pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0255998**
Facility Type	**Storm Water**	APS ID	**1048667**
Major / Minor	**Minor**	Authorization ID	**1371074**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Daniels Concrete Inc.**	Facility Name	**Daniels Concrete Batch Plant**
Applicant Address	1463 State Route 819	Facility Address	1855 State Route 819
	Greensburg, PA 15601		Greensburg, PA 15601
Applicant Contact	Madchen Mahkovic	Facility Contact	Madchen Mahkovic
Applicant Phone	(724) 834-5134	Facility Phone	(724) 834-5134
Client ID	365811	Site ID	852383
SIC Code	3273	Municipality	Salem Township
SIC Description	Manufacturing - Ready-Mixed Concrete	County	Westmoreland
Date Application Received	September 20, 2021	EPA Waived?	Yes
Date Application Accepted	May 16, 2022	If No, Reason	
Purpose of Application	New NPDES Permit for the discharge of Stormwater Associated with Industrial Activity from concrete batch plant.		

Summary of Review

Background

The Department received a new NPDES permit application from Daniels Concrete Inc. on September 20, 2021 for coverage of its Daniels Concrete Batch Plant in Salem Township of Westmoreland County. The facility operates as a ready-mix concrete batch plant with an SIC Code 3273 (Manufacturing – Ready-Mixed Concrete). The permittee operates an excavation business, Daniels Excavating, and began construction of the batch concrete plant in August 2020. The property was previously used to store aggregate, soil materials, trucks, and equipment for excavating projects.

Property and Operations

The Daniels Concrete Batch Plant consists of a small control building housing the plant's control system, located on an upper pad level with the stockpile area, and the batch plant and wash pits located on a lower level, separated from the stockpile area by a retaining wall. The facility's property consists of 15,680 ft^2 of compacted gravel with a concrete apron and slopes to the west. State Route 819, located on the east side of the plant, provides access for trucks to the batch plant. No fuels, chemicals or other potentially hazardous materials are stored at the site.

The concrete batch plant was constructed adjacent to an existing stockpile area utilized by Daniels Concrete to store aggregate and soil materials for use in construction projects. Aggregate materials are moved from the stockpile area directly to the batch plant. Cement used at the batch plant is stored in a silo. Concrete is mixed at the batch plant and loaded directly onto trucks for delivery. Following delivery, trucks will return to the batch plant to wash out at a four (4) bay wash-out basin. The water is fully contained across four connected sloped concrete basins. Trucks will wash out in the first bay. Water then flows through the four bays in series, allowing time for solids to settle before being pumped from the fourth wash bay for

Approve	Deny	Signatures	Date
X		Lauren Nolfi, E.I.T. / Environmental Engineering Specialist	June 16, 2022
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	June 17, 2022

Summary of Review

reuse. Pumped effluent can be recycled back to the first pit if additional time for settling is needed or is recycled and used for washout water. Stormwater runoff from the batch plant area reportedly also drains to the washout basin. The washout basin is inspected weekly and cleaned out biweekly or as needed. DEP recommends that Daniels Concrete segregate uncontaminated stormwater from the washout basin, so as to prevent the washout basin from overflowing. Collecting the batch plant area's stormwater runoff in the washout basin, along with truck washout water, will likely accumulate more wastewater in the washout basin than Daniels Concrete can reuse and lead to a wastewater overflow. The washout basin is also not sized to accommodate a 10-year, 24-hour storm event in addition to the generated wastewater volume, as is recommended for the collection of stormwater. Discharges and overflows from the washout basin are not authorized by this permit.

Outfalls

Daniels Concrete discharges stormwater through Outfall 001 to an Unnamed Tributary (UNT) to Beaver Run, designated in 25 PA Code Chapter 93 as a High Quality – Cold Water Fishery (HQ-CWF). Site plan topographic and aerial maps for Daniels Concrete are included in Attachement B to show stormwater flow at the facility. Outfall 001 receives stormwater from a 15,500 sq. ft. drainage area of the lower section of the batch plant. A channel downstream of the batch plant collects runoff from the batch plant area and conveys it to an existing culvert to be discharged to an Unnamed Tributary to Beaver Run. The channel is inspected monthly and cleaned to remove sediment as needed. A pipe installed in the aggregate storage bins collects runoff from 1200 sq. ft. of the upper level aggregate storage area. The pipe outlets adjacent to the water tank storage building at the batch plant. No discharge has been observed to date from the pipe outlet. The pipe is inspected monthly while the plant is in operation and cleaned if necessary. Since no discharge has been observed from the pipe outlet, and should it discharge, the pipe would discharge within the drainage area to Outfall 001, the aggregate storage area pipe is not considered to be an outfall.

