Ohio Environmental Protection Agency (OEPA) And

Ravenna Army Ammunition Plant (RVAAP) 1993 Correspondences



RAVENNA ARMY AMMUNITION PLANT

8451 STATE ROUTE 5 • RAVENNA, OHIO 44266-9297

15 November 1993

State of Ohio Environmental Protection Agency Northeast District Office 2110 E. Aurora Road Twinsburg, Ohio 44087-1969

ATTN: Mr. Paul Anderson

Subject: Facility: Ravenna Army Ammunition Plant

Notice of Deficiency TA#2 Ohio Id: #02-67-0209

U.S. EPA ID: OH5 210 020 736

Reference: 1. Ohio EPA letter dated 24 September 1993, same subject.

2. Our telephone conversation of 18 November 1993 regarding this subject.

Dear Sir,

During the course of our telephone conversation on 18 November 1993, I informed you that Mason & Hanger-Silas Mason Co., Inc. was the new Modified Caretaker Contractor for the U.S. Army at the Ravenna Army Ammunition Plant. I also explained that we have recommended to the local Government staff that the Army withdraw its RCRA Part B Permit Application for the installation's Open Burning/Open Detonation Grounds, and close those facilities. Mr. Robert Kasper, the local Contracting Officer's Representative shares our view on this issue, and has recommended the withdrawal of the permit application to Headquarters, U.S. Army Armament Munitions and Chemical Command.

Under the circumstances, we believe that it would be prudent for the installation to delay its submission of a response to the Notice of Deficiency until a decision is reached with respect to the recommendation to withdraw. Such a course of action would avoid the unnecessary expenditure of limited staff time by both the installation and by your agency, if the recommendation is accepted and implemented. We therefore request that the installation be granted a 120 day extension with regard to its response to the subject NOD.

Your cooperation with regard to this matter would be greatly appreciated. If you have any questions, please feel free to contact me at (216) 358-7400.

Sincerely,
Mason & Hanger-Silas Mason Co. Inc.

V.B. Talmon, Jr.

Site Manager

JDM/ljl/ta2

cc: W.B. Talmon, Jr.
J.M. Higgins, Grand Island, N.E.
June Adams, Lexington, KY
Environmental File



RAVENNA ARMY AMMUNITION PLANT

8451 STATE ROUTE 5 • RAVENNA, OHIO 44266-9297

INTER OFFICE MEMO

December 6, 1993

From: W.B. Talmon, Jr. w

Location: Ravenna, OH

To: File

Location: Ravenna, OH

Subject: RCRA Part B Permit Application for RVAAP's OB/OD Grounds

On Thursday, December 16, 1993, the writer took part in a meeting at the Twinsburg, OH District Office regarding the subject permit application and other HW issues. Also in attendance were:

Mr. Frank Popotnik, HW Unit Supervisor, Ohio EPA

Mr. Murat Tukel, HW Inspector, Ohio EPA

Ms. June Adams, Staff Attorney, MHSM

Ms. Susan McCauslin, (environmental consultant)

During the course of the meeting, we discussed several HW issues, which are summarized below:

- 1. We have requested a 120 day extension with respect to the submission of the installation's reply to an Ohio EPA NOD regarding the Part B Permit Application. The extension was requested while the Army studies our recommendation that the application be withdrawn, and the OB/OD grounds be closed. Mr. Murat Tukel indicated that, to date, they have not acted upon our request for an extension. He reported that they were reluctant to do so until they had some assurance that the Army would respond in a timely manner. He indicated that with that in mind, they would like the Army to provide the following information by Dec. 31, 1993:
 - a. A milestone schedule re their decision-making process.
 - b. A tentative closure schedule (presupposing a favorable decision with regard to our recommendation).
- 2. We also discussed the fact that a new Ohio EPA Findings and Orders Agreement would have to be granted if Mason & Hanger is to operate the OB/OD Grounds under interim status pending the issuance of the Part B Permit. Mr. Tukel indicated that he wasn't sure what would be required to satisfy their concerns. He indicated that it might help if we resubmit the annotated Part A Application, and a revised Contingency Plan.

He also speculated that it might help if we documented my credentials, assuming that I plan to directly manage the HW program (I don't. Sue McCauslin will oversee it, pending the employment of a full-time ES&H Specialist).

Mr. Popotnik asked if we had any plans for operating the OB/OD facilities in the near future (i.e. within 30 days), and I replied that we did not. He asked if we have a stockpile of materials on hand that we intend to burn/detonate, and Sue McCauslin replied that we did not.

3. Mr. Tukel indicated that if the Army decides to withdraw its permit application, any findings and Orders Agreement would be canceled, as well. (Such a cancellation would not preclude the granting of a true "emergency" burning permit by the Ohio EPA, if industrial stock items cannot be safely shipped to another facility for treatment.)

We promised to meet with the local Army staff and to pass along the information that we had obtained during our meeting with the regulators.

cc: J.M. Higgins
J. Adams
W.B. Talmon, Jr.
COR
RCRA File

CONTRACTOR

information Compliance

applicable

Reply NLT

FWD FOR

21 December 1993

MEMO FOR THE RECORD:

Subject: RCRA Part B Application NOD RVAAP

- Ref 1. OHIO EPA ltr 29 Sep 93 SAB.
 - 2. Mason & Hanger ltr 17 Dec 93 SAB.

Mr. T. Livingston AMSMC-EQ and S. Wise AMSMC-PAI-G Team A were contacted this date to resolve the issue of the NOD. It was resolved that the OB/OD grounds is necessary for the operation of RVAAP, therefor, the NOD must be adddressed now. Ms Wise ref Article C3 10.3.3.7.1 of the contract as the authority of Mason & Hanger to pursue the corrective actions required by the NOD.

LTC Hunter was informed of the above this date.

Mr. Talmon was informed of AMCCOM's decision this date, and that I would notify OHEPA of same. Mr. Talmon requested I hold off notification to OHEPA until he has received a milestone schedule from NUS. Mr. Talmon expects to have an estimate from NUS by 23 Dec 93. This will allow notification of the need for the OB/OD grounds and submittal of a milestone schedule by 31 December 1993 as requested by OHEPA.

ROBERT/J. KASPER

Commander's Representative

KECEINED

DEC 21 1993





8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297 TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

January 6, 1993

THRU:

Contracting Officer's Representative

Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266-9297

TO:

Director

Environmental Protection Agency

Post Office Box 1049 1800 Watermark Drive

Columbus, Ohio 43266-0149

Subject: Request for Extension of Time to Complete Closure

Dear Sir:

On November 2, 1990 the Ohio EPA approved a RCRA Closure Plan for the closure of the Deactivation Furnace at Ravenna Army Ammunition Plant in Ravenna, Ohio. On October 14, 1992 the Ohio EPA approved an extension request extending the closure period to January 24, 1993. This letter is to request an additional 180 days extension to the closure period. The additional time is needed because of the larger than expected area of contamination found during closure activities. More time is needed to define the extent of contamination in the furnace area, and to secure additional funding from the Army to complete the closure of this unit as set forth in the approved plan. A sampling plan to further delineate contamination at the site was submitted to OEPA for review on October 27, 1992.

RVAAP and Ravenna Arsenal, Inc. have taken and will continue to take all steps to prevent threats to human health and the environment from the Deactivation Furnace, including compliance with applicable interim status requirements until completion of closure.

Should you have any questions or require additional information, the RAI point of contact for this subject is Susan McCauslin at (216) 297-3220; the Government point of contact is Robert J. Kasper, at (216) 297-3124.

Sincerely,

RAVENNA ARSENAL, INC.

H.R. Cooper

HIR Corpe

Engineering Manager

SMC/bp/OEPA.ext

cc: N. Wulff

T. Chanda

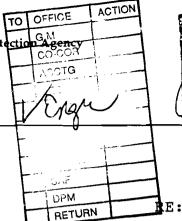
File

cf: Paul Vandermeer, OEPA Columbus

Carolyn Reierson, OEPA NEDO

ChieEPA
State of Ohio Environmental Prote

P.O. Box 1049, 1800 WaterMark Dr. Columbus, Ohio 43266-0149 (614) 644-3020 FAX (614) 644-2329



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PROP ADM
OASAS
SECURIT

RECEIVED

FEB 23 1993 N. WULFF

George V. Voinovich
Governor

Donald R. Schregardus Director

CERTIFIED MAIL

February 18, 1993

H.R. Cooper, Engineering Manager Ravenna Arsenal, Incorporated Ravenna Army Ammunition Plant 8451 State Route 5 Ravenna, OH 44266-9297

Dear Mr. Cooper:

CLOSURE PLAN EXTENSION RAVENNA ARMY AMMUNITION PLANT DEACTIVATION FURNACE CLOSURE

On January 11, 1993, Ravenna Arsenal, Inc., located at 8451 State Route 5, Ravenna, Ohio, submitted a request for an extension to the closure period specified in the approved closure plan dated November 2, 1990 for 180 days, until July 11, 1993. The extension request was submitted pursuant to OAC Rule 3745-66-13(B) as closure will require longer than the 180 day period specified in OAC Rule 3745-66-13. Ravenna Arsenal, Inc. has requested this extension because of larger than expected area of contamination found during closure activities and additional time will be needed to define the extent of contamination.

My staff reviewed your request and recommends that the extension be granted per Rule 3745-66-13(B) of the OAC. I concur and am therefore granting this extension request. This extension is being granted for the above referenced closure plan and expires on July 11, 1993.

Ravenna Arsenal, Inc. shall continue to take all steps to prevent a threat to human health and the environment from the unclosed but inactive waste management unit per OAC Rule 3745-66-13(B)(2).

