

Paul Philemonoff

From: Hawks, Jody (US) <jody.hawks@baesystems.com>
Sent: Friday, February 22, 2019 8:50 AM
To: kurt.kochan@deq.virginia.gov; Elizabeth Lohman; Brett Fisher; Ashby.Scott@deq.virginia.gov
Cc: Mckenna, James J CIV (US); McCoy, Mary (US); Mike Lawless; Janet Frazier
Subject: [Non-DoD Source] RFAAP Combined 4th Qtr Semiannual and Annual GWMR for HWMUs 5 & 16
Attachments: 19-0900-026 Combined 4thQtr SA and Annual GWMR_HWMU 5&16.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Kurt – Attached you will find the transmittal letter associated with the Combined 4th Quarter Semiannual and Annual GWMR concerning HWMUs 5 & 16. Within the letter you will find links to access the report and the laboratory data. I have also placed the links below for your convenience. Should you have any questions or concerns, do not hesitate to contact me. Thanks and have a good weekend.

RPT - 19 0214- File 1 of 3 - 2018 Annual GW Rpt HWMUs 5&16.pdf

Caution-https://files.daa.com/dl/Eh4lhYtVVT/RPT_-_19_0214_-_File_1_of_3_-_2018_Annual_GW_Rpt_HWMUs_5%2616.pdf < Caution-
https://files.daa.com/dl/Eh4lhYtVVT/RPT_-_19_0214_-_File_1_of_3_-_2018_Annual_GW_Rpt_HWMUs_5%2616.pdf >

RPT - 19 0214 - File 2 of 3 - App C1 - 2Q 2018 5 16 Validation report and lab data.pdf

Caution-https://files.daa.com/dl/uXC2ndUZfX/RPT_-_19_0214_-_File_2_of_3_-_App_C1_-_2Q_2018_5_16_Validation_report_and_lab_data.pdf < Caution-
https://files.daa.com/dl/uXC2ndUZfX/RPT_-_19_0214_-_File_2_of_3_-_App_C1_-_2Q_2018_5_16_Validation_report_and_lab_data.pdf >

RPT - 19 0214 - File 3 of 3 - App C2 - 4Q 2018 5 16 Validation report and lab data.pdf

Caution-https://files.daa.com/dl/MpGBbBoT2Y/RPT_-_19_0214_-_File_3_of_3_-_App_C2_-_4Q_2018_5_16_Validation_report_and_lab_data.pdf < Caution-
https://files.daa.com/dl/MpGBbBoT2Y/RPT_-_19_0214_-_File_3_of_3_-_App_C2_-_4Q_2018_5_16_Validation_report_and_lab_data.pdf >

Regards,

Jody Hawks, CHMM
Sr. Environmental Specialist
BAE System - OSI
RFAAP
T: 540-639-7701 | **M:** 540-589-7599

“Strive not to be a success, but rather be of value.” ~A. Einstein

ORDNANCE SYSTEMS INC.
Radford Army Ammunition Plant
4050 Pepper's Ferry Road
Radford Virginia 24141

February 18, 2019

VIA ELECTRONIC MAIL

Mr. Kurt Kochan
Office of Remediation Programs
Virginia Department of Environmental Quality (VDEQ)
1111 East Main Street, Suite 1400
Richmond, Virginia 23219

**Subject: 2018 Combined Annual and Semiannual Groundwater Monitoring Report –
HWMU-5 and HWMU-16
Post Closure Care Permit HWMUs 5 & 16
Radford Army Ammunition Plant, Radford, Virginia
EPA ID#: VA1210020730**

Dear Mr. Kochan:

The 2018 Combined Annual and Fourth Quarter Semiannual Groundwater Monitoring Report for Hazardous Waste Management Units (HWMUs) 5 and 16 at RFAAP can be accessed at the links below (link accessible until Dec 26, 2019).

