

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0058866
APS ID 1034347
Authorization ID 1346647

Applicant and Facility Information

Applicant Name	<u>Blommer Chocolate Co.</u>	Facility Name	<u>Blommer Chocolate East Greenville Facility</u>
Applicant Address	<u>1101 Blommer Drive</u> <u>East Greenville, PA 18041-2140</u>	Facility Address	<u>1101 Blommer Drive</u> <u>East Greenville, PA 18041-2140</u>
Applicant Contact	<u>Tim Campbell</u>	Facility Contact	<u>Tim Campbell</u>
Applicant Phone	<u>(267) 347-2332</u>	Facility Phone	<u>(267) 347-2332</u>
Client ID	<u>4477</u>	Site ID	<u>491646</u>
SIC Code	<u>2066</u>	Municipality	<u>Upper Hanover Township</u>
SIC Description	<u>Manufacturing - Chocolate And Cocoa Products</u>	County	<u>Montgomery</u>
Date Application Received	<u>March 18, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit renewal.</u>		

Summary of Review

The permittee submitted a renewal application for their non-contact cooling water, boiler blow down, softener and de-alkalizer reject water and storm water discharges to Perkiomen Creek through 4 outfalls.

The facility is operating under SIC 2066 - Chocolate and Cocoa Products - chocolate and confectionary manufacturing from cocoa beans. Production of chocolate and related chocolate products, including whole bean processing, roasting and cocoa butter extraction. Industrial wastewater sources include non-contact blowdown from boilers and cooling towers.

Outfall 001 receives stormwater from the manufacturing building roof drains, concrete loading/unloading areas, as well as additional paved and unpaved surfaces and grass areas on the northern portion of the site.

Outfall 002 receives stormwater from the manufacturing building roof drains, material loading/unloading and material storage areas, as well as paved and unpaved surfaces and grass areas on the eastern portion of the site. Non-process water redirected to Outfall 003.

Outfall 003 receives all non-contact cooling tower discharge, boiler discharge and stormwater from paved and unpaved surfaces and grass areas on the southern portion of the site. Maximum Flow During Production / Operation (MGD): 0.0892.

Outfall 004 receives stormwater from the storage building roof drains, an unpaved trailer parking area, as well as additional unpaved surfaces and grass areas on the western portion of the site. A vegetated sediment basin treats stormwater runoff at Outfall 004. Solids removed from the basin are disposed with plant waste.

Approve	Deny	Signatures	Date
X		<i>Begay Omuralieva</i> Begay Omuralieva / Environmental Engineering Specialist	9/9/2021
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	09/10/2021

Summary of Review

There are following chemical additives are used in wastestream:

Dica 66 (sulfuric acid) - Acid neutralization
Trexide 435 - Cooling water treatment (biocide)
CW-879L - Cooling water treatment (dispersant)
IsoPlus PBB Blend - Boiler treatment (inhibitor)
A-5-19 - Stream line treatment
Ultrex Plus PBB Blend - Cooling water treatment

New additive is requested to be used: MBC 215-P as cooling water treatment (it is in DEP approved list).

Site visit was conducted on 3/30/2021. No operational violations are noted, but there was an unpermitted discharge of pH 9.59 and TSS exceedances in DMRs noted in p. 8 of this factsheet.

Following Notice of violation for the 5/2//21 pH violation facility has provided following corrective action report:

This letter is in response to the Notice of Violation received at the Blommer Chocolate, East Greenville facility on May 4, 2021. The NOV stated "On 5/2/21 an unidentified white material was discharged through the permitted 003 outfall. This condition is a violation of the NPDES Permit." In follow-up to the Notice of Violation, an investigation was initiated to determine the identity of the aforementioned material as well as the reason for its presence in the permitted discharge from the boiler system to the 003 outfall. As a result of the investigation, it was determined that Alkalized Chocolate Liquor had entered the plant's steam system by way of a damaged steam jacket surrounding a product tank. The alkalized liquor was circulated throughout the plant's entire steam system, undergoing a process called saponification, wherein a fat, oil, or lipid is converted into soap by the action of heat in the presence of aqueous alkali. Eventually, the system's filters were no longer able to function, releasing the contents to the boilers. From there, the contaminate was discharged into a drainage pit that leads to the 003 outfall. Once the material had time to cool, it solidified, creating the hard, white substance that was found.

Representatives of Blommer Chocolate's East Greenville plant worked with multiple vendors to contain, identify, remove, and properly dispose of the discharged material, as well as to determine a root cause and establish an action plan to prevent a recurrence of this event. What follows is a breakdown of the various actions taken in response to the 5/2/21 incident.

Based on the submitted application and summary of the DMR data no changes in quality and quantity of the discharges. Therefore, all previously established effluent limits and monitoring requirements will be proposed in the draft permit except for stormwater monitoring requirements that were revised in accordance statewide stormwater permit to semi-annual sampling (see pp.9-12 of this fact sheet).