Please be advised that approval of this closure extension request does not release Ravenna Arsenal, Inc. from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

RECEIVED

FEB 2 3 1993

ENGINEERING

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin

Date 1 8 1993



H.R. Cooper
Ravenna Arsenal, Inc.
Page Two

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. These certifications shall follow the format specified in OAC 3745-50-42(D), and should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Tom Crepeau, Data Management Section, P.O. Box 1049, Columbus, OH 43226-0149.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the ground upon which the appeal is based. This appeal must be filed with the Environmental Board of Review within thirty (30) days from the receipt of this letter. A copy of the appeal must be served to the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal must be filed at the following address:

Environmental Board of Review 236 East Town Street Room 300 Columbus, OH 43215

Sincerely,

Director

DRS/MT/wk

CC: Tom Crepeau, DHWM Central File, Ohio EPA
 Section Chief, Ohio Permit Section, U.S. EPA - Region V
 Randy Meyer, Ohio EPA, DHWM, CO
 Murat Tukel, Ohio EPA, DHWM, NEDO

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin Date Dete

OHIO E.P.A.

FEB 18 93

ENTERED DIRECTOR'S JOURNAL

PR 2 0 1993 State of Ohio Environmental Protection ency N. WULFF

Northeast District Office

2110 E. Aurora Road Twinsburg, Ohio 44087-1969 (216) 425-9171 FAX (216) 487-0769

SECURIT

George V. Voinovich Governor

April 13, 1993

CERTIFIED MAIL

CO-COR ACCTG SEC ENGR CAF CPM RETURN

TO OFFICE

G M

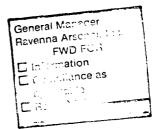
ACTION

H. R. Cooper

Engineering Manager Ravenna Army Ammunition Plant 8451 State Route 5 Ravenna, Ohio 44266-9297

Dear Mr. Cooper:

RAVENNA ARMY AMMUNITION PLANT RE: OH5 210 020 736 PORTAGE COUNTY DEACTIVATION FURNACE CLOSURE SAMPLING PLAN



On October 30, 1992, this office received a sampling plan addressing further delineation of the metal contamination at the Deactivation Furnace closure site.

This office reviewed the sampling plan and approves this plan with the following modifications:

- RVAAP's sample from Grid #166 (southeast) showed lead contamination exceeding the "hot spot" limit (HSL). RVAAP shall RVAAP's consider at least 2 (two) more "Hot Spot" (HS) sampling locations around this grid. Ohio EPA recommends the HS sampling locations as shown in the attached figure.
- RVAAP suggested soil samples to be analyzed for total Lead only. The lead analysis can be used for screening purposes only. It does not represent any indication of other metal constituents since other metals were found above HSL in some grids without lead being primary constituent (Grid #336). Please be aware that at of soil excavation and/or soil contamination determination, all the metals of concern should be analyzed and addressed.
- RVAAP shall contact and notify the Ohio EPA Northeast District Office at least five (5) business days prior to sampling implementation so that an inspector may be present to observe the activities.

RECEIVED APR 20 1993 ENGINEERING

Printed on recycled paper

H. R. Cooper April 13, 1993 Page -2-

Please proceed implementation within thirty (30) days of the receipt of this letter. If you have any questions concerning this letter, please feel free to contact me at (216) 963-1192.

Sincerely,

Murat Tukel

Environmental Engineer
Division of Hazardous Waste

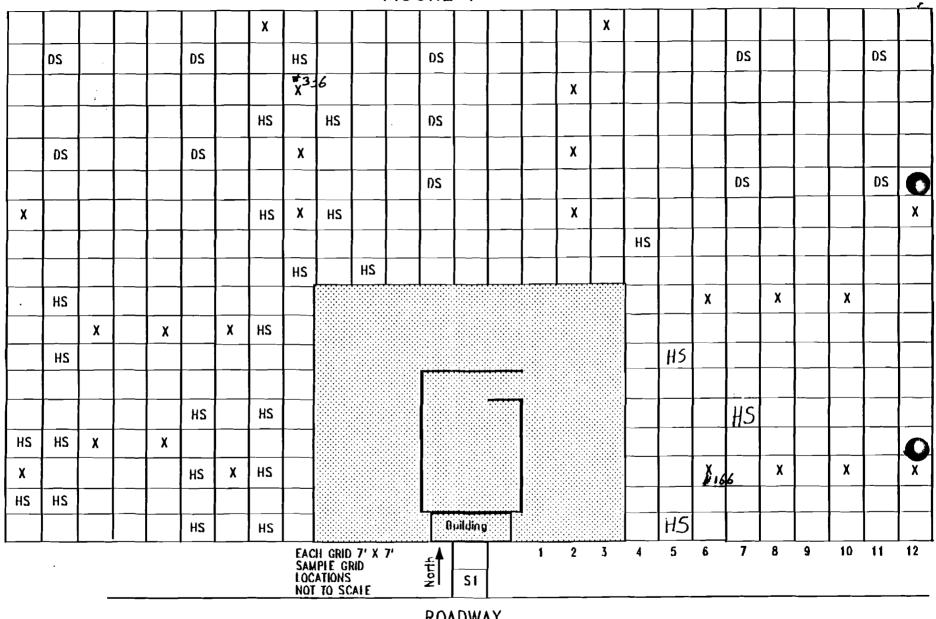
Management

MT/fwn

cc: Paul Anderson, DHWM, NEDO

Randy Meyer, DHWM, CO Alan Harness, DHWM, CO

RAVENNA ARSENAL, INC. - DEACTIVATION CLOSURE FIGURE 1



ROADWAY

S2 S4

X= GRIDS PREVIOUSLY SAMPLED HS= HOT SPOT DELINEATION DC- DEAD COOT DELINEATION





8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297 TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

July 6, 1993

THRU:

Contracting Officer's Representative

Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266-9297

TO:

Director

Environmental Protection Agency

Post Office Box 1049 1800 Watermark Drive

Columbus, Ohio 43266-0149

Subject: Request for Extension of Time to Complete Closure

Dear Sir:

On November 2, 1990 the Ohio EPA approved a RCRA Closure Plan for the closure of the Deactivation Furnace at Ravenna Army Ammunition Plant in Ravenna, Ohio. On February 18, 1993 the Ohio EPA approved an extension request extending the closure period to July 11, 1993. This letter is to request an additional 30 days extension to the closure period. The additional time is needed for the preparation and submission to the Ohio Environmental Protection Agency of an Amended Closure Plan to complete closure of this unit.

RVAAP and Ravenna Arsenal, Inc. have taken and will continue to take all steps to prevent threats to human health and the environment from the Deactivation Furnace, including compliance with applicable interim status requirements until completion of closure.

Should you have any questions or require additional information, the RAI point of contact for this subject is Susan McCauslin at (216) 297-3220; the Government point of contact is Robert J. Kasper, at (216) 297-3124.

Director Ohio EPA Page 2

Sincerely,

RAVENNA ARSENAL, INC.

H.R. Cooper

Engineering Manager

SMC/bp/RCRA.EPA

cc: N. Wulff
Chanda
File

cf: Paul Vandermeer, OEPA Columbus

Murat Tukel, OEPA NEDO





8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297 TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

July 19, 1993

THRU:

Contracting Officer's Representative

Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266-9297

TO:

Director, Ohio Environmental Protection Agency

Section Manager, DHWM

Data Management Section Post Office Box 1049

Columbus, Ohio 43266-0149

Amended Closure Plan for Ravenna Army Ammunition Subject:

Plant's Deactivation Furnace

Dear Sir:

Attached for Ohio EPA review and approval are two copies of an amended Closure Plan for the Ravenna Army Ammunition Plant's Deactivation Furnace. A RCRA Closure Plan for this unit was previously approved by Ohio EPA on November 2, 1990. While conducting closure activities under the approved plan, a much larger than anticipated area of contamination was discovered making closure, under the original plan as approved, impossible.

We hope this amended plan will meet with your satisfaction and we await your approval.

The Ravenna Arsenal, Inc. point of contact for this subject is Susan McCauslin, (216) 297-3220. The Government point of contact is Robert J. Kasper, Commander's Representative, (216) 297-3124.

Sincerely,

RAVENNA ARSENAL, INC.

H.R. Cooper

Engineering Manager

:SM/bp/CLOSURE.II

Attachment

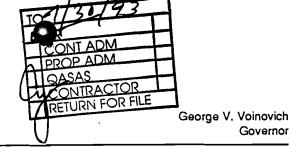
Ohio EPA Northeast District Office, Mr. Paul Anderson c:

N. Wulff - w/o attachment / S. McCauslin

File

Northeast District Office 2110 E. Aurora Road Twinsburg, Ohio 44087-1969

(216) 425-9171 FAX (216) 487-0769



July 27, 1993

RE: CLOSURE PLAN EXTENSION

RAVENNA ARMY AMMUNITION PLANT DEACTIVATION FURNACE CLOSURE

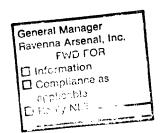
#02-67-0209

OH5 210 020 736

CERTIFIED MAIL

H.R. Cooper, Engineering Manager Ravenna Arsenal, Incorporated Ravenna Army Ammunition Plant 8451 State Route 5 Ravenna, Ohio 44266-9297

Dear Mr. Cooper:



On July 6, 1993, Ravenna Arsenal, Inc., located at 8451 State Route 5, Ravenna, Ohio, submitted a request for a second extension to the closure period specified in the approved closure plan dated November 2, 1990 for 30 days, until August 10, 1993. The extension request was submitted pursuant to OAC Rule 3745-66-13(B) as closure will require longer than the 180 day period specified in OAC Rule 3745-66-13. Ravenna Arsenal, Inc. has requested this extension for the preparation and submission of an amended closure plan to complete closure of this unit.

My staff reviewed your request and recommends that the extension be granted per Rule 3745-66-13(B) of the OAC. I concur and am therefore granting this extension request. This extension is being granted for the above referenced closure plan and expires on August 10, 1993.

Ravenna Arsenal, Inc. shall continue to take all steps to prevent a threat to human health and the environment from the unclosed but inactive waste management unit per OAC Rule 3745-66-13(B)(2).

Please be advised that approval of this closure extension request does not release Ravenna Arsenal, Inc. from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

RECEIVED

JUL 3 0 1993

ENGINEERING

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Carin Date 7-27-93

OHIO E.P.A.

