pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0013862**
Facility Type	**Industrial**	APS ID	**579021**
Major / Minor	**Minor**	Authorization ID	**1019975**

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

Applicant and Facility Information

Applicant Name	**Corixa Corporation, dba GlaxoSmithKline Vaccines**	Facility Name	**Corixa Corporation, dba GlaxoSmithKline Vaccines**
Applicant Address	325 N Bridge Street Marietta, PA 17547-1134	Facility Address	325 N Bridge Street Marietta, PA 17547-1134
Applicant Contact	Michael Szymanski	Facility Contact	Michael Szymanski
Applicant Phone	(717) 426-6566	Facility Phone	(717) 426-6566
Client ID	247130	Site ID	240709
SIC Code	2836	Municipality	East Donegal Township
SIC Description	Biological Products, Except Diagnostic	County	Lancaster
Date Application Received	March 26, 2014	EPA Waived?	Yes
Date Application Accepted	April 10, 2014	If No, Reason	

Purpose of Application: NPDES Renewal.

Summary of Review

A draft NPDES permit was issued on December 20, 2019 and was published in the PA Bulletin on January 4, 2020. Comments were received from GSK on January 30, 2020. The comments are listed below:

1. GSK currently operates an UV treatment unit just upstream of the internal monitoring point, Outfall 100 and currently can measure UV intensity at this location. GSK requests to monitor the daily UV light transmittance and report under Outfall 100. GSK respectfully requests a compliance schedule to purchase and install additional equipment to be able to measure UV transmittance %.
2. Page 2 of the NPDES Permit Fact Sheet has a paragraph titled “Changes in this renewal”. This section lists changes made to this permit but does not include the parameters of Nitrate-Nitrite as N, Total Nitrogen and Total Kjeldahl Nitrogen for Outfall 004 to be analyzed annually. However, these parameters are listed on Page 3 of the draft permit. Please remove these parameters from the permit or clarify in the Fact Sheet these additional permit parameters.

An email was received from Betty Fisher, GSK on February 20, 2020 providing an updated process flow diagram of the wastewater treatment process. Ms. Fisher noted that their UV system supplier was in the process of confirming that the existing UV system was capable of reading UV intensity in W/cm^2 and/or mJ/cm^2.

An email was received from Betty Fisher on March 11, 2020 which confirmed the capability of the existing UV system to read UV intensity in mW/cm^2. Additionally GSK requested additional time to sample all six of its stormwater outfalls to enable a revised determination of representative stormwater outfalls based on current information. GSK requested the final permit not be issued until this sampling was completed and appropriate revised analytical data and drainage basin information could be reported. DEP consented to this proposal.

Approve	Deny	Signatures	Date
X		Benjamin Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	October 1, 2020
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Program Manager	

Summary of Review

On May 20, 2020, GSK submitted updated chemical additive information. Chemical additive notification forms were provided for two new additives and revisions for three previous notifications.

On July 14, 2020, GSK submitted the updated stormwater NPDES forms which presented the most recent stormwater data from March 2020 for each of the facility's outfalls. A revised stormwater drainage basin map was included, which reflects changes in drainage basin usage (to non-industrial) and updated the drainage basin boundaries and basin sizes previously submitted to DEP. The report states there are no industrial activities exposed to stormwater at the facility. Outfalls 006 and 007 meet the numerical benchmarks for No Exposure. Outfall 005 exceeds the No Exposure benchmark for BOD and Total Nitrogen, and Outfall 008 exceeds the No Exposure benchmark for BOD; GSK concluded that the likely source of these pollutants are leaves, lawn cuttings and lawn fertilization. GSK asked their lawn service to reduce fertilizer applications by 50%. In addition to BOD and Total Nitrogen, Outfalls 002 and 003 exceed the No Exposure benchmark for COD. GSK did not have an explanation for these exceedances, but noted that Outfalls 002 and 003 include flows from public streets and abutting residential properties owned by others. GSK requests that DEP remove the requirements in the draft permit for stormwater sampling and classify the facility as a No Exposure site, due to their statement that there are no industrial contributions of pollutants to stormwater, as well as no non-stormwater flows existing through these facility outfalls.

On August 6, 2020, GSK submitted a letter relating to the correction of erroneous application information. GSK had discovered that the March 24, 2014 NPDES application submitted by IES failed to indicate those analytical parameters that were not detected, reporting them without the necessary less-than sign or U qualifier. There were also several typographical errors, two of which related to compounds that were not detected, and one that was the NAICS number. The concentrations erroneously reported as detected were all sufficiently low in concentration as to not lead to any additional effluent monitoring requirements in the December 2019 NPDES draft permit.

In response,

The effluent limitations have been revised to include a UV intensity monitoring requirement at Outfall 100, the internal monitoring point. As the March 11, 2020 correspondence indicated that the existing UV system is capable of reading UV intensity, a compliance schedule to purchase and install additional equipment has not been included.