The permittee conducted a non-discharge alternatives analysis because the stormwater discharge is to a high-quality waterway but concluded because the discharge is stormwater only that there are no technically feasible, cost effective or environmentally sound alternative to the stormwater discharge. Non-degrading effluent limitations were not developed or imposed because the discharge is stormwater only. To ensure that the discharge does not degrade the stream, the no exposure benchmark values will be used as the benchmark values in the permit. The goal for the permittee is to consistently achieve these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters

Public Participation

Daniels Concrete provided evidence of Act 14 municipal and county notifications to Salem Township and Westmoreland County on August 10, 2021.

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.

Conclusion

Draft permit issuance is recommended.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 23' 04.7"	Longitude	-79º 31' 16.4"
Quad Name	Slickville	Quad Code	1509
Wastewater Description:	Stormwater runoff from batch plant		
Receiving Waters	Unnamed Tributary to Beaver Run (HQ-CWF)	Stream Code	43031
NHD Com ID	125291621	RMI	1.63
Drainage Area	0.0487 mi^2	Yield (cfs/mi^2)	0.023
Q_{7-10} Flow (cfs)	0.00112	Q_{7-10} Basis	USGS Streamstats
Elevation (ft)	1278	Slope (ft/ft)	0.0316
Watershed No.	18-B	Chapter 93 Class.	HQ-CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation		
Source(s) of Impairment	Crop production (crop land or dry land), grazing in riparian or shoreline zones		
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	MAWC Sweeney Plant		
PWS Waters	Beaver Run	Flow at Intake (cfs)	52.61
PWS RMI	7.01	Distance from Outfall (mi)	11.6

Other Comments:

The USGS Stream Stats Data for the drainage area is displayed in Attachment A.

Compliance History	
Summary of DMRs:	Daniels Concrete was not previously covered under an NPDES permit since it is a new facility.
Summary of Inspections:	An inspection was conducted on April 6, 2022 by the permit engineer and local water quality specialist. During the inspection a floor drain inside the garage was observed. The permittee also stated that the sample results provided with the application were from a sample collected from the wash pits rather than from the facility's outfalls. DEP informed Daniels Concrete that the floor drain needed to either be plugged or included in the NPDES permit as a process water discharge and requested samples be collected and analyzed from the facility's outfalls. On May 16, 2022 Daniels Concrete provided a photograph showing the garage floor drain plugged with concrete and stormwater sample results from Outfall 001. Two attempts were reportedly made to collect stormwater samples from the aggregate storage area pipe, but no flow was observed discharging from the pipe outlet. The permittee stated that no flow has ever been observed discharging from the pipe outlet.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0
Latitude 40º 23' 4.7" **Longitude** -79º 31' 16.4"
Wastewater Description: Stormwater runoff from 15,500 sq. ft. of lower section of the batch plant area.

Stormwater Drainage Overview

Outfall 001 receives stormwater from a 15,500 sq. ft. drainage area of the lower section of the batch plant. A channel downstream of the batch plant collects runoff from the batch plant area and conveys it to an existing culvert to be discharged to an Unnamed Tributary to Beaver Run. The channel is inspected monthly and cleaned to remove sediment as needed.

A pipe installed in the aggregate storage bins collects runoff from 1200 sq. ft. of the upper level aggregate storage area. The pipe outlets adjacent to the water tank storage building at the batch plant. No discharge has been observed to date from the pipe outlet. The pipe is inspected monthly while the plant is in operation and cleaned if necessary. Since no discharge has been observed from the pipe outlet, and should it discharge, the pipe would discharge within the drainage area to Outfall 001, the aggregate storage area pipe is not considered to be an outfall.

Technology-Based Limitations

Stormwater Technology Limits

Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls discharge stormwater. The SIC code for the site is 3273 (Manufacturing - Ready-Mixed Concrete) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix N. The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix N (Glass, Clay, Cement, Concrete and Gypsum Products) of the PAG-03 will also be included in Part C of the Draft Permit.