JUL 27 93

INTERED DIRECTOR'S JOURNAL

H.R. Cooper, Engineer Manager Page Two

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. These certifications shall follow the format specified in OAC 3745-50-42(D), and should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Tom Crepeau, Data Management Section, P.O. Box 0149, Columbus, OH 43226-1049.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the ground upon which the appeal is based. This appeal must be filed with the Environmental Board of Review within thirty (30) days from the receipt of this letter. A copy of the appeal must be served to the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal must be filed at the following address:

Environmental Board of Review 236 East Town Street Room 300 Columbus, OH 43215

Sincerely,

Donald R. Schregardus

Director

DRS/mt/fwn

cc: Tom Crepeau, DHWM Central File, Ohio EPA Section Chief, Ohio Permit Section, U.S. EPA - Region V Randy Meyer, Ohio EPA, DHWM, CO Murat Tukel, Ohio EPA, DHWM, NEDO

OHIO E.P.A.

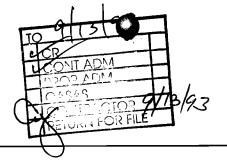
JUL 27 93

THIERED DIRECTOR'S JOURNAL

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin Date 7-27-93

P.O. Box 1049, 1800 WaterMark Dr. Columbus, Ohio 43266-0149 (614) 644-3020 FAX (614) 644-2329



George V. Voinovich Governor Donald R. Schregardus

Director

September 10, 1993

Ravenna Arsenal, Inc. Attn: Susan McCauslin 8451 State Route 5 Ravenna, Ohio 44266-9297

Dear Ms. McCauslin:

CONTRACTOR FWD FOR □ Information Compliance as applicable ☐ Reply NLT

Receipt of Amended Closure Plan U.S. EPA ID No. OH5210020736

With this letter the Ohio EPA acknowledges receipt of the amended hazardous waste closure plan for the Ravenna Army Ammunition Plant's Deactivation Furnace. A public notice concerning the receipt of the amended closure plan will appear in the Record Courier, Ravenna, Ohio the week of September 13, 1993. Director of the Ohio EPA will act upon the amended closure plan request following the close of the public comment period, October 18, 1993.

A copy of the amended closure plan will be available for public review at the Reed Memorial Library, 167 E. Main St., Ravenna, Ohio 44226 and at the Ohio EPA, Northeast District Office, 2110 East Aurora Road, Twinsburg, Ohio 44087, tel: 216-425-9171.

Please contact the Ohio EPA, Northeast District Office, if you have any questions on this matter.

Sincerely yours,

Thomas E. Crepeau, Manager

Data Management Section

Division of Hazardous Waste Management

cc. Harriet Croke, U.S. EPA, Region 5 Randy Meyer, DHWM Paul Anderson, NEDO

RECEIVED

SEP 14 1993

ENGINEERING

PUBLIC NOTICE

PORTAGE COUNTY

RECEIPT OF HAZARDOUS WASTE CLOSURE PLAN

Notice is hereby given that the Ohio EPA has received an amended hazardous waste closure plan from Ravenna Arsenal, Inc., 8451 State Route 5, Ravenna, Ohio 44266-9297. U.S. EPA ID No. OH5210020736. The plan concerns a deactivation furnace at the Ravenna Army Ammunition Plant at the address indicated above. A copy of the facility's amended closure plan will be available for public review at the Reed Memorial Library, 167 E. Main St., Ravenna, Ohio 44266, and at the Ohio EPA, Northeast District Office, 2110 E. Aurora Ohio 44087, tel. 216-425-9171. Twinsburg, Comments concerning the amended closure plan may be submitted within thirty days of the date of this notice to: Ohio EPA, Division of Hazardous Waste Management, Attn: Data Management Section, 1800 Watermark Dr., Columbus, Ohio 43215, tel: 614-644-2977.





8451 STATE ROUTE 5, RAVENNA, OHIO 44266-9297 TELEPHONE: (216) 358-7111 • FAX: (216) 297-3216

3 May 1993

THRU:

Contracting Officer's Representative

Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266-9297

TO:

Commander

U. S. Army Armament, Munitions and Chemical Command

ATTN: AMSMC-EQE (Mr. James Small)

Rock Island, IL 61299-6000

Subject:

Submission of Requested Data to Support Proposed Army

Contract DAAA09-93-R-0147

Dear Mr. Small:

The attached Ohio EPA (OEPA) RCRA Findings & Orders Agreement is provided as you requested following your 29 April 1993 Ravenna AAP site visit.

The following documentation will be available on file at Ravenna for a respective subject bidder:

- 1. Current NPDES permit
- 2. Inactive/Closed Solid Waste Landfill 30 Year Maintenance Plan---Please note that a written plan is not required by OEPA regulation. The OEPA regulation directs the entity conducting landfill closure that it will perform certain post-closure maintenance functions for a period of 30 years. These maintenance functions are mandated by law and assumed by the owner following OEPA's formal approval of closure.
- 3. Recent quarterly landfill report made to OEPA and local County Board of Health.
- 4. Quarterly results of RVAAP's 4 ea. open burning grounds and 4 ea. open detonation RCRA ground water monitoring wells.
- 5. The locational drawing of the 52 streams for which a storm water discharge permit Notice Of Intent (NOI) has been filed with OEPA.

This installation's points of contact are for the Government: Mr. Robert J. Kasper, Commander's Representative, at phone DSN 346-3124; and for Ravenna Arsenal, Inc.: Thomas M. Chanda, Environmental Engineer, at DSN 346-3221.

Sincerely,

RAVENNA ARSENAL, INC.

H.R. Cooper

Engineering Manager

Attachment

cc: N. Wulff

T. Chanda
J. Mound
File



Vorys, Sater, Seymour and Pease

52 East Gay Street Post Office Box 1008 Columbus, Ohio 43216-1008

(614) 464-5612

November 30, 1993

Mark Navarre, Esq.
Ohio EPA, Legal
P. O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266-0149

Re: Ravenna Army Ammunition Plant
Mason & Hanger-Silas Mason Co., Inc.
Director's Findings and Orders
O.R.C. 3734.02(G) Exemption

Dear Mr. Navarre:

On October 1, 1993, Ravenna Arsenal, Inc. ceased being the contractor at the Ravenna Army Ammunition Plant, and Mason & Hanger-Silas Mason Co., Inc. became the contractor. The July 30, 1992 Director's Findings and Orders issued to Ravenna Arsenal, Inc. granting an O.R.C. 3734.02(G) exemption, therefore, needs to be reissued substituting Mason & Hanger-Silas Mason Co., Inc. as the new contractor, pursuant to O.A.C. 3745-50-31.

In order to assist in expediting the issuance of the Director's Findings and Orders to Mason & Hanger-Silas Mason Co., Inc., and for your convenience, enclosed please find a draft of the proposed Findings and Orders, as well as a floppy disk containing the draft. Please note that the only new provisions are Findings No. 7 and 8 which reflect the fact that the prior Findings and Orders were issued on July 30, 1992, and that Mason & Hanger-Silas Mason Co., Inc. became the new contractor on October 1, 1993. The remainder of the Findings and Orders is unchanged except for grammatical revisions and the substitution of "MHSM" for "Ravenna Arsenal" throughout, and the subtitle "Environmental Safety and Health Specialist" for "Environmental Engineer" in Order #1(j).

We appreciate your cooperation. If you have any questions, please call.

Martyn W Brodnil

BECEIV

cc: J. Adams

W. Talman

DEC 2 1993

VORYS, SATER, SEYMOUR AND PEASE

52 East Gay Street Post Office Box 1008 Columbus, Ohio 43216-1008

Telephone (614) 464-6400

December 22, 1993

27458 MASON & HANGER AS OF NOVEMBER 30, 1993 00002 RAVENNA ARSENAL INCORPORATED

JUNE ADAMS
MASON & HANGER
SILAS MASON COMPANY
2355 HARRODSBURG ROAD
LEXINGTON KY 40503

J. W. HOBERG - 6213

STATEMENT OF SERVICES AND ADVANCEMENTS

DATE SERVICES

11/02/93 Attention to review of contract documents and conference with Mr. Talmon regarding RCRA permitting status.

Mr. Brodnik - 1.50

11/04/93 Attention to Findings and Orders granting Interim status and conference with Mr. Talmon regarding same.

Mr. Brodnik - 1.00

11/05/93 Office conference Messrs. Hoberg and Brodnik regarding strategy for permit.

Mr. Hoberg - .25

11/16/93 Attention to conference with Mr. Talmon informing him that Mr. Navarre was told by Mr. Anderson that Ohio EPA had not received a communication from the facility regarding OEPA's request for a meeting pertaining to ability to comply with RCRA.

Mr. Brodnik - .50

11/17/93 Attention to conference with Mr. Talman and Mr. Navarre regarding EH&S staffing, responsiveness of the contractor to OEPA inquiries and desire to move forward with execution of OEPA Findings and Orders.

Mr. Brodnik - 1.00

11/18/93 Attention to conference with Mr. Talman and Ms. Adams regarding conversation with Paul Anderson of Ohio EPA.

Mr. Brodnik - .50

11/23/93 Conference Messrs. Brodnik and Navarre regarding exemption Findings and Orders.

Mr. Brodnik - .25

11/24/93 Attention to conferences with Ms. Adams and Mr. Talmon regarding OEPA Class I modification and review of OEPA Findings and Orders/Terms and Conditions.

Mr. Brodnik - 1.00

11/29/93 Attention to preparation of Ohio EPA Findings and Orders for RCRA exemption.

Mr. Brodnik - 2.00

11/30/93 Attention to conference with Mr. Talmon to obtain comments on draft Findings and Orders; forward request for exemption to Mr. Navarre.