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No. 001, 002
 Latitude 40° 24' 32.94" Longitude -75° 30' 38.14"
 Quad Name East Greenville Quad Code 1541

Wastewater Description: Stormwater from the manufacturing building roof drains, concrete loading/unloading areas, as well as additional paved and unpaved surfaces and grass areas on the northern and eastern portion of the site.

Receiving Waters	<u>Unnamed Tributary to Perkiomen Creek (TSF, MF)</u>	Stream Code	<u>01471</u>
NHD Com ID	<u>25971370</u>	RMI	<u>0.80</u>
Drainage Area	<u>0.18</u>	Yield (cfs/mi ²)	<u>0.194</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.035</u>	Q ₇₋₁₀ Basis	<u>Streamstat</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Assessment Status Attaining Use(s)
 Cause(s) of Impairment
 Source(s) of Impairment
 TMDL Status Name

Background/Ambient Data	Data Source
pH (SU) <u></u>	<u></u>
Temperature (°F) <u></u>	<u></u>
Hardness (mg/L) <u></u>	<u></u>
Other: <u></u>	<u></u>

Nearest Downstream Public Water Supply Intake
 PWS Waters Flow at Intake (cfs)
 PWS RMI Distance from Outfall (mi)

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>003</u>	Design Flow (MGD)	<u>.0225</u>
Latitude	<u>40° 24' 48.29"</u>	Longitude	<u>-75° 31' 16.41"</u>
Quad Name	<u>East Greenville</u>	Quad Code	<u>1541</u>

Wastewater Description: Noncontact Cooling Water (NCCW), Stormwater from paved and unpaved surfaces and grass areas on the southern portion of the site

Receiving Waters	<u>Perkiomen Creek (TSF, MF)</u>	Stream Code	<u>01017</u>
NHD Com ID	<u>25971626</u>	RMI	<u>0.2700</u>
Drainage Area	<u>35.6</u>	Yield (cfs/mi ²)	<u>0.194</u>
Q ₇₋₁₀ Flow (cfs)	<u>6.9</u>	Q ₇₋₁₀ Basis	<u>Streamstat</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>

Assessment Status Attaining Use(s)

Cause(s) of Impairment

Source(s) of Impairment

TMDL Status Name

Background/Ambient Data	Data Source
pH (SU)	<u></u>
Temperature (°F)	<u></u>
Hardness (mg/L)	<u></u>
Other:	<u></u>

Nearest Downstream Public Water Supply Intake

PWS Waters Flow at Intake (cfs)

PWS RMI Distance from Outfall (mi)

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No. 004
 Latitude 40° 24' 46.55" Longitude -75° 31' 16.93"
 Quad Name East Greenville Quad Code 1541

Wastewater Description: Stormwater from the storage building roof drains, an unpaved trailer parking area, as well as additional unpaved surfaces and grass areas on the western portion of the site.

Receiving Waters Perkiomen Creek (TSF, MF) Stream Code 01017
 NHD Com ID 25971626 RMI 0.2700
 Drainage Area 35.6 Yield (cfs/mi²) 0.194
 Q₇₋₁₀ Flow (cfs) 6.9 Q₇₋₁₀ Basis Streamstat
 Elevation (ft) _____ Slope (ft/ft) _____
 Watershed No. 3-E Chapter 93 Class. TSF, MF
 Existing Use _____ Existing Use Qualifier _____
 Exceptions to Use _____ Exceptions to Criteria _____

Assessment Status Attaining Use(s)
 Cause(s) of Impairment _____
 Source(s) of Impairment _____
 TMDL Status _____ Name _____

Background/Ambient Data	Data Source
pH (SU) _____	_____
Temperature (°F) _____	_____
Hardness (mg/L) _____	_____
Other: _____	_____

Nearest Downstream Public Water Supply Intake _____
 PWS Waters _____ Flow at Intake (cfs) _____
 PWS RMI _____ Distance from Outfall (mi) _____

Changes Since Last Permit Issuance: none

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
pH (S.U.) Daily Maximum							7.35					
TSS (mg/L) Daily Maximum							90.0					
Oil and Grease (mg/L) Daily Maximum							12.0					
TKN (mg/L) Daily Maximum							1.54					
Total Iron (mg/L) Daily Maximum							0.725					

DMR Data for Outfall 002 (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
pH (S.U.) Daily Maximum							7.38					
TSS (mg/L) Daily Maximum							37.0					
Oil and Grease (mg/L) Daily Maximum							7.7					
TKN (mg/L) Daily Maximum							163					
Total Iron (mg/L) Daily Maximum							0.674					