Table 1: PAG-03 Appendix N Monitoring Requirements

Parameters	Maximum Daily (mg/L)	Benchmark Values (mg/L)	Monitoring Requirements	
			Monitoring Frequency	Sample Type
pH (S.U.)	Monitor & Report	9.0	1/6 Months	Grab
Total Suspended Solids (TSS)	Monitor & Report	100	1/6 Months	Grab
Aluminum, total	Monitor & Report	-	1/6 Months	Grab
Iron, total	Monitor & Report	-	1/6 Months	Grab

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfall 001 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Degradation

Antidegradation regulations under Chapter 93.4c(a)(l)(i) require dischargers to protect the existing use of receiving waters. Chapter 93.4c(b) requires dischargers to consider non-discharge alternatives, public participation and social/economic justification when proposing new, additional or increased discharges to high quality or exceptional value streams. Existing use protection required under Chapter 93.4c(a)(l)(i) is ensured for discharges to high quality streams imposing the most stringent of technology-based, water quality based and non-degrading effluent limitations. In this case, non-degradation

effluent limitations are not applicable because the discharge is stormwater-only. To ensure that the discharge does not degrade the stream, the no exposure benchmark values will be used as the benchmark values in the permit. The goal for the permittee is to be consistently below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters.

A Part C condition is included in the Draft Permit requiring a Corrective Action Plan when there is an exceedance of the benchmark values, which are included in the Part C condition and displayed below in Table 2. These values are not effluent limitations and an exceedance of the benchmark value is not a violation. If there is an exceedance of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater. To ensure that the discharge is not degrading the high-quality waters, the no exposure benchmark values will be used as the benchmark values in the permit.

Based on the discharge data included in the permit application, Outfall 001's sampling results were below all benchmark values indicative of no exposure conditions, except for total suspended solids (TSS). TSS was reported at 38 mg/L, as compared with the 30 mg/L TSS benchmark value. Since TSS is considered a pollutant of concern for concrete batch plants, benchmark monitoring is proposed for TSS to ensure the discharge is not degrading the high-quality waters. Discharge data was not provided for total iron in the permit application. The proposed effluent monitoring requirements will include monitoring for total iron.

Table 2: No Exposure Benchmark Values

Parameters	Benchmark Concentrations (mg/L)
Total Suspended Solids (TSS)	30.0

Total Maximum Daily Load (TMDL)

Wastewater discharges from Daniels Concrete Batch Plant are located within the Kiskiminetas-Conemaugh River Watershed, for which the Department has developed a TMDL. The Kiskiminetas-Conemaugh River Watershed TMDL was finalized on January 29, 2010 and addresses impairments resulting from acid mine drainage. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's ("EPA's") Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources to restore and maintain the quality of the state's water resources (USEPA 1991). The Kiskiminetas-Conemaugh River Watershed TMDL does not include a waste load allocation for Daniels Concrete Batch Plant. Water quality criteria for the TMDL watershed do not apply to the stormwater discharges from Daniels Concrete Batch Plant.

Anti-Backsliding

Daniels Concrete was not previously covered under an NPDES permit since it is a new facility. EPA's anti-backsliding regulation, 40 CFR 122.44(l) is not applicable to the Daniels Concrete Batch Plant.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 3 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there is an exceedance of the benchmark values, which are also included in the Part C condition. The benchmark values are also displayed below in Table 3. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there is an exceedance of the benchmark values, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater. To ensure that the discharge is not degrading the high-quality waters, the no exposure benchmark value for TSS will be used as benchmark values in the permit. If Daniels Concrete Batch Plant facility is

unable to consistently achieve the non-degrading benchmark values, the Department may consider the imposition of effluent limitations in the future.

Table 3: Proposed Effluent Monitoring Requirements – Outfall 001

Parameters	Maximum Daily	Benchmark Values (mg/L)	Monitoring Requirements	
			Monitoring Frequency	Sample Type
pH (S.U.)	Monitor & Report	9.0 (maximum)	1/6 Months	Grab
Total Suspended Solids (mg/L)	Monitor & Report	30.0	1/6 Months	Grab
Aluminum, total (mg/L)	Monitor & Report	-	1/6 Months	Grab
Iron, total (mg/L)	Monitor & Report	-	1/6 Months	Grab

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model 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.
☐	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.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

Attachments

Attachment A: StreamStats Reports for Outfall 001

Attachment B: Site Plan and Aerial Maps

ATTACHMENT A:

StreamStats Report for Outfall 001

StreamStats Report

Region ID: PA
Workspace ID: PA20220525124904081000
Clicked Point (Latitude, Longitude): 40.37960, -79.52196
Time: 2022-05-25 08:49:29 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0487	square miles
ELEV	Mean Basin Elevation	1336	feet
PRECIP	Mean Annual Precipitation	41	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0487	square miles	2.33	1720
ELEV	Mean Basin Elevation	1336	feet	898	2700
PRECIP	Mean Annual Precipitation	41	inches	38.7	47.9