Mr. Brodnik - .35

J. W. HOBERG - .25 HR. @ \$215 PER HR. = \$ 53.75
M. T. BRODNIK - 8.10 HRS. @ \$160 PER HR. = 1,296.00

TOTAL SERVICES.....\$1,349.75

LONG DISTANCE TOLLS

TOTAL SERVICES AND DISBURSEMENTS.....\$1,372.68

22.93

Halliburton NUC Environmental Corporation P.O. Box 1032 910 Clopper Roal Saithersburg, MA 20877-0912 (301) 258 - 6000

Jarnes St. Cin (No longer w/ Halliburton)

Attn: Ralph Bosinski

Brown & Root Environmental bul Anduson Drive Foster Plaza 7 Pittsburg, PA 15220 (412) 921-7090

12/22/23 Conversation

They will provide extens proposal and schedule to me by the end of next week, but many Ohio EPA comments deal w/ Appendix E-5 Army GW Study Adma Bay Salian

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(513) 251-2430

RAVENNA ARMY AMMUNITION PLANT RAVENNA ARSENAL, INC.

RECORD OF CONVERSATION

DATE: 19 February 1993

FROM: Murat Tukel

PHONE: 216-963-1192

Ohio EPA, NEDO

TO: T.M. Chanda

PHONE: 216-297-3221

Environmental Eng.

SUBJECT: Ohio EPA Visit to Review RVAAP's OB/OD Facilities and

Deactivation Furnace RCRA Closure Activity -- DATE: 25

February 1993 @ 1000HRS.

Murat Tukel is the new OEPA inspector for Ravenna AAP; along with being our RCRA Part B permit reviewer and overseer for the RCRA closure activities upon the Deactivation Furnace.

Mr. Tukel will be arriving at Ravenna on subject date accompanied by his supervisor, Mr. Paul Anderson, and former RVAAP RCRA OEPA inspector, Ms. Carolyn Ryerson. The purpose of Mr. Tukel's visit is to discuss the DEAC furnace sampling plan and closure as well as visit all RCRA treatment and storage sites to orientate himself for reviewing our Part B permit application.

Please be advised that Mr. Tukel is not a U.S. citizen; he does have his green card with legal U.S. residence.

Subject to weather conditions please make available, with necessary concurrences, access to the OB/OD areas, along with Bldgs. 1601, X-232, W-221, and the Deac Furnace area.

Thank you.

T.M. Chanda

cc: RVAAP COR

N. Wulff

H. Cooper

J. McGee

J. Mound

J. Conner

SP HQTRS: (attn: J. McGee)

File-



State of Ohio Environmental Protection Agency

Northeast District Office

2110 E. Aurora Road Twinsburg, Ohio 44087-1969 (216) 425-9171 FAX (216) 487-0769



George V. Voinovich Governor

September 29, 1993

FACILITY: RAVENNA ARMY AMMUNITION PLANT

NOTICE OF DEFICIENCY TA#2
OHIO ID: #02-67-0209

U.S. EPA ID: OH5 210 020 736

CERTIFIED MAIL

Mr. Tom Chanda Environmental Engineer Ravenna Arsenal, Inc. 8451 State Route 5 Ravenna, Ohio 44266-9297

Dear Mr. Chanda:



5: 10/10/93 to contact Poc 5: 11/30/93 c for resubsusper

The Ohio EPA Division of Hazardous Waste Management has conducted a completeness/technical adequacy review of your Part B permit application and has determined it to be technically inadequate. This application has been reviewed pursuant to the rules published in the Hazardous Waste Facility Standards Chapters in the Ohio Administrative Code and the corresponding Federal regulations.

RE:

We have enclosed technical adequacy comments that are the result of this review. Please note that the technical adequacy review does not include a review of the air modelling data provided for the air pathway assessment in the permit application. This section is currently being reviewed by the Division of Air Pollution Control (DAPC), Ohio EPA/Central Office and U.S. EPA Region V. Any additional comments on this section will be forwarded to RVAAP as they become available. Please provide detailed information addressing all areas indicated on the comment sheets to Ohio EPA within 60 days of the date of receipt of this correspondence. This submission shall be in accordance with the following editorial protocol or convention:

- 1. Old language is overstruck.
- New language is capitalized.
- 3. Page headers should indicate date of submission.
- If significant changes are necessary, pages should be renumbered, table of contents revised, and complete sections provided as required.

Please send one copy each to:

Tom Crepeau
Ohio EPA, DHWM
1800 Watermark Drive
P.O. Box 1049
Columbus, Ohio 43266-0149

Harriet Croke, Chief Ohio Permitting Section RCRA Activities U.S. EPA - Region V (HRP-8J) 77 W. Jackson Blvd. Chicago, Illinois 60604 Mr. Tom Chanda - Ravenna Arsenal, Inc. September 1, 1993 Page Two

Please send two copies to:

Murat Tukel Ohio EPA, Northeast District Office 2110 East Aurora Road Twinsburg, Ohio 44087

In the course of the technical adequacy review, we may request additional information if it is necessary to clarify, modify, or supplement previous submissions of information in order to substantively evaluate the permit application for adequacy.

Failure to submit a complete permit application or to correct deficiencies in the application may result in the following: 1) revocation of your existing Ohio Hazardous Waste Facility Installation and Operation Permit, 2) denial of the permit application, 3) referral of the matter to the Ohio Attorney General's Office for appropriate enforcement action.

We request that the facility contact Murat Tukel or Paul Anderson, NEDO, at (216) 425-9171 within 10 days of receipt of this Notice of Deficiency to discuss each of the enclosed comments in order to make clear the information being requested. This can be accomplished by a conference call or meeting. Thereafter, any questions concerning the review of this permit application and the level of detail expected, should be addressed to the above mentioned persons.

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Sincerely,

Paul Anderson

Environmental Supervisor Division of Hazardous Waste

Management

PA/fwn

enclosure

CC: Harriet Croke, U.S. EPA
Joel Morbito, U.S. EPA
Tehmton Toorkey, CO, DHWM, Ohio EPA
Alan Harness, CO, DHWM, Ohio EPA
Pam Allen, CO, DHWM, Ohio EPA
Paul Anderson, NEDO, DHWM, Ohio EPA
Central File

PART B REVIEW COMMENTS RAVENNA ARMY AMMUNITION PLANT (RVAAP) PORTAGE COUNTY OH5 210 020 736

GENERAL COMMENT:

- RVAAP shall exclude the pinkwater treatment plants from the new Part B permit application if these units (Load Lines # 6, 7 and 12) are permanently closed.
- 2. Please be aware of the following typographical errors in this application:
 - a) In the third paragraph of page B-6, Figure B-1 should be noted as Figure B-2.
 - b) In the third paragraph of page C-2, Appendix C-1 should be noted as Appendix D-1.
 - c) In the second paragraph of page C-27, Appendix D-1 should be noted as Appendix C-1.
 - d) RVAAP's permit application is missing the title of Section G-4 ("Emergency Response Procedures") on page G-11.
 - e) Dimensions of the burn trays that were described on page I-2 are not clear. This office's interpretation was 15 feet 11-1/2 inches by 4 feet, 11-3/4 inches (deep). Please clarify this by adding a comma (,) at the appropriate space.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
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TECHNICAL ADEQUACY COMMENTS

A. PART A APPLICATION CHECKLIST

3. A-Part A Application: OAC 3745-50-43;

RVAAP should include D009 waste code in Section XIV of the application form. If RVAAP is not generating any D009 waste then this waste code should be excluded throughout the Part B application also.

B. FACILITY DESCRIPTION CHECKLIST

4. B-1 <u>General Description:</u> OAC 3745-50-44(A)(1);

RVAAP shall replace Figure B-2 on page B-4 with a more legible map showing street names.

- 5. B-2 <u>Topographic Map (General Requirements):</u> OAC 3745-50-44(A)(19);
 - a) RVAAP stated at item (ii) of this section on page B-7 that "None of the 100-year floodplain encroaches within 1000 feet of the OB/OD units." Referring to Figure B-4, RVAAP's Open Detonation (OD) Unit is within 30-40 ft of the 100-year floodplain. Also the Open Burning (OB) unit is approximately 800 ft away from the 100-year floodplain. Therefore this statement is invalid. RVAAP shall correct this statement.
 - b) RVAAP shall include the location of the spill response room (Building 1067) in Figure B-4.
 - c) RVAAP shall replace Figure B-5 on page B-10 with a more legible map.
- 6. B-3 Location Information: OAC 3745-50-44(A)(11);

RVAAP shall replace Figure B-6 on page B-13 and Figure B-7 on page B-14 with more legible maps.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 3 of 25

7. B-4 <u>Traffic Information:</u> OAC 3745-50-44(A)(10);

RVAAP shall include all the street names that are referred in this section in Figure B-2 on page B-4.

C. WASTE CHARACTERISTICS CHECKLIST

8. C- Waste Characterization/General:

a) Appendix C-2 <u>Chemical Composition of Energetics in Items</u> that may be treated by OB/OD at RVAAP:

Item #32 in Appendix C-2 has a weight percentage significantly higher than 100%. Also this office recommends that RVAAP provide a glossary for the abbreviations used in this appendix and throughout the text.

b) Appendix C-3 <u>Hazardous Waste Codes for Currently Allowable OB/OD Items at RVAAP:</u>

RVAAP shall provide the corresponding EPA waste code(s) for Item #140 (M18A1 Antipersonnel Mine with M57 Firing Device).

- 9. C-1g <u>Wastes in Miscellaneous Treatment Units:</u> OAC 3745-50-44(C)(9);
 - a) Composition CH6 discussed under Binary Mixtures on page C-9 is not included in Table C-1. Please provide its chemical formula and include this composition in Table C-1.
 - b) LX-14 listed under Boosters and Secondary Explosives/Binary Mixtures in Table C-1 is not defined or discussed in Section C-1g. Please provide the definition and detailed information regarding this material in Section C-1g.
- 10. C-2a <u>Parameters and Rationale:</u> OAC 3745-54-13(B)(1);

RVAAP has not specified selenium (D010) and silver (D011) in its waste analysis for TCLP metals. Also 2,4-Dinitrotoluene (DNT) has been chosen to be the only TCLP organic constituent

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 4 of 25

that could possibly be present in OB/OD treatment ash. RVAAP shall include the historical data (if available) showing that selenium, silver and other organic constituents besides DNT are not present in its waste streams or shall describe the knowledge used to establish that other toxic constituents are not present in the waste ash. Also Appendix C-4 should be updated accordingly. Please be aware that RVAAP should consider not only the hazardous wastes generated on-site but also the hazardous materials that are used in the plant while determining constituents for waste analysis.