DMR Data for Outfall 003 (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	0.0513	0.03676	0.0317269	0.036895	0.031618	0.027954	0.0354525	0.031927	0.021581	0.0183184	0.036397	0.032114
Flow (MGD) Daily Maximum	0.0908	0.07984	0.048517	0.05042	0.041432	0.035284	0.051661	0.045464	0.041874	0.044063	0.04429	0.056682
pH (S.U.) Instantaneous Minimum	7.16	7.14	6.65	7.02	6.92	6.93	7.56	7.7	7.97	7.75	8.26	3.22

**NPDES Permit Fact Sheet
Blommer Chocolate Co.**

NPDES Permit No. PA0058866

pH (S.U.) Instantaneous Maximum	8.55	10.24	8.76	8.92	8.11	8.58	8.74	8.89	8.84	8.86	8.89	8.95
Temperature (°F) Instantaneous Maximum	82	106	99.9	88.3	76.3	72.3	84.9	84.6	86.5	87.3	95.18	98.24
TSS (mg/L) Average Monthly	2	23	31	10	4	4	32	16	5	2	2	2
TSS (mg/L) Daily Maximum	1.9	23	31	10	3.6	4.4	32	16	4.5	1.5	1.5	2.1
Total Dissolved Solids (lbs/day) Average Monthly	198	268	465	269	307	319	698	258	122	75	378	373
Total Dissolved Solids (lbs/day) Daily Maximum	198	268	465	269	307	319	698	258	122	75	378	373
Total Dissolved Solids (mg/L) Average Monthly	690	920	1300	870	1200	1200	2000	810	1300	670	1200	1100
Total Dissolved Solids (mg/L) Daily Maximum	690	920	1300	870	1200	1200	2000	810	1300	670	1200	1100

DMR Data for Outfall 004 (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
pH (S.U.) Daily Maximum							7.83					
TSS (mg/L) Daily Maximum							1150					
Oil and Grease (mg/L) Daily Maximum							< 5.0					
TKN (mg/L) Daily Maximum							4.04					
Total Iron (mg/L) Daily Maximum							62.2					

Compliance History

Effluent Violations for Outfall 003, from: August 1, 2020 To: June 30, 2021

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	05/31/21	IMAX	10.24	S.U.	9.0	S.U.
TSS	12/31/20	Avg Mo	32	mg/L	30	mg/L
TSS	04/30/21	Avg Mo	31	mg/L	30	mg/L

Summary of Inspections: no operational violations were noted during inspections.

Following were also reported in the application:

On June 1st 2017, an apparent Dica (sulfuric acid) release was observed to the Blommer outfall #003. Dica is used to neutralize boiler blowdown water that is discharged to Outfall #003. The release was caused by a malfunctioning chemical pump. Pools of very low pH water were observed in a collection basin that lies on the neighbor's (Knoll) property. Several gallons of caustic were taken to the site and used to neutralize the pools of water. DEP visited the site the same day as the release and was satisfied and considered the immediate issue addressed. A NOV was issued on June 2nd, 2017 and Blommer complied and corrected/abated the issue.

On July 8, 2019, drums were being consolidated into 300 gallon totes prior to disposal as scrap steel. The totes were left uncovered and exposed. It rained ~1.3" on July 8, 2019 which caused the totes to overflow. The mixture of oils and water leached to the Outfall 004 retention pond. Residual oils and water was observed on the grass. The totes were drained, booms were set around release and contaminated grounds were removed. The area affected by release was re-stoned and a rip-rap swale was installed into this basin. Thorough investigation was conducted around the area of impact, on the neighboring (Knoll) property, where wastewater enters the Perkiomen creek from Outfall 004 and downstream of the discharge point into the Perkiomen creek. No evidence of impact or release was observed further than the Outfall 004 swale.

On July 6, 2020 at approximately 9:00 AM, low pH readings were discovered for the boilers. The readings were 3.22-3.32. The neutralizer pump was then replaced. The facility uses Dica 66 for pH neutralization of boiler blowdown prior to discharge through outfall 003. Outfall 003 was monitored by DEP at 1300. Discharge was clear and visually in compliance. pH was 8.90.

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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab

Compliance Sampling Location: Outfall 001

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 002, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab

Compliance Sampling Location: Outfall 002

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 003, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Metered
pH (S.U.) *	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
Temperature (deg F) *	XXX	XXX	XXX	XXX	XXX	110	1/week	I-S
Total Suspended Solids *	XXX	XXX	XXX	30	60	75	1/month	24-Hr Composite
Total Dissolved Solids *	Report	Report Daily Max	XXX	Report	Report	XXX	1/month	24-Hr Composite
pH (S.U.)**	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Total Suspended Solids **	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
5-Day Biochemical Oxygen Demand (BOD5) **	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Oil and Grease **	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Nitrate + Nitrite-Nitrogen **	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Chemical Oxygen Demand ** (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab

* Samples shall be taken during non-storm event.

** Samples shall be taken during wet-weather event

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 004, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Biochemical Oxygen Demand (BOD5)	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 month	Grab

Compliance Sampling Location: Outfall 004