Low-Flow Statistics Disclaimers [Low Flow Region 3]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

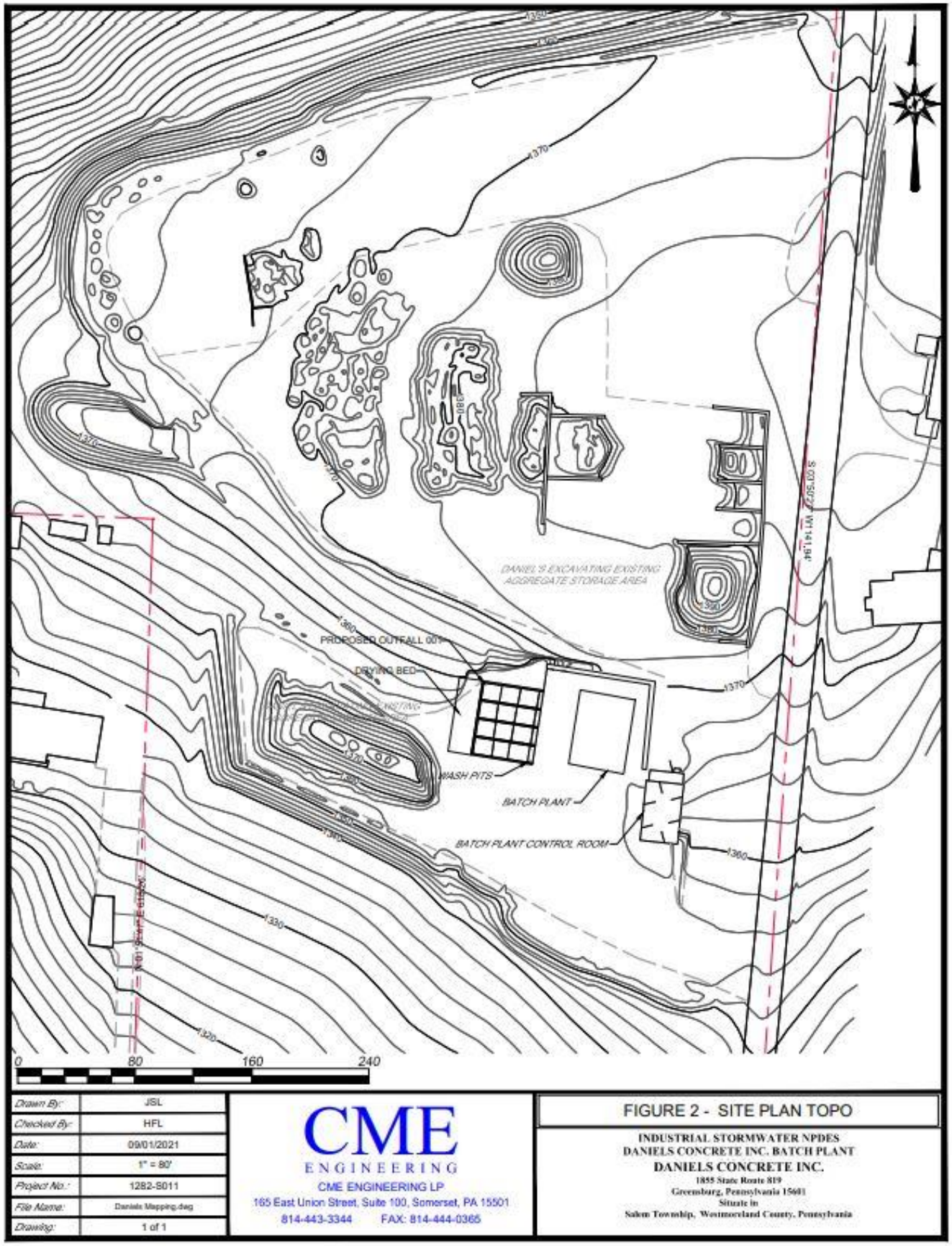
Low-Flow Statistics Flow Report [Low Flow Region 3]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00366	ft^3/s
30 Day 2 Year Low Flow	0.00573	ft^3/s
7 Day 10 Year Low Flow	0.00112	ft^3/s
30 Day 10 Year Low Flow	0.00182	ft^3/s
90 Day 10 Year Low Flow	0.00288	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