11. C-2c <u>Sampling Methods</u>: OAC 3745-54-13(B)(3) & (4), Appendix 1 of OAC 3745-51-20;

In Appendix C-7, RVAAP presented its drum sampling procedures. The following details should be provided in this Appendix:

- a) The procedures for placing burning tray ash into the containers.
- b) RVAAP referred to a satellite storage area (4th sentence in Appendix C-7). Please clarify whether this is a satellite accumulation area in the OB grounds or inside the storage building (Building 1601).
- c) If more than one drum of waste is generated during an OB/OD event, a composite sample out of all drums must be taken. Please correct the statement (6th sentence in Appendix C-7) "If more than one drum is in storage at the time, a composite sample may be taken".
- d) Details on composite sampling of multiple drums must be included as a part of the sampling procedures (Table 1) description.
- e) Table 1 (Appendix C-7) refers to a suitable sample container for composite sampling. Please specify. Also indicate any other devices (i.e stainless steel spoon) that will be used for mixing purposes.

12. C-2d <u>Frequency of Analyses:</u> OAC 3745-54-13(B)(4);

RVAAP shall clarify and explain the possible reasons which might arise which would require RVAAP to perform more frequent waste analyses than annual analysis due to changes in the nature of OB/OD ash.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 5 of 25

13. C-2e Additional Requirements for Wastes Generated Off-Site: OAC 3745-54-13(C);

RVAAP has failed to include the procedures that the facility goes through in order to get an emergency permit for the off-site wastes received and treated at the plant. RVAAP has failed to address this comment from the previous technical adequacy review.

D. PROCESS INFORMATION

14. D-lb Containers Without Free Liquids: OAC 3745-50-44(C)(1)(b);

The last sentence in Section D-1b on page D-1 states that "Other hazardous wastes may be stored in Building 1601, however, they will not contain free liquids." Please clarify this statement by including all the other possible hazardous wastes that will be stored in this area.

15. D-1b(2) <u>Description of Containers:</u> OAC 3745-55-71;

RVAAP shall provide a better copy of a typical container label in Figure D-1.

16. D-1b(3) Container Management Practices: OAC 3745-55-73;

RVAAP shall explain the additional precautions that will be taken when hazardous waste drums are stored three stages high in Building 1601. Also storing maximum of seventy-two (72) 55-gallon drums in this building will require a maximum storage capacity of approximately 30 tons, not 33 tons (assuming a bulk density of 2.0 g/cc). Please make the necessary correction or describe why 33 tons is an appropriate estimate.

17. D-1b(4) <u>Container Storage Area Drainage:</u> OAC 3745-55-75;

RVAAP shall provide the contingency details of management and proper disposal of any standing liquids in the event that they may accumulate in Building 1601.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
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RVAAP shall also provide information regarding how the drum storage area is designed or operated to drain and remove liquids (i.e. waters penetrating from the bunker building walls). RVAAP shall include details regarding any drains or sumps existing in this building, or, if these do not exist, then a description of how liquids accumulating in this building are removed and managed. RVAAP has failed to address this comment from the previous technical adequacy review.

18. D-8a(1)(1) <u>Description of Miscellaneous Units: Open Burning Trays and Materials Treated:</u> OAC 3745-50-44(C)(9);

- a) RVAAP provided an optional drain specification for its burning trays in Appendix D-3. RVAAP is not currently utilizing or intending to utilize this design. RVAAP shall include engineering drawings of the currently operational burning trays. Also, if RVAAP intends to use the new design, other design and operational details should be provided (waste collection container, valve details, resistance to extreme heat etc.).
- b) RVAAP has failed to adequately address the leak detection provisions taken at the OB area. RVAAP is conducting visual inspections of the burn trays. During site visits, the Ohio EPA has observed that some scrap burned materials and ash spread out from the burn trays. Please address the precautionary measures that RVAAP is taking to prevent this and verify the adequacy of visual inspections as a substitute for leak detection. RVAAP has failed to address this comment from the previous technical adequacy review.

19. D-8a(1)2.5 <u>Ash/Residue Management (Open Burning):</u> OAC 3745-50-44(C)(9);

In this section, RVAAP shall also include the details regarding how the ash which deposits around the burning trays will be collected after each burn.

20. D-8b <u>Waste Characterization:</u> OAC 3745-57-91(A)(1), (B)(1) and (C)(1);

RVAAP shall provide the net explosive weight limitations for OB and OD in this section instead of referring to the Standard Operating Procedures for OB/OD in Appendices D-5 and D-6.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 7 of 25

21. D-8c <u>Treatment Effectiveness:</u> OAC 3745-50-44(C)(9)(d);

- a) RVAAP is referring to a recent U.S. Army study for proving the efficient destruction of wastes by OB/OD. Please provide this study with the permit application.
- b) RVAAP shall provide all the site-specific data available in order to demonstrate the effectiveness of OB/OD.

22. D-8d Environmental Performance Standards for OB: OAC 3745-50-44(C)(9), 57-91;

RVAAP shall explain the procedures (if any) for transferring accumulated water from the pans into drums in more detail. Also RVAAP shall provide the current information regarding the alternative disposal methodologies for these waters since the facility's on-site pinkwater treatment plants (Load Lines 6,7 and 12) are not in operation. RVAAP has failed to address this comment from the previous technical adequacy review.

E. ENVIRONMENTAL PERFORMANCE STANDARDS

23. E-2 <u>Human Health and Environmental Criteria:</u> OAC 3745-57-91;

- a) RVAAP shall list and consider all the major chemical constituents listed under Appendix C-2 in Table E-2-1. For example Ethylene-dinitramine (item 18 in Appendix C-2) is not listed in Table E-2-1. Also RVAAP shall provide a glossary for the chemical constituent abbreviations used in Appendix C-2.
- b) RVAAP shall provide the most current values of the Integrated Risk Information System (IRIS) standards in Table E-2-2.

24. E-3 Air Pathway Assessment:

This section is currently being reviewed by the Division of Air Pollution Control (DAPC), Ohio EPA/Central Office and U.S. EPA Region V. Any additional comments on this section will be forwarded to RVAAP as they become available.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 8 of 25

25. E-2c <u>Procedures for Establishing Background Quality:</u> OAC Rule 3745-50-44(B)(1);

RVAAP stated that interim status data were not available at the time of the submittal. OAC Rule 3745-50-44(B)(1) requires that a summary of ground water monitoring data obtained during the interim status period be included in the permit application. Throughout 1992, ground water monitoring data was collected. All available ground water data should be presented in the permit application.

26. E-4 & E-5 <u>Topographic Map Requirements/Contaminant Plume</u> <u>Description:</u>

OAC Rules 3745-50-44(A)(19), 50-44(B)(3)&(4) and 54-95(A);

OAC rule 3745-50-44(B)(3) requires the inclusion of topographic maps in the Part B permit. RVAAP included these topographic maps as Figures B-3 and B-4. (These were erroneously listed as Appendices B-3 and B-4 in the text on page E-4-5). More information as listed below must be included on at least one topographic map:

- a) The waste management area (both OB and OD grounds) boundaries must be clearly delineated on the topographic maps (the point of compliance must be clearly delineated, ground water flow direction and rate must be shown as well as the ground water monitoring wells (already present)).
- b) OAC rules 3745-54-95(A) and 50-44(B)(3) require that a point of compliance for ground water quality be specified. While RVAAP presented the two waste management units with Figures E-4-7 and E-4-9, the point of compliance must also be clearly depicted.

27. E-7a <u>Indicator Parameters</u>, <u>Waste Constituents</u>, <u>Reaction</u> Products to be Monitored:

- a) OAC Rule 3745-54-98(A);
 RVAAP quoted only OAC Rules 3745-54-98(F) and (G) in the text. All items concerning OAC Rule 3745-54-98 should be directly identified in the text.
- b) OAC Rule 3745-54-98(A);
 RVAAP shall specify and clarify in the permit application whether the statistics will be performed for all of the parameters or just a subset of indicator parameters as required by this rule.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
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- c) OAC Rule 3745-54-98(D);
 RVAAP shall also specify the frequencies for sample collection and statistical analyses for all parameters.
- d) OAC Rule 3745-54-98(E);
 RVAAP shall specify in its permit application that flow rates and direction of ground water flow in the uppermost aquifer will be determined at least annually.

28. E-7d Proposed Sampling and Analysis Procedures:

- a) OAC Rule 3745-54-97(D)(2);
 RVAAP did not specify whether immiscible layers would be measured. If applicable, the methodology used to detect immiscible layers must be specified in the permit application.
- b) OAC Rule 3745-54-97(D)(3)(f); Information regarding the filtration of samples must be included in the permit application.
- C) OAC Rule 3745-54-97(D)(4)(b);
 This Rule requires procedures and techniques for calibrating the pH probe. Information regarding the frequency of calibration of the pH probe must be included in the permit application.
- d) OAC Rule 3745-54-97(D)(7)(a);
 Temperature was not listed as one of the constituents in
 Table E-4-1. RVAAP shall list this parameter in Table E-4-1.
- e) OAC Rule 3745-54-97(D)(7)(b);
 It was stated that Method 624 would be used to analyze volatile organic compounds (VOCs). The VOC parameters to be analyzed must be listed along with each detection limit. It was stated that the detection limit for VOCs was 0.003 mg/L. This is too high for some VOCs such as vinyl chloride, which has a maximum contaminant level (MCL) of 0.002 mg/L. Detection limits must be below MCLs for all parameters. RVAAP shall provide the corresponding detection limits for its VOCs with the permit application.
- f) OAC Rule 3745-54-97(D)(8)(c);
 Potential interferences for analytical procedures to be used must be discussed in the permit application.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 10 of 25

- GAC Rule 3754-54-97(D)(9)(b); Sample labels to be used for ground water samples or the information which will be listed on sample labels must be included in the permit application.
- 29. E-7e Statistically Significant Increase in any Constituent or Parameter Identified at any Compliance Point Monitoring Well: OAC Rule 3745-54-98(H);

RVAAP shall state in its permit application that if it is determined that the detection monitoring program no longer satisfies the requirements of detection monitoring Rule, then a permit modification making changes to the program must be submitted within ninety (90) days.