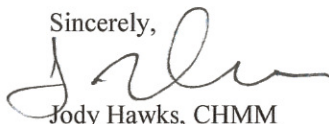
RPT - 19 0214- File 1 of 3 - 2018 Annual GW Rpt HWMUs 5&16.pdf
<https://files.daa.com/dl/Eh4lhYtVVT/RPT - 19 0214- File 1 of 3 - 2018 Annual GW Rpt HWMUs 5%2616.pdf>

RPT - 19 0214 - File 2 of 3 - App C1 - 2Q 2018 5 16 Validation report and lab data.pdf
<https://files.daa.com/dl/uXC2ndUZfX/RPT - 19 0214 - File 2 of 3 - App C1 - 2Q 2018 5 16 Validation report and lab data.pdf>

RPT - 19 0214 - File 3 of 3 - App C2 - 4Q 2018 5 16 Validation report and lab data.pdf
<https://files.daa.com/dl/MpGBbBoT2Y/RPT - 19 0214 - File 3 of 3 - App C2 - 4Q 2018 5 16 Validation report and lab data.pdf>

This report meets the Annual and Semiannual Groundwater Monitoring Report requirements for the above noted permit at RFAAP. If you have any questions or concerns, please contact me at 540/639-7701 (jody.hawks@baesystems.com).

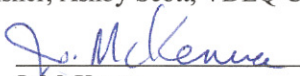
Sincerely,



Jody Hawks, CHMM
Sr. Environmental Specialist
BAE Systems, Ordnance Systems Inc.

Cc: Beth Lohman VDEQ, BRRO w/attachments
Brett Fisher, Ashby Scott, VDEQ-Central w/attachments

Coordination:


J. McKenna

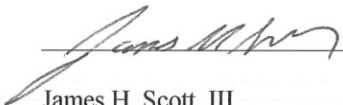
bc: Environmental File
J. McKenna, Army Staff
Mary McCoy, BAE Staff
Mike Lawless, Draper Aden Associates
Janet Frazier, Draper Aden Associates

Concerning the following:

*CY 2018 Annual and Fourth Quarter Semiannual Groundwater Monitoring Report
Hazardous Waste Management Unit 5 – Correction Action Groundwater Monitoring
Hazardous Waste Management Unit 16 – Compliance Groundwater Monitoring
Radford Army Ammunition Plant, Radford, Virginia\
EPA ID#: VA1210020730*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

SIGNATURE:



PRINTED NAME:

James H. Scott, III

TITLE:

Lieutenant Colonel, US Army
Commanding

SIGNATURE:



PRINTED NAME:

Michael Bocek

TITLE:

General Manager
BAE Systems



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

April 11, 2019

Mr. Jim McKenna
Radford Army Ammunition Plant
Route 114, P.O. Box 1
Radford, Virginia 24143-0100

VIA ELECTRONIC MAIL

**Re: 2018 Annual Groundwater Monitoring Report for HWMUs 5 & 16
Radford Army Ammunitions Plant
Route 114, Radford, Virginia 24141
EPA ID#: VA1210020730**

Dear Mr. McKenna:

This letter acknowledges the receipt and review of the 2018 Annual Groundwater Monitoring Report for HWMUs 5 & 16 dated March 2018, submitted to the Virginia Department of Environmental Quality (Department), Office of Remediation Programs (Department) by BAE Systems on behalf of the Radford Army Ammunitions Plant (RFAAP).

There reportedly no new-targeted constituents were detected during the groundwater monitoring activities conducted during the second or fourth quarters of 2018 for Hazardous Waste Management Unit (HWMU) 5. However, total cobalt was detected in point of compliance wells 16CW1A and 16MW9 during second quarter of 2018 and only in 16WC1A during the fourth quarter of 2018 at concentrations greater than the GPS of 6 ug/L.

RFAAP had previously submitted an Alternate Source Demonstration (ASD) to the Department indicating that the detections of cobalt in this well were due to natural variation. As the report points out, the Department has approved the combination of the ASD for wells 16WC1A, 16WC1B, and 16MW9. RFAAP has recommended continued monitoring of these three wells through 2019 with a revised ASD to be submitted in spring 2020. The Department concurs with this recommendation.

As previously discussed, the Department acknowledges the presence of barium above the site-specific background concentration. The Department recognizes the variability of the lithology in the area of HWMU-16 that could potentially account for the natural variation of this trace element. No further investigation is required at this time; however, the Department may request further investigation if the barium levels in groundwater increase in the future.

EPA ID#: VA1210020730
Radford Army Ammunitions Plant
Radford, Virginia
April 11, 2019

The Department concurs with the recommendation of continued monitoring at both units with no further actions being warranted at this time. If you have any additional technical questions, you may contact me at 703-583-3825 or by email at Kurt.Kochan@deq.virginia.gov.

Sincerely,



Kurt W. Kochan
Corrective Action Project Manager
Office of Remediation Programs

cc: RFAAP Correspondence File
Ashby Scott, VDEQ-CO
Beth Lohman, VDEQ-BRRO
Jody Hawks, BAE
Mike Lawless, DAA