The addition of Nitrate-Nitrite, Total Nitrogen, and TKN monitoring requirements to Outfall 004 was unintentionally omitted from the "Changes in this renewal" paragraph of the NPDES Fact Sheet Draft. The addition of these monitoring requirements was documented in the Fact Sheet "Development of Effluent Limitations" section, as well as the draft NPDES permit. Total Dissolved Solids, Bromide, Chloride, Sulfate, Nitrate-Nitrite, Total Nitrogen, and TKN monitoring requirements were added to the permit for Outfall 004. Fecal coliform instantaneous maximum (IMAX) limits and UV Intensity monitoring were added to the permit for Outfall 100. Revised stormwater monitoring requirements were included for Outfall 002, 003, 005, 006, 007 and 008.

The updated list of chemical additives in use at this facility is provided below.

Due to the fact that no industrial activities are exposed to stormwater at the facility, monitoring requirements for the stormwater outfalls have been removed from the permit. Updated stormwater information is provided below.

A revised NPDES permit will be re-drafted with the changes listed in this addendum. There are currently no open violations for the permittee or facility.

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.

Chemical Additives

The following chemical additives are currently used at the plant and are expected to be present in the effluent:

Chemical Additive	Purpose	Maximum Usage (lb/day)	Usage Frequency
Chemtex B-2374	Boiler Treatment	98.2	Continuous
Chemtex B-297	Boiler Treatment	106.8	Continuous
Chemtex B-862	Boiler Treatment	5,759.5	Continuous
Steris LpH	Hard Surfaces Disinfection	484.2	Daily
Steris Vesta-Syde SQ	Hard Surfaces Disinfection	56.1	Daily
Chemtex CST-4252	Corrosion Inhibitor and dispersant	804	Continuous
AP Tech Group Durobrom	Microbiological control	3.4	Continuous
AP Tech Group Durocide C100-G	Microbiological control	3.9	Continuous

These chemicals are included on DEP's Approved List of Chemical Additives. The permit will include Part C conditions for chemical additive usage and reporting requirements.

Development of Effluent Limitations

Outfall No.	002, 003, 005, 006, 007, 008	**Design Flow (MGD)**	Variable (stormwater)
	40º 3' 29" (002)		76º 33' 46" (002)
	40º 3' 28" (003)		76º 33' 54" (003)
	40º 3' 38" (005)		76º 34' 02" (005)
	40º 3' 38" (006)		76º 33' 53" (006)
	40º 3' 39" (007)		76º 33' 46" (007)
Latitude	40º 3' 38" (008)	**Longitude**	76º 33' 36" (008)

Wastewater Description: Stormwater

Stormwater Limitations

The application lists six (6) stormwater outfalls for this facility. Outfall 002 receives stormwater from 706,160 ft^2 from building roofs, part of facility yard and roadways, parking lot, and borough street drains. Outfall 003 receives stormwater from 241,450 ft^2 from building roofs, parking lot, part of facility yard, lawns, roadways, and borough street drains. Outfall 005 receives stormwater from 328,570 ft^2 from building roofs, parking lot, part of facility yard, lawn, and roadways. Outfall 006 receives stormwater from 92,830 ft^2 from facility roadways and lawn. Outfall 007 receives stormwater from 60,000 ft^2 from building unloading area (covered), part of facility yard, lawn, and roadways. Outfall 008 receives stormwater from 164,640 ft^2 from building roofs, parking lot, and lawn. Outfall 002 and 003 both discharge into storm sewers which discharge to the Susquehanna River. Outfalls 005, 006, 007, and 008 discharge into retention basins prior to discharge to the Susquehanna River.

The existing permit requires annual monitoring of pH, $CBOD_5$, COD, TSS, Oil and Grease, TKN, Total Phosphorus, and Dissolved Iron at Outfalls 002, 003, 005, 006, 007, and 008. This monitoring requirements was derived from Appendix J of the NPDES PAG-03 General Permit. This facility falls under SIC code 2836. The facility's stormwater discharge does not fall with the EPA definition of storm water associated with industrial activity per 40 CFR 122.26(b)(14); therefore, monitoring will not be required. Part C requirements for stormwater outfalls will be included in the permit.

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
TSS	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
Total Phosphorus	5.4	10.7	XXX	2.0	4.0	5.0	1/week	8-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/month	8-Hr Composite
Bromide	XXX	XXX	XXX	XXX	Report	XXX	1/month	8-Hr Composite
Chloride	XXX	XXX	XXX	XXX	Report	XXX	1/month	8-Hr Composite
Sulfate	XXX	XXX	XXX	XXX	Report	XXX	1/month	8-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/year	8-Hr Composite
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/year	8-Hr Composite

Compliance Sampling Location: After mixing with inorganic waste stream

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 100, 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD) Internal Monitoring Point	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
UV Intensity (mW/cm²) Internal Monitoring Point	XXX	XXX	Report	XXX	XXX	XXX	1/day	Recorded
BOD5 Internal Monitoring Point	Report	Report	XXX	18	35	45	1/week	8-Hr Composite
COD Internal Monitoring Point	Report	Report	XXX	86	228	285	1/week	8-Hr Composite
TSS Internal Monitoring Point	Report	Report	XXX	31	58	77	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Internal Monitoring Oct 1 - Apr 30	XXX	XXX	XXX	2,000 Geo Mean	XXX	10,000	1/week	Grab
Fecal Coliform (No./100 ml) Internal Monitoring May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/week	Grab

Compliance Sampling Location: At discharge from treatment facility

Other Comments: None