30. E-8 <u>Compliance Monitoring Program:</u> OAC Rule 3745-54-99;

Section E-4.10 stated that "A formal compliance monitoring program will be established either by US EPA or Ohio EPA at the time a RCRA Part B permit issuance is made to RVAAP". This statement must be removed. Compliance monitoring established by the facility under OAC Rules 3745-54-98(G) and 3745-54-99. The process entails permit modification, and is not implemented until a confirmed ground water contamination problem has been identified. The Ohio EPA provides oversight and approves the permit modifications required under these Rules. RVAAP shall modify Section E-4.10 in order to reflect the process of compliance monitoring more accurately.

31. Ground Water Monitoring Program/General:

Also RVAAP shall demonstrate compliance with the following rules by including the following(s) in its permit application:

- a) OAC Rule 3745-54-75(F)
 RVAAP shall state in the permit application that all ground water monitoring data required by OAC Rule 3745-55-02(C) and (A)(1-4) will be submitted by March first of each year.
- b) OAC Rule 3745-54-91(A)(1)
 RVAAP shall state in its permit application that if hazardous constituents are detected at the compliance point, a permit modification will be requested to establish a compliance monitoring program.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 11 of 25

32. Appendix E-5 Geohydrological Study/General:

RVAAP shall include the statistical analysis on background concentration level calculations in its geohydrologic study.

33. Appendix E-5 Geohydrological Study/General:

RVAAP stated that "site contaminant levels would not cause the soil to be considered a hazardous waste" for both OD (page 22) and OB grounds (pages 34 & 43). RVAAP cannot make this determination at this time without running a Toxicity Characteristic Leaching Procedure (TCLP) test on these soils. RVAAP's current soil sampling analyses are all total constituent analyses and these do not represent or substitute the TCLP analysis. In order make this determination RVAAP must run TCLP analyses on these soils at the time of disposal.

34. Appendix E-5 Geohydrological Study/General:

RVAAP stated that "site contaminants are below levels of concern from a health risk standpoint" for both OD (page 22) and OB grounds (pages 34 & 43). RVAAP's geohydrologic study did not contain any supporting data which would verify this determination. RVAAP may verify this conclusion only through assessment considering the health risk human environmental impacts. In this risk assessment analysis, RVAAP shall consider all the relevant hazardous constituents present on site above background levels. In order to be acceptable to the Ohio EPA, the risk assessment should represent a complete and site specific demonstration of protection of human health and the environment.

35. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> <u>Characterization:</u>

On page B-3 under Item 5.a, RVAAP stated that surface water from the OD area enters the creek at numerous and changing locations. Please justify this statement since the facility is required to be operated to prevent surface run-on and run-off from the hazardous waste management areas. Also as a point of clarification, Sand Creek is correctly identified with the appropriate water quality standards (WQS), but the samples from OB1 and OB2 are in a tributary to the creek and are not subject to the same criteria as the mainstream of Sand Creek. The appropriate use designation for the unnamed tributary to Sand Creek near the open burning area is "Limited Resource Waters" (LRW).

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 12 of 25

36. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> Characterization:

On page B-5 under Item 6.d, RVAAP stated that "surface water runoff at the facility is not regulated by state ambient water quality criteria, since it is not ambient water". Storm water run off that is not a stream, lake, reservoir, pond, marsh, wetland or waterway is not considered waters of the state and therefore is not subject to Ohio water quality standards. However, the run off is subject to regulation under the NPDES program and Ohio Revised Code (ORC) Chapter 6111. RVAAP shall clarify this in its permit application.

37. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> Characterization:

Section (IV)-A-2.a(1) on page B-6 indicated a discharge of pollutants to waters of the state from the OD area. This is in conflict with the statement of "no evidence as yet that surface water and sediments in Sand Creek have received any of the contamination." (last sentence in page E-6-1). Please clarify. (Also, lead (Pb) exceeded the chronic but not the acute water quality criteria downstream from OD area as noted in Section (IV)-2.b).

38. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> Characterization:

Section (IV)-B-2.a(1) on page B-9 indicated a discharge of pollutants to waters of the state from the OB area. The information provided for RDX indicates the concentrations detected in the stream are not acutely toxic (using LC-50 values), and does not exceed Ohio water quality criteria for LDW at the time of sampling. However, if the same values were to be reported in Sand Creek, the values would likely exceed chronic toxicity criteria for warmwater habitat (WWH).

39. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> Characterization:

Section (IV)-B-2.b.(1) on page B-9 indicated a reported value of 53,000 ug/g COD in stream sediment may not be "extremely high" as evaluated by RVAAP. Kelly and Hite report a value of 90,000 ug/g of COD as not elevated in Illinois stream sediments.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 13 of 25

40. Appendix E-5/Section B <u>Geohydrological Study/Surface Water</u> Characterization:

RVAAP has failed to conduct Benthic macroinvertebrate sampling according to the Ohio EPA methods (Section (IV)-C-1.b on page B-10). Sampling was conducted too early in the year and probably accounted for the low and erratic colonization of the artificial substrates. Also, the sampling in the OB area should have used qualitative rather than quantitative techniques due to the small stream size. Therefore it is not possible to completely evaluate the effect of the OD and OB operations on the macroinvertebrate populations using Ohio EPA criteria. Subtle species or biomass shifts could have occurred that would not be apparent using the information provided.

Also the sampling techniques used did not conform to standard two week exposures of the slides. RVAAP left the slides in the stream for six weeks. This long exposure time probably accounts for the disparate results for macroinvertebrates and diatoms at the study site. RVAAP found reduced diatoms where higher concentrations of macroinvertebrates were detected. The invertebrates probably grazed down to diatoms at those sites. On the other hand the diatom study does not influence on the evaluation of RVAAP's impact on the aquatic community and is not required to be included in the permit application.

F. PROCEDURES TO PREVENT HAZARDS

41. F-2 General Inspection Requirements: OAC 3745-54-15(A)&(B), 3745-54-33;

RVAAP shall clarify the locations of the safety and emergency equipment listed in Table F-1.

42. F-2(b)(1) Container Inspection: OAC 3745-55-74;

RVAAP shall also refer to Appendix F-1 for standard inspection procedures.

43. F-3a(1) <u>Equipment Requirements/Internal Communications:</u>
OAC 3745-54-32(A);

RVAAP shall provide information regarding the closest telephone locations to the hazardous waste management units and the approximate distances from these units. Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
Page 14 of 25

Salar Committee

44. F-4b <u>Run-off (OB/OD Operations):</u> OAC 3745-50-44(A)(8)(b);

- a) Currently RVAAP is having surface run-off and erosion problems in the OD area. RVAAP shall describe the procedures, structures and/or equipment that will be used to prevent surface run-off and erosion at this area. This office recommends that RVAAP move its OD operations to the OB grounds area which was historically being used for open burning on the ground (northern side of the currently operating OB area). This matter can be further discussed in a meeting between Ohio EPA and RVAAP.
- b) RVAAP indicated in its permit application that "the earth south of the burning trays shall be bermed to prevent run-off from entering nearby surface waterways". To date, this has not been constructed. This office also recommends that RVAAP put a concrete structure under the OB trays. This matter can also be further discussed in a meeting between Ohio EPA and RVAAP.
- 45. F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste:
 OAC 3745-50-44(A)(9) and 54-17(A);

RVAAP shall also include the container storage building (Building 1601) in this section.

- 46. F-5b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste:
 OAC 3745-50-44(A)(9) and 54-17(B);
 - a) RVAAP shall include the AMC 385-100 safety requirements in the permit application since it is referred in this section.
 - b) RVAAP shall provide more details regarding the precautions taken during the treatment of hazardous waste that may produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion. RVAAP has failed to address this comment from the previous technical adequacy review.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
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G. CONTINGENCY PLAN

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47. G-1 General Information/Current Operations: OAC 3745-50-44(A)(7) and 54-50 through 54-56;

RVAAP shall update its description of hazardous waste generating activities in the facility since some of these activities were closed or put out of service recently (i.e. paint shop).

48. G-4a Notification: OAC 3745-54-56(A);

- a) In this section RVAAP shall also provide the phone numbers of the Ravenna Fire Department (if applicable or extension number of the RVAAP fire department) and Robinson Memorial Hospitals since RVAAP has signed emergency coordination agreements with these offices.
- b) RVAAP shall modify the necessary telephone report information on page G-15 of the permit, to include the following information;
 - i) Probable source of the spill or release.
 - ii) Duration of the spill or release.
 - iii) Weather conditions.

49. G-4b <u>Identifications of Hazardous Material:</u> OAC 3745-54-56(B);

- a) RVAAP shall also consider the RCRA hazardous waste listings (OAC 3745-51-30) that may be applicable to the released materials/wastes in identification of hazardous materials.
- b) RVAAP's Material Safety Data Sheets (MSDS) provided in Appendix G-3 of the submittal did not appear to be complete. Much of the information listed on the MSDS forms are left blank or are not complete. RVAAP shall note "Not-applicable" (N/A) if appropriate, or provide the required information.

Part B Review Comments
Ravenna Army Ammunition Plant (RVAAP)
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50. G-4d Control Procedure: OAC 3745-54-52(A);

RVAAP's procedure of evacuating the area 50 feet away in all directions for a small spill and 100 feet for large spills needs justification. The Ohio EPA has concerns regarding explosive hazards associated with the spills. The isolation distances provided do not appear to be adequate.

