), a schedule of compliance will be included in the permit for the permittee to meet the limitation in 2 years. The proposed compliance schedule is below. No additional modeling will be performed to determine if a more stringent water quality-based limit is necessary due to the distance to the receiving stream being adequate to dissipate the chlorine residual and significant dilution in County Line Branch.

Schedule of Compliance

- A. The permittee shall achieve compliance with final effluent limitations for Total Residual Chlorine or terminate this discharge in accordance with the following schedule:
 - Submit Construction or Interim
 Compliance Report

 Compliance with Final Limits
 One year after Permit Effective Date

 Two years after Permit Effective Date
- B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:
 - 1. A short description of the non-compliance.
 - A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.
 - 3. A description of any factors which tend to explain or mitigate the non-compliance.
 - 4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.

Toxics Management

No further "Reasonable Potential Analysis" was conducted to determine additional toxic parameters for this minor treatment facility with no industrial inflows.

Chesapeake Bay/Nutrient Requirements

According to the Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, this facility is an existing Phase 5 Chesapeake Bay sewage discharger that is not expanding, and as such requires no nutrient loading limits. Annual nutrient monitoring was included in the existing permit per the Phase II Watershed Implementation Plan. The Total Nitrogen was found to average 82.6 mg/L and the Total Phosphorus averaged 11.4 mg/L over the past three years. Therefore, because the Total Nitrogen and Total Phosphorus in the effluent has adequately been characterized, no further monitoring for these will be required at this time consistent with the Phase III Watershed Implementation Plan.

Best Professional Judgment (BPJ) Limitations

Comments: No additional BPJ limitations are necessary beyond the technology and water quality-based limits noted above.

Anti-Backsliding

No proposed limitations were made less stringent consistent with the anti-degradation requirements of the Clean Water Act and 40 CFR 122.44(I).

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.

		Monitoring Red	quirements						
Parameter	Mass Units (lbs/day) (1)			Concentrations (mg/L)				Required	
raianietei	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type	
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Metered	
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab	
TRC – Interim	XXX	XXX	XXX	Report	XXX	XXX	1/day	Grab	
TRC - Final	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab	
Dissolved Oxygen	XXX	XXX	Report	XXX	XXX	XXX	1/day	Grab	
CBOD5 Nov 1 - May 31	XXX	XXX	XXX	20	XXX	40	2/month	Grab	
CBOD5 Jun 1 - Oct 31	XXX	XXX	XXX	10	XXX	20	2/month	Grab	
TSS	XXX	XXX	XXX	10	XXX	20	2/month	Grab	
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab	
Ammonia Nov 1 - May 31	XXX	XXX	XXX	9	XXX	18	2/month	Grab	
Ammonia Jun 1 - Oct 31	XXX	XXX	XXX	3	XXX	6	2/month	Grab	

Compliance Sampling Location: Outfall 001

Other Comments: The above limitations and monitoring are unchanged from the existing permit with the exceptions noted here. Nutrient monitoring is removed as mentioned above. DO monitoring is new and Interim and Final TRC limits are included as also mentioned above. Daily maximum flow monitoring is also new. The existing five per week monitoring for pH and TRC has been updated to daily.

Proposed Effluent Limitations and Monitoring Requirements

Outfall 002 and 006, Effective Period: Permit Effective Date through Permit Expiration Date.

	Effluent Limitations						Monitoring Requirements	
Parameter	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2)	Required
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 002 and 006

Tools and References Used to Develop Permit							
	WQM for Windows Model (see Attachment)						
	PENTOXSD for Windows Model (see Attachment)						
	TRC Model Spreadsheet (see Attachment)						
	Temperature Model Spreadsheet (see Attachment)						
	Toxics Screening Analysis 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.						
\boxtimes	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.						
$\overline{\boxtimes}$	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.						
	SOP: Establishing Effluent Limitations for Individual Sewage Permits, rev. 8/23/13						
	Other:						

Attachments:

A. Discharge Location Map

Permit No. PA0208914