ATTACHMENT B:
Site Plan and Aerial Maps

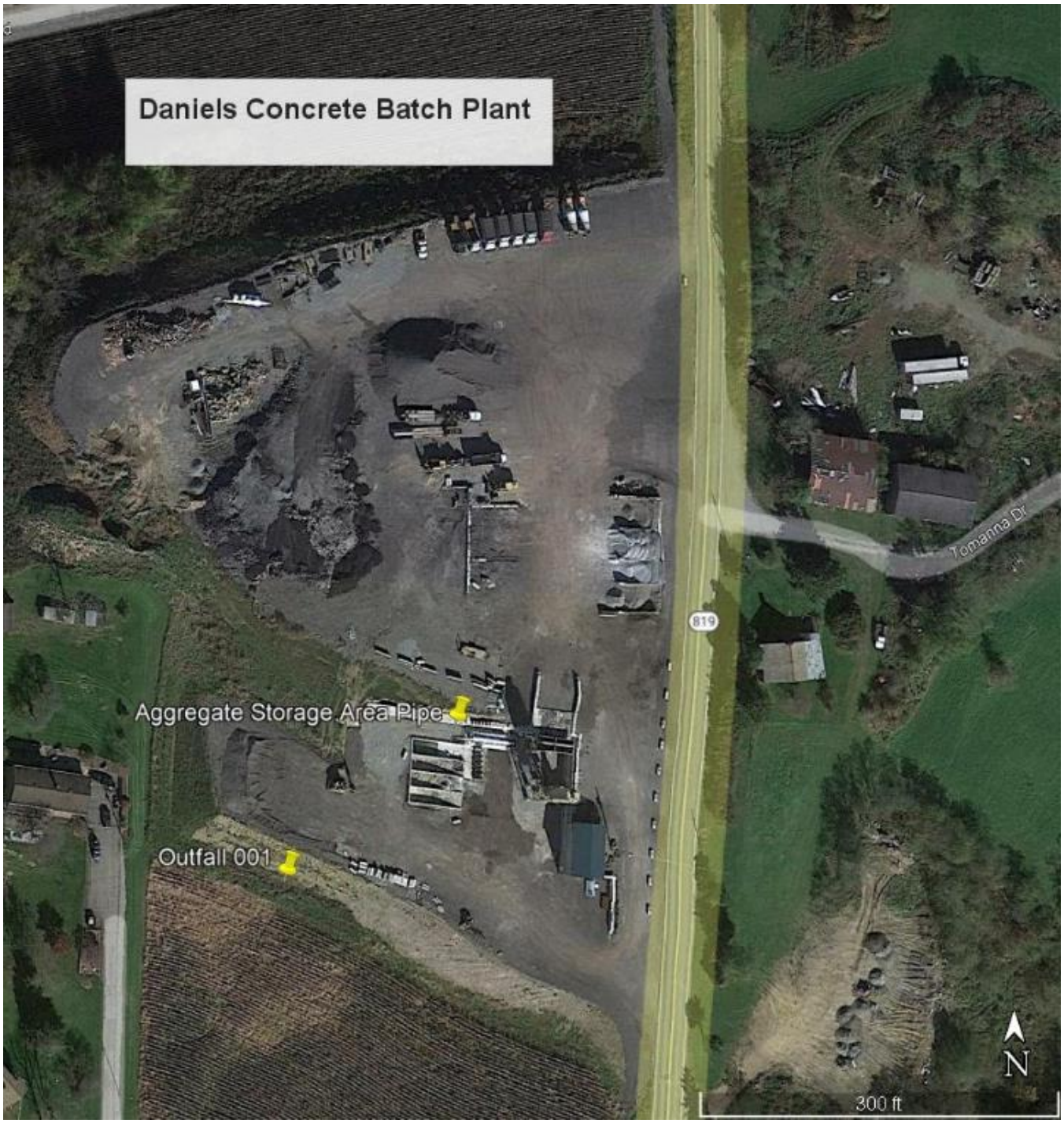


Drawn By:	JSL
Checked By:	HFL
Date:	09/01/2021
Scale:	1" = 80'
Project No.:	1282-S011
File Name:	Daniels Mapping.dwg
Drawing:	1 of 1

CME
ENGINEERING
CME ENGINEERING LP
165 East Union Street, Suite 100, Somerset, PA 15501
814-443-3344 FAX: 814-444-0365

FIGURE 2 - SITE PLAN TOPO

INDUSTRIAL STORMWATER NPDES
DANIELS CONCRETE INC. BATCH PLANT
DANIELS CONCRETE INC.
1855 State Route 819
Greensburg, Pennsylvania 15601
Situate in
Salem Township, Westmoreland County, Pennsylvania


Daniels Concrete Batch Plant
Aggregate Storage Area Pipe
Outfall 001
Tomanna Dr
819
N
300 ft