51. G-4f Storage and Treatment of Released Materials: OAC 3745-54-56(G);

RVAAP has not included or discussed the possibility of RCRA hazardous waste listings (OAC 3745-51-30) that may be applicable to spilled materials.

52. G-4i Container Spills and Leakage: OAC 3745-54-52 and 55-71;

- a) RVAAP referred to the previous sections of the contingency plan on page G-22. Please be more specific on the referred sections and page numbers.
- b) RVAAP shall provide a more detailed description of the clean-up procedures for small spills or leakages.

53. G-7 Evacuation Plan: OAC 3745-54-52(F);

- a) RVAAP shall modify Figure G-4 and G-5 so that all the buildings referred in the text and Table G-6 are included. For example, Building 1037 and 1101 are not shown in either figure. Also RVAAP shall replace Figure G-4 and G-5 with more legible figures.
- b) RVAAP shall include a description of the alternate evacuation route shown in Figure G-6 in the text.

H. PERSONNEL TRAINING

54. H-1 Outline of the Training Program: OAC 3745-50-44(12) and 54-16(A)(1);

RVAAP stated on page H-2 of the permit application that all employees except spill response and emergency personnel shall be trained on Spill Control and Countermeasures Plan. Please justify the reason why these personnel are not required to be trained on this topic.

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55. H-1b Training Content, Frequency and Techniques: OAC 3745-54-16(C) & (D)(3);

RVAAP has failed to demonstrate the frequency of training provided to the hazardous waste management personnel. Also RVAAP must document all the "On the Job Training" (i.e by a sign-up sheet) and update the Master Training Index periodically with the exact training dates. RVAAP has failed to address this comment from the previous technical adequacy review.

56. H-1c <u>Training Director:</u> OAC 3745-54-16(A)(2);

RVAAP has failed to provide the requested documentation regarding the Training Director's credentials. RVAAP shall provide this person's name and all the hazardous waste management related training that he/she attended in the past three years. RVAAP has failed to address this comment from the previous technical adequacy review.

57. H-1d Relevance of Training to Job Position: OAC 3745-54-16(A)(2);

RVAAP stated on page H-8 of its permit application that training courses shall be conducted on as-needed basis. However, RVAAP shall provide a training schedule that can demonstrate annual training for each employee whose position is related to hazardous waste management. The Master Training Index provided in Appendix H-1 can be modified to provide a training schedule by including the dates when training is received and scheduled.

58. H-2 <u>Implementation of Training Program:</u> OAC 3745-54-16(B), (D)(4) and (E);

The first sentence of this section stated that "The Environmental Engineer and all current waste generation and handling personnel have been fully trained at the time of this submittal". This statement is contradictory to the Master Training Index. RVAAP shall demonstrate the validity of this statement by including the dates when training was received with this table. Also Ohio EPA recommends including RVAAP's fire department personnel and each employee's job title in this table.

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Ravenna Army Ammunition Plant (RVAAP)
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59. Appendix H-2 <u>Job Descriptions:</u>

- a) The hazardous waste management duties for the job description of Supervisory Engineer (position is currently being filled by D. Jendrisak) is missing.
- b) Mr. McCollum's (Operating Engineer) and Mr. L. Johnson's (Utilities Equipment Mechanic) job descriptions do not reflect their RCRA inspection job duties.
- I. CLOSURE PLANS, POST CLOSURE PLANS AND FINANCIAL REQUIREMENTS
- 60. I <u>Closure Plan/General:</u> OAC 3745-50-44(A)(13);

RVAAP's closure plan shall be a stand-alone document. Please delete all the cross referencing sections, tables and appendices and provide these as a part of the closure plan.

61. I <u>Closure Plan/General:</u> OAC 3745-50-44(A)(13);

RVAAP shall exclude the quantitative risk analysis for closure criteria and closure as a landfill sections from the closure plan. These issues shall be addressed in an amended closure plan if clean closure standards can not be met. This review does not include any comments/deficiencies regarding these sections.

- 62. I <u>Closure Plan/General:</u>
 OAC 3745-50-44(A)(13), 55-13(A)(1) & (2);
 - a) RVAAP has failed to identify each hazardous waste closure unit by referencing the corresponding line numbers on the Part A application. RVAAP has failed to address this comment from the previous technical adequacy review.
 - b) The facility has failed to include a facility map and a diagram (detailed map) of hazardous waste units in its closure plan section of the permit application. Please be aware that closure plan section must be a stand-alone document and any cross-referencing with other portions of the permit application is not acceptable. RVAAP has failed to address this comment from the previous technical adequacy review.

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63. I-1 Closure Plan/Description and Map of Facility: OAC 3745-50-44(A)(13);

RVAAP shall include the pinkwater treatment plant and less than 90 day storage units in the Description of the Facility section.

64. I-1 Closure Plan/Description of Waste Management Units to be Closed: OAC 3745-50-44(A)(13);

In this section RVAAP shall provide a more detailed description of the refractory liners in the burn trays (i.e. similar to the description in Section D-8a(1)(1)).

65. I-1 Closure Plan/Closure Certification: OAC 3745-55-15;

RVAAP shall provide a closure certification within 60 (sixty) days of closure completion. At a minimum, the closure certification shall follow the guidelines presented in the Ohio EPA Closure Plan Review Guidance (page 65) dated May 1991. The owner/operator's and independent registered professional engineer's certifications of closure must follow the signature requirements found in OAC 3745-50-42 (D).

66. I-la Closure Performance Standards: OAC 3745-55-11;

a) <u>Container Storage Building:</u>

RVAAP stated that "By removing all waste and residues from the building, the need for post closure care and maintenance of the facility will be eliminated". This statement is not valid. The combination of removing all waste and residues from the building and meeting the closure performance standards for clean closure set forth in OAC 3745-55-11 will eliminate the need for post closure care.

b) OB/OD Units:

i) RVAAP stated in page I-4 that "If decontamination of residue or soil cannot be achieved at a given unit during closure, additional closure activities will be conducted". This will require RVAAP to amend this closure plan therefore a statement

Part B Review Comments
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similar to; "An amended closure plan will be submitted to the Ohio EPA for approval" shall be included.

- ii) RVAAP shall list the naturally occurring parameters of concern by considering RVAAP's active hazardous waste streams referred in the "Comparison with Background" section (Step 2).
- iii) Step 2 (Quantitative Risk Analysis) and Step 3 (Soil Removal) under this section (pages I-5 & 6), will require RVAAP to amend this closure plan and will be subject to Ohio EPA's approval.
- 67. I-1b Partial Closure and Final Closure Activities: OAC 3745-55-12(B)(1) through (B)(7);

RVAAP has failed to address the closure of the Horse-Shoe Shaped area as part of the OD grounds closure. RVAAP has failed to address this comment from the previous technical adequacy review.

68. I-lc <u>Maximum Waste Inventory:</u> OAC 3745-55-12(B)(3);

RVAAP shall address this item in its closure plan section without cross-referencing to the other sections of the permit. RVAAP has failed to address this comment from the previous technical adequacy review.

- 69. I-1d <u>Schedule for Closure:</u>
 OAC 3745-55-12(B)(6),(D) and 55-13;
 - a) RVAAP shall provide two (2) separate closure schedules for OB and OD units since these are two separate closure projects requiring different schedules.
 - b) RVAAP shall also include in its OB/OD closure schedules the confirmation sampling event after the excavation/disposal of soil residues.
 - c) On page I-10, RVAAP stated that if large quantities of contaminated soil or unexploded ordnance (UXO) are encountered during closure of any OB/OD unit, an extension of the estimated closure time may be necessary. If the closure schedule be revised, RVAAP shall amend the closure plan and provide the revised closure schedule with the amended plan.

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d) RVAAP has failed to provide in its closure schedule the times that an independent professional engineer or his representative will be present on-site during critical closure plan activities. RVAAP has failed to address this comment from the previous technical adequacy review.

70. I-le(2) <u>Disposal or Decontamination of Equipment, Structure</u> and Soils: OAC 3745-55-12(B)(4), 55-14;

RVAAP has failed to provide the design details of the equipment decontamination area. Information required shall include, but not necessarily limited to, a scale map showing the location of the decontamination area, materials of construction, liner specifications and the method of rinseate collection. RVAAP shall either provide this information with the revised application or include a statement that RVAAP will provide this information to the Ohio EPA prior to implementation of the closure plan, subject to Ohio EPA's approval. RVAAP has failed to address this comment from the previous technical adequacy review.

71. I-1e(3) Closure of Disposal Units/Contingent Closures: OAC 3745-57-93;

"Closure as a landfill" will require RVAAP to amend this closure plan. Landfill cover and liner designs and other details shall be provided with this amended closure plan. RVAAP shall exclude these portions from its closure plan portion of the Part B submittal and include a statement similar to; "An amended closure plan will be submitted to Ohio EPA for approval if RVAAP cannot meet clean closure standards".

72. I-e(4) <u>Closure of Containers:</u> OAC 3745-55-78;

a) <u>Hazardous Waste Inventory:</u> OAC 3745-55-12(B)(3);

RVAAP shall replace the word "deposited" with words "disposed of" in the first sentence of this section on page I-11.

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b) <u>Decontamination Procedures:</u> OAC 3745-55-12(B)(4) and 55-14;

RVAAP shall provide a more detailed description of the steps that will be taken to prevent the migration of liquids outside the storage building. Also a visual inspection of the area for cracks and/or deterioration will be necessary prior to commencement of decontamination activities. If discovered, all cracks must be filled and sealed to prevent possible migration of rinseate into the structure.

c) Rinseate Analysis: OAC 3745-55-12(B)(4);

In determination of rinseate standards, RVAAP shall consider the most recent public drinking water standards at the time of the closure. Also RVAAP must include mercury (D009) in these standards if the facility is generating this waste.

