pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0052868**
Facility Type	**Industrial**	APS ID	**973015**
Major / Minor	**Minor**	Authorization ID	**1237065**

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

Applicant and Facility Information

Applicant Name	**BAE Systems**	Facility Name	**BAE Systems GWCU**
Applicant Address	PO Box 868, NNH01-6C5	Facility Address	305 Richardson Road
	Nashua, NH 03061-0868		Lansdale, PA 19446-1495
Applicant Contact	Jeffrey Mathis	Facility Contact	Ronald Blanchette
Applicant Phone	(603) 885-3440	Facility Phone	(603) 885-3440
Client ID	133835	Site ID	254607
SIC Code	4959	Municipality	Montgomery Township
SIC Description	Trans. & Utilities - Sanitary Services, not elsewhere classified/Remediation Services	County	Montgomery
Date Application Received	July 2, 2018	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Permit Renewal.

Summary of Review

The applicant requests renewal of an NPDES permit to discharge treated groundwater from a groundwater remediation system to an UNT to West Branch Neshaminy Creek.

In the late 1970's, TCE/PCE groundwater contamination was detected at the site. The facility signed a consent decree with the Department in 1981, and a groundwater cleanup system commenced operation in 1986. This site had an on-site tank that leaked TCE/PCE. This site is also within a regional North Penn NPL (superfund) area.

BAE Systems sold the site to Sensor and Antenna Systems, Lansdale Inc., a division of Cobham Defense Electronic Systems Corporation. BAE Systems retains ownership and responsibility of the groundwater treatment at the site. BAE does not maintain responsibility for the stormwater at the site. The new owners submitted a no-exposure certificate.

A DMR review shows the discharge is in compliance with the existing permit limits.

Effluent Limitation Guidelines (ELGs) have not been developed for Discharges from Chlorinated Solvent Product Contaminated Groundwater Remediation Systems.

This is an existing discharge to a dry swale. Therefore, the discharge is subject to requirements under the 'Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales and Storm Sewers (391-2000-14)'. Generally, the effluent limits will ensure protection of groundwater for drinking water use, using the following considerations: (i) if the maximum contaminant level (MCL) has been promulgated for the chemical in question, the MCL is the permit limit (ii) if no MCL has been finalized, the effluent limit will be set equal to the human health based criterion developed specifically for groundwater.

Approve	Deny	Signatures	Date
		Sara Reji Abraham, E.I.T. / Project Manager	
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

Summary of Review

Trichloroethylene (TCE) was selected as the indicator pollutant, because it is the one compound that is consistently detected in the groundwater at concentrations significantly above relevant cleanup standards.
The effluent limit established in the current permit for TCE, 0.005 mg/l (MCL) is recommended to carry over to the new permit. Standard pH limit, 6.0 to 9.0 is also carried over to the new permit.
A TSS limit of 30 mg/l (secondary treatment standard / DRBC) which is typically included for this type of discharge is also incorporated in the new permit.

Perflourinated chemicals (PFCs) were discovered in the local groundwater during a Federal EPA Unregulated Contaminant Rule (UCMR3) sampling effort. BAE proposes to modify the existing treatment system to include additional treatment through activated carbon to treat the substances Perfluoro-octanoic acid (PFOA) and Perfluoro-octanesulfonic acid (PFOS).

There are no published drinking water MCLs for the emerging contaminants PFOA and PFOS. The latest PFOA and PFOS Health Advisories (EPA, May 2016) are based on both short term (weeks to months) and lifetime human exposures. The Drinking Water Health Advisories recommend a total PFOA and PFOS concentration of 0.07 ug/l. The Drinking Water Health Advisories are accepted by DEP and EPA as the target concentration for the drinking water supply. Discharging treated water at concentrations at or below the Health Advisory Level (HAL) will ensure that the discharge does not cause or contribute to contamination in the stream or groundwater above this level. Therefore, the recommendation is to include a maximum Total PFOA and PFOS concentration of 0.07 ug/l in the permit as an average monthly limit. In addition, DEP is utilizing the HAL to implement the narrative water quality criteria contained in DEP's regulations at 25 Pa Code §93.6 (a). Since the sample type listed in the permit is grab, an instantaneous maximum limit is also included in the permit with a multiplier of 2.5.

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.

Act 14 Notifications:

Montgomery Township - March 6, 2018
Montgomery County - March 6, 2018

Permit Conditions:

A. Acquire Necessary Property Rights
B. Proper Sludge Disposal
C. WQM Requirement
D. BAT/ELG Reopener
E. Dry Stream
F. No Stripper Tower Wastewater

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.1
Latitude	40º 15' 59.86"	Longitude	-75º 14' 46.38"
Quad Name	Doylestown	Quad Code	1644
Wastewater Description:	Groundwater Cleanup Discharge		
Receiving Waters	Unnamed Tributary of West Branch Neshaminy Creek (WWF, MF)	Stream Code	02878
NHD Com ID	25479138	RMI	0.2500
Q_{7-10} Flow (cfs)	0.0	Q_{7-10} Basis	Dry Swale / intermittent Stream
Watershed No.	2-F	Chapter 93 Class.	WWF, MF
Assessment Status	Impaired		
Cause(s) of Impairment	Flow Regime modification, Siltation		
Source(s) of Impairment	Site Clearance (Land Development or Redevelopment) , Urban Runoff/Storm Sewers		
TMDL Status	Final, 04/09/2003 *	Name	Neshaminy Creek

Comments: * Nutrient portion of Neshaminy Creek TMDL was withdrawn.

Compliance History

DMR Data for Outfall 001 (from May 1, 2018 to April 30, 2019)

Parameter	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18	MAY-18
Flow (MGD) Average Monthly	0.0026	0.0030			0.0019						0.0007	
pH (S.U.) Instantaneous Minimum	7.95	7.74			6.94						8.43	
pH (S.U.) Instantaneous Maximum	7.95	7.74			6.94						8.43	
Trichloroethylene (mg/L) Weekly Average	< 0.0002	< 0.0002			< 0.001						< 0.003	
Trichloroethylene (mg/L) Instantaneous Maximum	< 0.0002	< 0.0002			< 0.001						< 0.003	

Proposed Effluent Limitations and Monitoring Requirements

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	75.0	1/month	Grab
Trichloroethylene	XXX	XXX	XXX	0.005	XXX	0.013	1/month	Grab
PFOA (ug/L)	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
PFOS (ug/L)	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
Total PFOA and PFOS (ug/L)	XXX	XXX	XXX	0.07	XXX	0.175	1/month	Grab