73. I-le(11) <u>Closure of Miscellaneous Units:</u> OAC 3745-57-91;

a) RVAAP shall update this section by including the background sampling locations & results and ground water monitoring locations approved during the facility's Geohydrologic study. Also RVAAP shall revise this section to contain only one set of background samples for both OB and OD units as approved by the Ohio EPA.

How the OB/OD Units will be Closed:

- b) RVAAP shall provide a more detailed description regarding disposal of the burn trays.
- c) RVAAP shall clarify that the facility will utilize the Ohio EPA developed rinseate standards in its OB/OD equipment decontamination process, not risk-based standards. RVAAP shall develop a rinseate standard for its equipment and burn tray decontamination procedures.
- d) RVAAP shall delete the words in parenthesis "if necessary" for burn tray decontamination in the last paragraph of page I-17. RVAAP must conduct a decontamination procedure for its burn trays. Otherwise these trays should be handled as hazardous waste carrying all the hazardous waste codes managed at this units.

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Ravenna Army Ammunition Plant (RVAAP)
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- e) In this section, RVAAP shall provide details regarding the proper disposal of the burn tray stands.
- f) RVAAP's statement in the first paragraph of page I-18 should clearly state that the burn trays will be recycled as scrap metal after being decontaminated and it is verified that they do not exhibit any characteristics of hazardous waste.

<u>Determination of the Presence, Nature and Extent of Contamination:</u>

- g) RVAAP shall provide a more detailed description of the sampling scenario of the Horseshoe shaped area in OD unit as this is not included in the Geohydrologic study.
- i) RVAAP shall rephrase the second sentence in this section as follows: "The residue or soil will then be containerized, properly manifested and transported to an approved hazardous waste management facility".
- j) RVAAP shall provide more details on the disposal of the materials (i.e liner, cover material) used in the temporary staging area.
- k) RVAAP stated under the topic of "Unstable Material" that the items which pose a risk of explosion or detonation will be segregated at the staging area and moved to the OD area. The Ohio EPA has concerns regarding the stability of these materials during transportation and the safety of workers. Please clarify these issues in the revised permit application.
- 1) RVAAP shall provide more detailed descriptions of the appropriate fuels and oxidizers that will be used in decontamination of the burn trays. At a minimum, RVAAP shall define some of its options and their specifications.
- m) RVAAP stated that the proposed equipment decontamination facility will be designed with a liquid collection and retention system (last paragraph on page I-22). RVAAP shall provide the details on the design of this system before the implementation of the closure plan for review and approval by the Ohio EPA. (Also see Item #70)

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Ravenna Army Ammunition Plant (RVAAP)
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Procedures to Evaluate Effectiveness of Decontamination:

n) RVAAP shall determine the effectiveness of the decontamination procedures for the surrounding areas by comparing the soil samples with the background sample results. Also RVAAP shall update the confirmation sample quantities and locations referred in this section by considering the Geohydrologic Study results.

Waste Disposal:

....

- o) RVAAP stated that most of the materials generated from closure activities are expected to be handled as non-hazardous waste. Please clarify and/or justify this statement.
- 74. I-1g Closure Plan Amendment: OAC 3745-55-12(C);

The last paragraph of this section should be included in Section I-2.

75. I-2a <u>Inspection Plan:</u> OAC 3745-55-17(A)(1);

The issues that would be covered, under the post-closure care of a "closure as a landfill" should be included in an amended closure plan (i.e cover cap details, leachate collection system) and can be removed from the current permit application.

76. I-3 Notices Required for Disposal Facilities: OAC 3745-55-15,16,19 & 20;

RVAAP shall submit its closure notice letters to the <u>Director</u> of Ohio EPA as required by the OAC rule 3745-55-19.

77. Appendix I-2 Rinseate Standards: OAC 3745-55-12(B)(4);

RVAAP shall include mercury in the list of rinseate standard parameters since mercury (D009) is listed as a waste to be stored in the facility (Section C-la of the Part B application). Also before the implementation of closure, RVAAP shall revise this table considering the most recent public drinking water standards (MCL and MCLG) at that time.

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Ravenna Army Ammunition Plant (RVAAP)
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78. Appendix I-3 Sampling and Analysis Plan for Closure:

a) 1.2.1 Number of Samples and Locations/OD Unit:

- i) RVAAP shall include the grid block calculations in order to justify 70 feet interval grid blocks. The grid interval determination equations are provided in the Ohio EPA Closure Plan Review Guidance, May 1991. Please provide the dimensions of the OD unit and other assumptions (if any) used in calculating this value.
- ii) RVAAP shall also include the horseshoe shaped area in this sampling plan.

b) 1.3 <u>Background Samples:</u>

RVAAP shall revise this section to include the most recent results obtained from the Geohydrologic study.

c) 1.4.1 Soil Sample Type and Methodology/ OD Unit:

RVAAP stated that if any unexploded ordinances (UXOs) are present or suspected, the sampling methodology may be revised. Should this be correct, an amended closure plan including the revised sampling methodology must be submitted to the Ohio EPA for review and approval.

d) 2.1 Rinseate Samples/ Parameters to be Analyzed:

RVAAP shall include mercury in the list of the parameters to be analyzed in rinseate from the storage building.

e) 3.5 Analytical Methods:

RVAAP shall include mercury (D009) in the list of toxicity characteristic parameters used in TCLP analysis.

TELEPHONE OR VERBAL CONVERSATION RECORD For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office.		19Oct 93
NOD# TA#2	- RCRA PART A	S.
PERSON CALLING	ADDRESS	PHONE NUMBER AND EXTENSION
MURAT TUKE/	OHERA	2/6-425-911/
R KASPER		
PERSON CALLING	OFFICE CONTINUE	PHONE NUMBER AND EXTENSION
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PERSON CALLED	ADDRESS DOS NAME OF THE PROPERTY IN CO.	PHONE NUMBER AND EXTENSION
SUMMARY OF CONVERSATION		·
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MEMORANDUM FOR AMSMC-EQ

AMSMC-PAI-G/TEAM A

SUBJECT: Resource Conservation Recovery Act (RCRA) Part B Permit Application for Ravenna Army Ammunition Plant (RVAAP)

- Reference letter, State of Ohio Environmental Protection Agency (OEPA), 29 Sep 93, regarding Notice of Deficiency TA#2 (encl).
- Request your office review the comments provided by OEPA on Ravenna's latest submission of the RCRA Part B permit. Specifically, request you determine if open burn/open detonation requirements submitted by the previous operating contractor (Ravenna Arsenal, Inc.) are overstated in light of the installation's modified caretaker status. The letter has been provided to Mason & Hanger by the government staff. At this point in time, the new operating contractor (Mason & Hanger-Silas Mason Co., Inc.) has not employed the personnel involved in the preparation of the permit. Therefore, request your office provide necessary expertise to insure the Government interests are protected and the stated deadlines for response are met.
- The POC is Ms. Shirlene Wise, extension 3764.

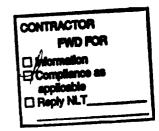
Encl as

THOMAS A. BOLTON Contracting Officer

CF:

Contracting Officer's Representative Ravenna Army Ammunition Plant

ATTN: SMCRV-CR (Mr. Kasper)





To: Tolmon

Message 33

Date Received: TUE, 09 NOV 93 14:00:35 CST

Forward-Path: <orvaap@ria-emh1.army.mil>

Return-Path: <@ria-emh1.army.mil:msnow@spips6.ria-emh2.army.mil>

Date: Tue, 9 Nov 93 13:45:30 CST

From: "Mary K. Snow, Secretary" <msnow@ria-emh2.army.mil>

To: "aaps"

Subject: Environmental

S: COB 18 November 1993

CONTRACTOR

☐ Information
☐ Compliance 4

applicable

FWD FOR

AMSMC-PAI-G (715(A))

9 November 1993

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Environmental Permits/Licenses/Hazardous Waste Manifests

5: COB 11/11/

- 1. The following information is required NLT COB 18 November 1993:
- a. Confirm that your installation contractor is/is not signing hazardous waste manifests as the "generator" of the waste. If not, advise who is signing, why practice was adopted, and how long this has been done.
- b. Confirm that your installation contractor is/is not identified as "operator" on environmental permits requiring such identification. If not, who is and why, etc.
- c. Confirm that your installation contractor is/is not signing environmental permit applications and/or permits requiring signature of the "operator." If not, who is and why, etc.
- 2. If your GOCO contract does not require the contractor to sign manifests, to apply for permits, or to sign permits as the "operator," please note this in your response.
- 3. This request has been coordinated with your Contracting Officer.
- 4. Request the above information be provided to this office via electronic mail NLT COB 18 November 1993. Point of contact is Mr. John Kaddatz, DSN 793-3414, electronic mail address is jkaddatz.

// s //
THEODORE L. HORNSBY, JR.
Chief, GOCO Branch

****** END OF MESSAGE *******

BECEIVED

NOV 10 1993



RAVENNA ARMY AMMUNITION PLANT

8451 STATE ROUTE 5 • RAVENNA, OHIO 44266-9297

15 November 1993

Contracting Officer's Representative Ravenna Army Ammunition Plant Attn: Robert J. Kasper 8451 State Route 5 Ravenna, Ohio 44266-9297

Subject: Environmental Permits/Licenses/Hazardous Waste Manifests

Dear Sir,

The following information requested in paragraph 1. of the above referenced correspondence is provided.

- a. The contractor is signing as the "Generator" on hazardous waste manifests.
- b. The previous contractor was identified as the "Operator" on environmental permits requiring such identification. Note: We are currently in the process of preparing a revised RCRA Part A Permit Application which reflects the change in RVAAP's operating contractor.
- c. The previous contractor signed permit applications as the "Operator". Mason & Hanger will also do so.

If we can provide any additional information with respect to this matter, please feel free to contact us.

Sincerely,
Mason & Hanger-Silas Mason Co. Inc.

W.B. Talmon, Jr.

Site Manager

JDM/ljl/eplhwm

cc: W.B. Talmon, Jr. Environmental File